

SANITARY SEWER MANAGEMENT PLAN 2025

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TRANSFORMING WASTEWATER INTO RESOURCES

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Introduction

Background

This Sewer System Management Plan (SSMP) has been prepared in compliance with the State Water Resources Control Board (SWRCB) Order 2022-0103-DWQ Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (GWDR), as revised by Order No. WQ 2008-0002.EXEC on February 20, 2008, as revised by Order No. 2013-0058-EXEC on September 9, 2013. The GWDR prohibits sanitary sewer overflows (SSOs) and requires reporting of SSOs using a statewide electronic reporting system. The intent of this SSMP is to meet the requirements of both the San Francisco Bay Regional Water Quality Control Board and the State Water Resources Control Board.

Organization of SSMP

The structure of this document follows the section numbering and nomenclature specified in the Goals

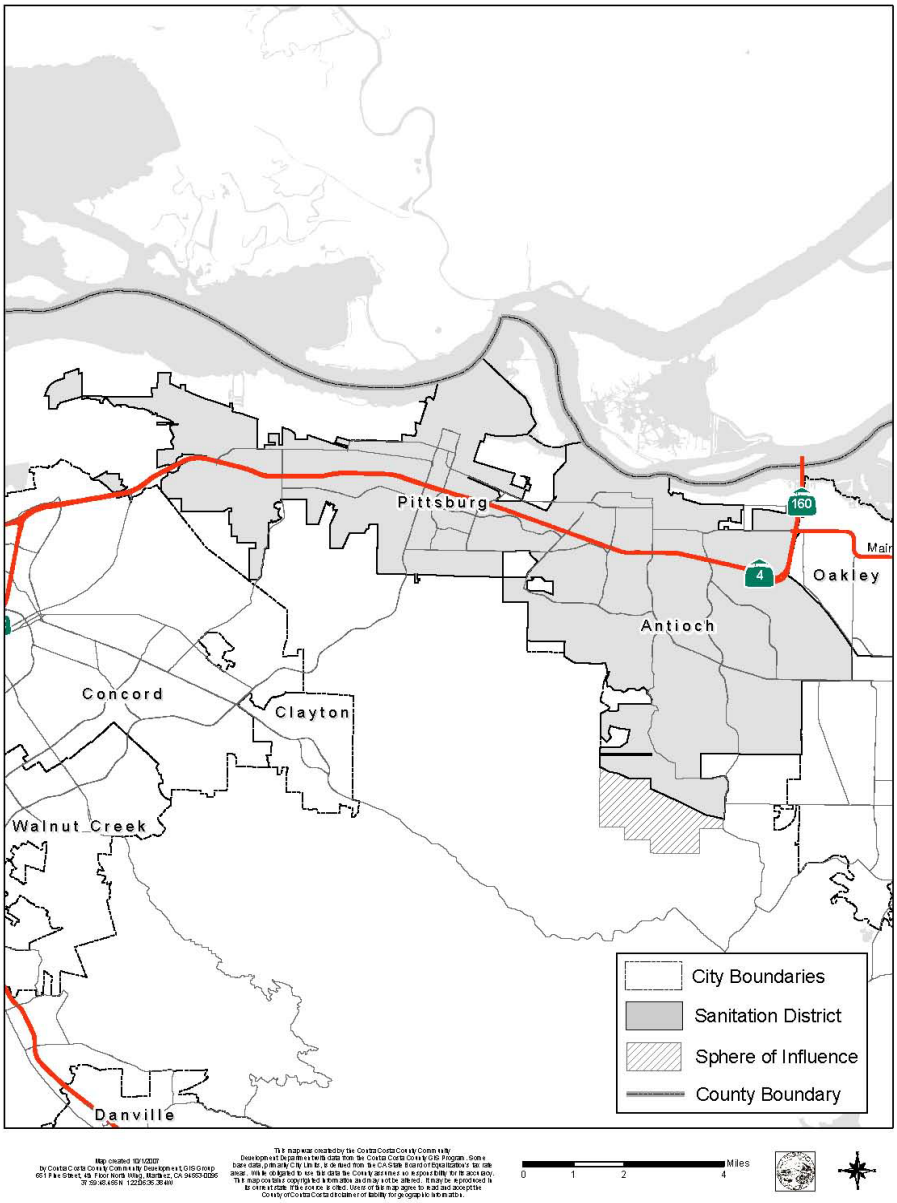
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4. Design and Performance Provisions
5. Overflow Emergency Response Plan
6. Fats, Oils and Grease (FOG) Control Program
7. System Evaluation and Capacity Assurance Plan
8. Monitoring, Measurement, and Program Modifications
9. SSMP Audits
10. Communication Program

System Overview[1]

The Delta Diablo (District) provides wastewater collection services for the unincorporated community of Bay Point, and conveyance, treatment, and disposal services for the Cities of Antioch and Pittsburg. The District serves an estimated population of 212,000 residents in a service area of approximately 54 square miles. The District's wastewater collection and conveyance systems include five pump stations, 57 miles of gravity sewers, and 18.5 miles of force mains. The Districts sewer system facilities are summarized on Table I-1. The District service area is shown on Figure I-1.

[1] Contra Costa LAFCO Water and Wastewater Municipal Services Review for East Contra Costa County, Final—Approved December 19, 2007 (http://www.contracostalafco.org/municipal_service_reviews/east_county_water_wastewater/8.0%20Delta Diablo_WaterWastewater%20Final.pdf)

Figure I-1: Delta Diablo Service Area [2]



[2] Created by the Contra Costa County Community Development Department with data from the Contra Costa County GIS Program. Extracted from Contra Costa LAFCO: Water and Wastewater Municipal Services Review for East Contra Costa County, Final—Approved December 19, 2007.

Table I-1: District Sewer System Facilities

Facilities	Service Area	Quantity
Sewer Mains	Bay Point Gravity Interceptors Force mains	43 Miles 14 Miles 18.5 Miles
Pump Stations	Antioch Bay Point Pittsburg	2 2 1
Sewer System Connections	Antioch Bay Point Pittsburg	31,404 5,309 18,368

Definitions, Acronyms, and Abbreviations

Best Management Practices (BMP) - Refers to the procedures employed in commercial kitchens to minimize the quantity of grease that is discharged to the sanitary sewer system. Examples include scraping food scraps into a garbage can and dry wiping dishes prior to washing.

Calendar Year (CY)

California Integrated Water Quality System (CIWQS) - Refers to the State Water Resources Control Board online electronic reporting system that is used to report SSOs, certify completion of the SSMP, and provide information on the sanitary sewer system. The electronic reporting requirement became effective on May 2, 2007, for Region 2 and September 2, 2007, for Region 5.

California Office of Emergency Services (Cal OES) - Refers to the California Governor's Office of Emergency Services.

Capital Improvement Program (CIP) - Refers to the document that identifies planned capital improvements to the District's sanitary sewer system.

Certification of SSO Reports – The SWRCB requires the Legally Responsible Official to login to CIWQS within a given time to electronically sign submitted reports thereby stating that to the best of his/her knowledge and belief, the information submitted is true, accurate, and complete.

Closed Circuit Television (CCTV) - Refers to the process and equipment used to internally inspect the condition of gravity sewers.

Computerized Maintenance Management System (CMMS)

County Health – Refers to the Contra Costa County Health Department.

Delta Diablo (District)

Drainage Channel- Refers to any structure that drains storm and/or surface water including storm drains.

Fats, Oils, and Grease (FOG) - Refers to fats, oils, and grease typically associated with food preparation and cooking activities that can cause blockages in the sanitary sewer system.

First Responder – Refers to the District employee who provides the District's initial response to a sewer system event.

Field Report – Refers to the Collection System Service Call/Overflow Field Report, included as Appendix 6-E.

Food Service Establishment (FSE) - Refers to commercial or industrial facilities that discharge to the sanitary sewer system where food is handled/prepared/served.

Force main - Refers to a pressure sewer used to convey wastewater from a pump station to the point of discharge.

Full-time Equivalent (FTE) - Refers to the equivalent of 2,080 paid labor hours per year by a regular, temporary, or contract employee.

General Waste Discharge Requirements (GWDR) - Refers to the State Water Resources Control Board Order No. 2006-0003, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, dated May 2, 2006, as revised on February 20, 2008.

Geographical Information System (GIS) - System used to capture, store, analyze, and manage geospatial data associated with sanitary sewer system assets.

Global Positioning System (GPS) - Refers to the handheld unit used to determine the longitude and latitude of sanitary sewer overflows for use in meeting CIWQS reporting requirements.

Grease Removal Device (GRD) - Refers to grease traps or grease interceptors installed to remove FOG from the wastewater flow at food service establishments.

High Density Polyethylene (HDPE)

Hot Spot – A gravity sewer identified as requiring frequent preventive maintenance to reduce the likelihood of SSOs.

Infiltration/Inflow (I/I) - Refers to water that enters the sanitary sewer system from storm water and groundwater that increases the quantity of flow. Infiltration enters through defects in the sanitary sewer system after flowing through the soil. Inflow enters the sanitary sewer without flowing through the soil. Typical points of inflow are direct connections to the sanitary sewer (e.g., storm drains, area drains, and roof leaders).

Lateral - See sewer service lateral.

Legally Responsible Official (LRO) - Refers to the individual who has the authority to certify reports and other actions submitted through CIWQS.

Manhole (MH) - Refers to an engineered structure that is intended to provide access to a sanitary sewer for maintenance and inspection.

Monitoring, Measurement, and Program Modifications (MMPM)

National Pollution Discharge Elimination System (NPDES)

Not Applicable (N/A)

Notification of an SSO – Refers to the time at which the District becomes aware of an SSO event through observation or notification by the public or other source.

Operations and Maintenance (O&M)

Spill Emergency Response Plan (SERP)

Personal Protective Equipment (PPE)

Plant Operations Center (POC)

Polyvinylchloride Pipe (PVC)

Preventive Maintenance (PM) - Refers to maintenance activities intended to prevent failures of the sanitary sewer system facilities (e.g., sewer cleaning, equipment maintenance).

Private Lateral Sewage Discharges - Sewage discharges caused by blockages or other problems within a privately-owned lateral.

Property Damage Overflow – Property damage overflow refers to a sewer overflow or backup that damages private property.

Regional Water Quality Control Board (RWQCB) - Refers to the San Francisco Bay Regional Water Quality Control Board, Region 2 unless otherwise specified.

Sanitary Sewer Overflow (SSO) - Any overflow, spill, release, discharge, or diversion of untreated or partially treated wastewater from a sanitary sewer system. SSOs include:

i. Overflows or releases of untreated or partially treated wastewater that reach waters of the United States.
ii. Overflows or releases of untreated or partially treated wastewater that do not reach waters of the United States; and
iii. Wastewater backups into buildings and on private property that are caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer system.

Sanitary Sewer System - Refers to the portion of the sanitary sewer facilities owned and operated by the Delta Diablo.

Sensitive Area – Refers to areas where an SSO could result in a fish kill or pose an imminent or substantial danger to human health.

Sewer Service Lateral - Refers to the piping that conveys sewage from the building to the District's sewer system. The property owner is responsible for the entire sewer service lateral from the owner's structure(s) to the public sewer system

Sewer System – See Sanitary Sewer System.

Sewer System Management Plan (SSMP)

Standard Operating Procedures (SOP) - Refers to written procedures that pertain to specific activities employed in the operation and maintenance of the sanitary sewer system.

State Water Resources Control Board (SWRCB) - Refers to the California Environmental Protection Agency (EPA) State Water Resources Control Board and staff responsible for protecting the State's water resources.

Supervisory Control and Data Acquisition (SCADA)

Surface Waters – See waters of the State.

System Evaluation and Capacity Assurance Plan (SECAP)

United States Environmental Protection Agency (EPA)

Vitrified Clay Pipe (VCP)

Volume Captured – The amount of spilled sewage returned to the sanitary sewer system.

Water Body – A water body is any stream, creek, river, pond, impoundment, lagoon, wetland, or bay.

Waters of the State – Waters of the State means any water, surface or underground, including saline waters, within the boundaries of California. In case of a sewage spill, storm drains are considered to be Waters of the State unless the sewage is completely contained and returned to the sewer system and that portion of the storm drain is cleaned.

Work Order (WO) - Refers to a document (paper or electronic) used to assign work and to record the results of the work.

References

New Requirements for Preparing Sewer System Management Plans, California Regional Water Quality Control Board San Francisco Bay Region letter to Sewer System Authorities, July 7, 2005 (www.cwea.org/conferences/sso/Reg2 Letter-SSMP0705.pdf).

Sewer System Management Plan (SSMP) Development Guide, San Francisco Bay Regional Water Quality Control Board in cooperation with Bay Area Clean Water Agencies, July 2005 (www.swrcb.ca.gov/rwqcb2/download/).

State Water Resources Control Board Order No. 2006-0003 Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, California State Water Resources Control Board, May 2, 2006.

Monitoring and Reporting Program 2006-0003 Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, State Water Resources Control Board, May 2, 2006 (www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2008/ wqo/wqo2008_0002_exec.pdf).

State Water Resources Control Board Monitoring and Reporting Program No. 2013•0058 DWQ (as revised by Order No. WQ 2008-0002.EXEC) Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, California State Water Resources Control Board, February 20, 2008 (www.cwea.org/pdf/2008-0002-EXEC.pdf).

Section 1 Goals

1.1 Introduction

This section of the SSMP presents the District's goals for the management, operation, and maintenance of its sanitary sewer system.

1.2 Regulatory Requirements for Goals Element of SSMP

The summarized requirements for the Goals Element of the SSMP are:

1.2.1 RWQCB Requirement

The goal of the SSMP is to develop goals to manage, operate, and maintain all parts of its collection system. The goals should address the provision of adequate capacity to convey peak wastewater flows, as well as a reduction in the frequency of Sanitary Sewer Overflows (SSOs) and the mitigation of their impacts.

1.2.2 GWDR Requirement

The goal of the SSMP is to provide a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer system. This will help reduce and prevent Sanitary Sewer Overflows (SSOs), as well as mitigate any SSOs that do occur.

1.3 SSMP Goals

The District's goals are:

- To properly manage, operate, and maintain all portions of the District's wastewater collection and conveyance systems.
- To provide adequate capacity to convey the peak wastewater flows. Adequate capacity, for the purposes of this SSMP, is defined as the capacity to convey the peak wastewater flows that are associated with the design storm event.
- To minimize the frequency of SSOs and to achieve the greatest reasonable reduction in SSOs.
- To mitigate the impacts that are associated with any SSO that may occur.
- To meet all applicable regulatory notification and reporting requirements.
- To measure progress through performance measures so the plan can be adjusted as needed.
- To protect public health, the environment, and to prevent unnecessary property damage.
- To effectively identify and remedy design, construction, and operational deficiencies.
- To perform all activities in a safe manner.

Section 2 Organization

2.1 Introduction

This section of the SSMP identifies District staff that is responsible for implementing this SSMP, responding to SSO events, and meeting the SSO reporting requirements.

2.2 Regulatory Requirements for Organization Element of SSMP

The requirements for the Organization element of the SSMP are summarized below:

2.2.1 RWQCB Requirement

The SSMP must identify staff (names and phone numbers) responsible for implementing measures outlined in the SSMP, including management, administration, and maintenance positions. Identify the chain of communication for reporting and responding to SSOs.

2.2.2 GWDR Requirement

The SSMP must identify:

- The name of the responsible or authorized representative.
- The names, titles, telephone numbers, and email addresses for management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP program. Include lines of authority as shown in an organization chart or similar document with a narrative explanation; and
- The chain of communication for reporting SSOs, from receipt of a complaint or other information, including the person responsible for reporting SSOs to the State and Regional Water Board and other agencies if applicable (such as County Health Officer, County Environmental Health Agency, Regional Water Board, and/or California Office of Emergency Services (Cal OES)).

2.3 Organization

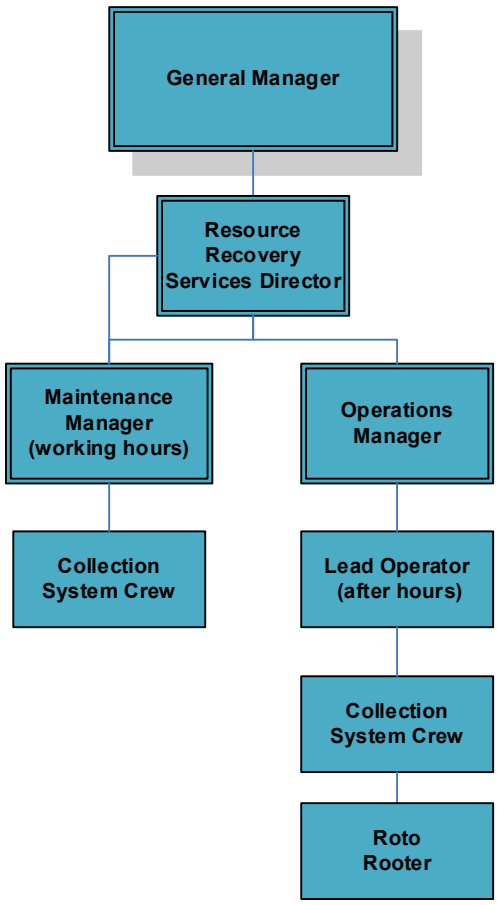
The organization chart for the management, operation, and maintenance of the District's wastewater collection system is shown on Figure 2-1.

2.4 Authorized Representative

The District's Authorized Representatives in all wastewater collection system matters is the Resource Recovery Services Director and Maintenance Manager. These positions are authorized to submit verbal, electronic, and written spill reports, and they are authorized to certify electronic spill reports submitted to the State Water Resources Control Board.

The Operations Manager, Operations Supervisor, Lead Operator, and Collection Worker Lead are authorized to submit verbal, electronic, and written spill reports.

Figure 2-1: Organization Chart and SSO Reporting Chain of Communication



2.5 Responsibility for SSMP Implementation

The Resource Recovery Services Director is responsible for developing, implementing, and maintaining all elements of the District's SSMP.

Other District staff responsible for developing, implementing, and maintaining specific elements of the District's SSMP, along with their job titles and contact information, are shown in Appendix 2-A. Legally Responsible Officials (LRO) and Data Submitters are determined based on their level of supervisory responsibility and engagement with District's conveyance and collection systems operation. Designated LROs and Data Submitters can only be modified with approval from the General Manager or Resource Recovery Services Director.

2.6 SSO Reporting Chain of Communication

The SSO Reporting Chain of Command follows the Organization Chart shown on Figure 2-1. The SSO reporting process and responsibilities are described in detail in Section 6 - Overflow Emergency Response Plan.

Appendix 2-A SSMP Development, Implementation, and Maintenance Responsibilities

Name	Job Title	Phone Number & Email	SSMP Responsibility	Section
Vince De Lange	General Manager	(925) 756-1920 vinced@deltadiablo.org	LRO, Maintain SSMP	All
Dean Eckerson	Resource Recovery Services Director	(925) 756-1972 deane@deltadiablo.org	LRO, SSO Response (Off Hours)	All
Joaquin Gonzalez	Operations Manager	(925) 756-1971 joaquing@deltadiablo.org	Conveyance System Operations	4,6
Dustin Bloomfield	Maintenance Manager	(925) 756-1918 dustinb@deltadiablo.org	LRO, Sewer System Maintenance, SSO Response Report	4,6,9,10,11
Trevor Simpson	Maintenance Supervisor	(925) 156-1921 trevors@deltadiablo.org	LRO, Sewer System Maintenance, SSO Response Report	4,6,9,10,11
Murat Bozkurt	Engineering Services Director	(925) 756-1948 muratb@deltadiablo.org	LRO, Design and Performance Provisions, Capacity Assurance Program, Capital Improvement Program, Collection System Maps	3,5,8
Jung Park	Laboratory Manager	(925) 756-1915 jungp@deltadiablo.org	FOG	7
Todd Ravazza	Safety Manager	(925) 756-1934 toddr@deltadiablo.org	Overflow Emergency Response Plan (SERP) Training	6
Jamie Lyn Alfonso	Human Resources and Risk Manager	(925) 756-1969 jamielyna@deltadiablo.org	CSRMA Claims Management Coordinator	6

Section 3 Legal Authority

3.1 Introduction

This section of the SSMP presents the District's legal authority to comply with the SSMP requirements, as provided in its District Code and agreements with other agencies.

3.2 Regulatory Requirements for Legal Authority Element of SSMP

The summarized requirements for the Legal Authority element of the SSMP are:

3.2.1 RWQCB Requirement

The District must demonstrate that it has the legal authority (through ordinances, service agreements, and other binding procedures) to control infiltration and inflow (I/I) from satellite collection systems and private service laterals; require proper design, construction, installation, testing, and inspection of new and rehabilitated sewers and laterals; and enforce violation of ordinances.

3.2.2 GWDR Requirement

The District must demonstrate, through collection system use, ordinances, service agreements, or other legally binding procedures that it possesses the necessary legal authority to:

- Prevent illicit discharges into its wastewater collection system (examples may include infiltration and inflow (I/I), storm water, chemical dumping, unauthorized debris and cut roots, etc.).
- Require that sewers and connections be properly designed and constructed.
- Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the District.
- Limit the discharge of fats, oils, and grease and other debris that may cause blockages
- Inspect grease producing dischargers; and
- Enforce any violation of its sewer ordinances.

3.3 District Code

The District Code describes the District's current legal authorities. The legal authorities provided in the District Code that address the specific requirements for this SSMP are summarized on Table 3-1.

3.4 Agreements with Satellite Collection Systems

The Antioch and Pittsburg sewer systems discharge into the District's conveyance system. The relationship between the satellite Cities and the District are delineated in the District Code and the Cities have representation on the District's Board of Directors. The District and its satellite agencies are working cooperatively in the development and implementation of their respective SSMPs. There is no benefit at this time that would be associated with formal agreements between the District and its satellite agencies due to the nature of the District's governance structure. District staff regularly engage with their peers at the Cities to coordinate capital projects, development review and inspection, and maintenance activities.

3.5 Agreement with Northern California River Watch

On June 17, 2013, the District entered into an agreement with the Northern California River Watch Corporation. The agreement provides specific guidelines for District personnel to follow in responding to and reporting SSOs and condition assessment and rehabilitation responsibilities. The agreement is filed with the District records as CORP.10-AGR-1345 and may be referred to as needed. The District completed the surface water condition assessment in June 2018 in compliance with the timeframe specified in Section 2.a.i. Pipeline rated significantly defective (PACPS) have been prioritized in the District's CIP accordance with the agreement Sections 2.a.(ii) and 2.a.(iii). A summary of the agreement sewer system requirements are as follows:

1. NCRW Definitions

(a) **Effective Date:** The term "Effective Date," as used in this Agreement, shall mean the last date on which the signature of a party to this Agreement is executed.

(b) **Condition Assessment:** The term "Condition Assessment" shall mean a report that comprises inspection, rating, and evaluation of the existing condition of a sewer collection system. Inspection is based upon Closed Circuit Television (CCTV) inspections for gravity mains. After CCTV inspection occurs, pipe conditions are assigned a grade based on the Pipeline Assessment and Certification Program (PACP) rating system, developed by the National Association of Sewer Service Companies.

(c) **Full Condition Assessment:** The term "Full Condition Assessment" shall mean a Condition Assessment of all gravity sewer lines (not force mains) except for gravity sewer lines located within two hundred (200) feet of surface waters, defined as a river, creek, stream canal or bay (i.e., those gravity sewer lines not included in the definition of Surface Water Condition Assessment).

(d) **Surface Water Condition Assessment:** The term "Surface Water Condition Assessment" shall mean a Condition Assessment of all gravity sewer lines (not force mains) within two hundred (200) feet of surface waters, defined as a river, creek, stream canal or bay.

(e) **Significantly Defective:** A sewer pipe is considered to be "Significantly Defective" for purposes of this Agreement if the pipe's condition receives a structural grade of 5 based on the PACP rating system. The PACP assigns grades based on the significance of the defect, extent of damage, percentage of flow capacity restriction, and/or the amount of pipe wan loss due to deterioration. Grades are assigned as follows:

5 - Most significant defect

4 - Significant defect

3 - Moderate defect

2 - Minor to moderate defect

1 - Minor defect

2. Collection System Investigation & Repair

(a) Surface Water Condition Assessment

(i) Within five (5) years of the Effective Date of this Agreement, the District shall complete a Surface Water Condition Assessment, except those sewer lines that have been inspected

by CCTV within the last eight (8) years or constructed or rehabilitated within the last ten years.

(ii) The District shall repair or replace all sewer lines rated Significantly Defective (PACP rating grade 5) by the Surface Water Condition Assessment, or take other appropriate action, within three (3) years of determination that a line is Significantly Defective via completion of the Surface Water Condition Assessment. The phrase "take other appropriate action" in this circumstance means to divert sewage flow from a Significantly Defective sewer line or abandon the Significantly Defective sewer line in lieu of repair or replacement.

(iii) With respect to sewer lines that receive a PACP rating Grade 4 by the Surface Water Condition Assessment, the District will ascertain whether such lines need to be repaired or re-CCTV.

(b) Full Condition Assessment

(i) Within eight (8) years of the Effective Date of this Agreement, the District shall complete a Full Condition Assessment, excepting those sewer lines that, at the time the Full Condition Assessment work is being undertaken in a given area, have been inspected by CCTV within the last five (5) years or constructed or rehabilitated within the last ten (10) years, and excepting those sewer lines that are already addressed by the Surface Water Condition Assessment.

3. Sewer System Overflow Response and Reporting

(a) The District's Sanitary Sewer Overflow (SSO) report form shall include the method of calculation used for estimating total spill volume, estimating spill volume that reaches surface waters, and estimating spill volume recovered.

(b) The District shall document the following information, and will include, where feasible, the same information in SSO reports submitted to the State Water Resources Control Board via the CIWQS SSO website:

(i) Date and time the District was made aware of the SSO, based on information received from a complainant, informant, or through self-discovery (whichever is earlier).

(ii) Date and arrival time to the scene of the SSO by the crew responsible for containment of the SSO.

(iii) Estimated ongoing SSO discharge rate in gallons per minute (if ongoing) at the time the crew responsible for SSO containment arrived at the scene of the SSO.

(iv) SSO start/stop date and time. The parties recognize that designating the SSO start time as the equivalent to the time the agency was first notified of the spill may not be reliable.

(v) Description of how SSO start/stop date and time were calculated, which may include:

(1) Date and time the complainant or informant first noticed the SSO, unless self-discovered by the District.
(2) Any further information provided by the complainant or informant.
(3) Corroborated witness statements, if any (e.g., information provided from witnesses, nearby residents, or business operators).
(4) Visual observation by District staff.
(5) Estimated volume of spill and flow rates. Start date and time can be determined by taking the estimated volume at the time of discovery and dividing it by the estimated

flow rate at that same time. The start date and time is then determined by subtracting the duration from the time of discovery. Volume and flow estimations can be based on the following:

a. Calculation of the area and depth of the SSO.
b. Estimation using CWEA Manhole Overflow Gauge Worksheet.
c. Flow meter reading in the collection system or pump stations.
d. Pump run times and pump discharge volume ratings.
e. Water usage information for customers who discharge into the collection system.
f. If the entire spill is captured, the tank level indicator; and/or,
g. Any other relevant technical or collection system information.

(c) For any SSO that is greater than 50 gallons and reaches surface waters, the District will, if feasible, collect a sample at the point of discharge, and from receiving waters at a point upstream (within 150 feet of the discharge, if possible) and at a point downstream (within 150 feet of the discharge, if possible). The samples will be analyzed for pH, dissolved oxygen, ammonia, and fecal coliform. Feasibility for obtaining a sample will involve whether sufficient flow exists to collect a representative, uncontaminated sample, and whether weather or other conditions allow District staff to safely obtain a sample (i.e., District staff will not be placed at risk for injury in severe weather). If the District alleges that it was not feasible to collect samples for a given SSO event, the District shall include an explanation of infeasibility in its SSO Report.

Any requirements under this provision which conflict with sampling or testing requirements by a regulatory agency (e.g., the sampling location, frequency, parameters analyzed, etc.), either currently in effect or adopted in the future, shall cease to be in effect under this agreement between the parties. The absence of sampling or testing requirements by a regulatory agency shall not be considered a conflict with regulatory agency requirements.

The District will agree to investigate the cause of the SSO entering surface waters and will employ the following measures to prevent future overflows: (a) if the SSO is caused by a structural defect, then the District will take immediate action to repair or replace the defect, or take other action necessary to protect water quality (e.g., divert the flow until the repair/replacement can occur); and (b) if the defect is non-structural, such as a grease blockage or vandalism to a manhole cover, the District will implement appropriate measures (e.g., additional maintenance or cleaning), where feasible, to address the cause.

(d) *During the first two years of this Agreement, the District shall collect SSO samples for any SSO that is greater than 50 gallons and reaches surface waters, if feasible, for River Watch to conduct a CAM-17 toxic metals analysis. If no SSO events meeting, these criteria occur during the first two years of this Agreement, no further sample collection is required. Feasibility for obtaining a sample will involve whether sufficient flow exists to collect a representative, uncontaminated sample, and whether weather or other conditions allow District staff to safely obtain a sample (i.e., District staff will not be placed at risk for injury in severe weather). If the District alleges that it was not feasible to collect SSO samples for River Watch for any SSO greater than 50 gallons which reaches surface water, the District shall include an explanation of infeasibility in its SSO Report.

***Note: This requirement is no longer applicable as of June 2015.**

4. CIWQS Link

The District has a link from the website to the State Water Resources Control Board's CIWQS SSO Public Reports website and shall publicize this new link to customers and members of the public.

Table 3-1: Legal Authority

Requirement	District Code Reference	Meets GWDR Requirements?	Code Page Number
General			
Prevent illicit discharges into the wastewater collection system	2.10.010 2.28.020	Yes	22 55
Limit the discharge of debris that may cause blockages	2.28.020 (B.3)	Yes	55
Require that sewers and connections be properly designed and constructed	2.10.040	Yes	22
Laterals			
Clearly define Agency responsibility	2.10.040	No responsibility for laterals	22
Ensure access for maintenance, inspection, or repairs for portions of the service lateral owned or maintained by the Agency	Not Applicable (N/A)	No responsibility for laterals	N/A
Control infiltration and inflow (I/I) from private service laterals	2.28.020 (B.20)	Yes	56
FOG Source Control			
Limit discharges of fats, oils, and grease	2.28.020 (B.17)	Yes	56
Requirements to install grease removal devices (such as traps or interceptors), design standards for the grease removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements	2.28.650 2.28.655 2.28.660	Yes	92 93 94
Authority to inspect grease producing facilities	2.28.660A	Yes	83 94
Enforcement			
Enforce violations of the sewer ordinances	2.28.450-.485 2.28.500-.510	Yes	86-89 89-90

Appendix 3-A Sewer Management Plan Change Log

DATE	SSMP SECTION	DESCRIPTION OF CHANGE/REVISION	AUTHORIZED CHANGE BY
8/11/2021	Appendix 2-A	SSMP Development, Implementation, and Maintenance Responsibilities	Regina C. Morales

Appendix 3-B SSMP Adoption Documents

APPROVED

ITEM E/2

October 10, 2018

ADOPT RESOLUTION APPROVING UPDATED SEWER SYSTEM MANAGEMENT PLAN AS MANDATED BY THE STATE WATER RESOURCES CONTROL BOARD

RECOMMENDATION

Adopt Resolution approving the District's updated Sewer System Management Plan (SSMP) pursuant to the statewide General Waste Discharge Requirements (WDRs) set forth by the State Water Resources Control Board (SWRCB).

Background Information

In May 2006, the SWRCB adopted Order No. 2006-0003-DWQ, which established WDRs for public agencies that own and operate sanitary sewer collection systems. The WDRs mandate that owners and operators of sanitary systems must: (1) report sanitary sewer overflows (SSOs) to the SWRCB and (2) develop and implement a Sewer System Management Plan (SSMP) with specific provisions for the proper and efficient management, operation, and maintenance of sanitary sewer systems.

In April 2009, the District adopted its SSMP and completed a subsequent update in 2013. The SSMP set forth goals and actions for the various activities involved in operating, repairing, and replacing the sewer system. The SSMP includes chapters describing legal authorities and requirements, monitoring, auditing, reporting, and communicating with the public and regulators. The SSMP must be audited every two years to assess effectiveness, identify opportunities for improvement, and implement necessary revisions. The SWRCB also requires public agencies to perform a comprehensive review and update of their SSMPs at least once every five years.

Analysis

A District team comprising staff directly responsible for various elements of the SSMP and those familiar with sanitary sewer system operations, maintenance, and incident response recently conducted the required review and update. The SSMP review team focused on the effectiveness of SSMP procedures, compliance with WDRs, and any potential deficiencies in the SSMP.

The reference documents and information used for conducting the review included the amended WDR Monitoring and Reporting Program (Order No. 2013-0058-EXEC), the Northern California River Watch (NCRW) Agreement, historical sewer system performance data, and the District's operating budget and five-year capital improvement program. Based on this review, the modifications were minor in nature, such as updating employee and contractor contact information, modifying current standard operating procedure language, and adding new emergency response equipment to the District's inventory list. The updated SSMP has been provided to the Board under separate cover and will be made available at the Board meeting and District offices.

The updated SSMP is required to be approved by the Board for recertification. The updated SSMP and supporting documentation will be kept on file and available for review, and the SWRCB will be notified of the recertification.

Financial Impact

Funding for implementing the SSMP is included in the approved Fiscal Year 2018/19 operating budget.

Attachment

Resolution Approving Updated SSMP as Mandated by the SWRCB

Prepared by: Terry Spurgeon
Maintenance Manager

Reviewed by: Dean Eckerson
Resource Recovery Services Director

cc: District File NPDES.12-REP-

Delta Diablo

2500 Pittsburg-Antioch Hwy · Antioch, CA 94509 · p 925.756.1900 · f 925.756.1961 · www.deltadiablo.org

TRANSFORMING WASTEWATER TO RESOURCES

BEFORE THE BOARD OF DIRECTORS
OF
DELTA DIABLO
(a California Special District)

Re: **Approving Updated Sewer)**
System Management Plan) **RESOLUTION NO. 16/2018**

THE BOARD OF DIRECTORS OF DELTA DIABLO HAS DETERMINED THAT:

WHEREAS, on May 2, 2006, the State Water Resources Control Board (SWRCB) adopted Order No. 2006-0003-DWQ, which established General Waste Discharge Requirements (WDRs) for public agencies that own and operate sanitary sewer systems; and

WHEREAS, on September 9, 2013, the SWRCB adopted Order No. WQ 2013-0058-EXEC, which amended the WDR monitoring and reporting program for sanitary sewer systems; and

WHEREAS, pursuant to the statewide WDRs, public agencies that own and operate sanitary sewer systems greater than one mile in length must develop a Sewer System Management Plan (SSMP) in accordance with the SWRCB requirements; and

WHEREAS, the SSMP must be updated every five (5) years; and

WHEREAS, Delta Diablo has updated its SSMP to meet the current WDRs and ensure conformance with other appropriate reference documents; and

WHEREAS, the updated SSMP must be approved by the District's governing body.

NOW, THEREFORE, BE IT RESOLVED that the Delta Diablo Board of Directors does hereby approve the updated Sewer System Management Plan.

PASSED AND ADOPTED on October 10, 2018, by the following vote:

AYES:	LONGMIRE, WRIGHT and GLOVER	ABSENT:	NONE
NOES:	NONE	ABSTAIN:	NONE

I HEREBY CERTIFY that the foregoing is a true and correct copy of a Resolution adopted by the Board of Directors of Delta Diablo on October 10, 2018.

ATTEST: D. Pete Longmire
Board Secretary

By: _____

RESOLUTION NO. 16/2018

APPROVED

ITEM F/4

April 8, 2009

ADOPT RESOLUTION APPROVING SEWER SYSTEM MANAGEMENT PLAN AS MANDATED BY THE STATE WATER RESOURCES CONTROL BOARD

RECOMMENDATION

Adopt a resolution approving the District's Sewer System Management Plan (SSMP) (provided to Board under separate cover) pursuant to the statewide General Waste Discharge Requirements, set forth by the State Water Resources Control Board (SWRCB) order No. 2006-0003.

Background Information

Over the past few years, both the San Francisco Bay Regional Water Quality Control Board (RWQCB) and the State Water Resources Control Board (SWRCB) have adopted requirements for agencies that own and operate sanitary sewer collection systems. The most recent requirement includes the preparation of an SSMP which is a document that must include system specific provisions to provide proper and efficient management, operation, and maintenance of sanitary sewer systems, while taking into consideration risk management and cost benefit analysis. Additionally, the SSMP must contain a spill response and reporting plan that establishes standard procedures for immediate response to a sanitary sewer overflow in a manner designed to minimize water quality impacts and potential nuisance conditions.

On November 8, 2006, the Board authorized the General Manager to execute an agreement with Larson Consulting in an amount not to exceed $161,000 (shared between the District and Cities) to work together with District staff, the City of Antioch, and the City of Pittsburg in developing each agency's SSMP. It was agreed that working cooperatively would provide a cost savings to each agency and would aid in facilitating better communication, improved collection system information management, greater consistency in standards/enforcement, and superior emergency response in the event of a spill.

Analysis

Under the new order, publicly owned sanitary sewer systems are required to prepare their respective SSMP's in accordance with the SWRCB provided SSMP Time Schedule (Attachment 1). The District, the City of Antioch, and the City of Pittsburg have all participated cooperatively in the development of documents for compliance with the order and all conditions have been met ahead of schedule.

The SWRCB requires collection agencies to present the SSMP to the agency's governing board for approval at a public meeting prior to certification with the state. The proposed resolution is provided as Attachment 2. This represents the final steps in the SSMP development and certification process. This approval is necessary to ensure that the Board is aware of the scope of the SSMP and its potential impacts such as new programs, budget, staffing, and equipment before it is certified. An outline of the key elements of the SSMP is provided as Attachment 3. The deadline for certification is May 2, 2009.

Financial Impact

The District's share for developing the SSMP was $35,000. The potential impacts of the SSMP will be determined over time and will be incorporated in relevant budgeting documents as they are known.

Attachments

1) SSMP Time Schedule
2) Resolution
3) SSMP Guidelines Summary

Signature: _____

Michael Dixon, Maintenance Manager

cc: District File NPDES.12-DOCS

Attachment 24 - April 8, 2009 agenda item approving ssmp packet.docx

Delta Diablo Sanitation District

2500 Pittsburg Antioch Highway, Antioch, CA 94509-1978 • (925) 756-1900

Administration Fax: (925) 756-1951 • Maintenance Fax: (925) 756-1960 • Operations Fax: (925) 756-1962 • Technical Services Fax: (925) 756-1950

BEFORE THE BOARD OF DIRECTORS
OF
DELTA DIABLO SANITATION DISTRICT

Re: Approving Sewer System Management Plan)

RESOLUTION NO. 6/2008

THE BOARD OF DIRECTORS OF DELTA DIABLO SANITATION DISTRICT HAS DETERMINED THAT:

WHEREAS, on May 2, 2006, the State Water Resources Control Board (SWRCB), adopted new Statewide General Waste Discharge Requirements (GWDR) for Sanitary Sewer Systems, SWRCB Order No. 2006-0003; and

WHEREAS, pursuant to the statewide GWDR, public agencies that own and operate sanitary sewer systems greater than one mile in length must develop a Sewer System Management Plan (SSMP) in accordance with the SWRCB requirements; and

WHEREAS, the Delta Diablo Sanitation District's staff has developed the Sewer System Management Plan to meet the requirements of the SWRCB; and

WHEREAS, the completed Sewer System Management Plan must be approved by the agency's governing body.

NOW, THEREFORE, BE IT RESOLVED that the Delta Diablo Sanitation District's Board of Directors does hereby approve the Delta Diablo Sanitation District Sewer System Management Plan.

PASSED AND ADOPTED on April 8, 2009, by the following vote:

AYES:	DAVIS and PARENT	ABSENT:	GLOVER
NOES:	NONE	ABSTAIN:	NONE

I HEREBY CERTIFY that the foregoing is a true and correct copy of a Resolution adopted by the Board of Directors of Delta Diablo Sanitation District on April 8, 2009.

ATTEST: Nancy L. Parent
Board Secretary

By: Nancy L. Parent

Attachment: SSMP (by Reference)

RESOLUTION NO. 6/2008

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Appendix 3-C Re-Certification Document

APPROVED

ITEM E/1

December 11, 2013

ADOPT RESOLUTION APPROVING THE DISTRICT'S UPDATED SEWER SYSTEM MANAGEMENT PLAN AS MANDATED BY THE STATE WATER RESOURCES CONTROL BOARD

RECOMMENDATION

Adopt Resolution approving the District's updated Sewer System Management Plan (SSMP) pursuant to the statewide General Waste Discharge Requirements (GWDR) set forth by the State Water Resources Control Board (SWRCB).

Background Information

In May 2006, SWRCB adopted requirements for agencies that own and operate sanitary sewer collection systems pursuant to the requirements included in SWRCB Order No. 2006-0003-DWQ. The requirements included the preparation of an SSMP with specific provisions to provide proper and efficient management, operation, and maintenance of sanitary sewer systems. The SSMP is required to have a spill response and reporting plan establishing standard procedures for immediate response to a sanitary sewer overflow in a manner designed to minimize water quality impacts and potential nuisance conditions. The SWRCB required a phased in approach with full implementation by May 2, 2009. The District certified completion of the SSMP through the California Integrated Water Quality System in time to meet the May 2, 2009 deadline with Board approval on April 8, 2009. The SWRCB requires that all sewer agencies perform a comprehensive review of their SSMP and update the document at least once every five years.

Analysis

A team consisting of the District's staff directly responsible for different aspects of the SSMP and those familiar with sanitary sewer system operations, maintenance, and response recently conducted the audit/update. The review team focused on the effectiveness of the SSMP Program, compliance with the GWDR requirements, and identification of any deficiencies in the SSMP.

Items reviewed in preparing for the update included the amended GWDR Monitoring and Reporting Program (Revised Order No. 2013-0058-EXEC), the Northern California River Watch (NCRW) Agreement, Historical System Performance Data, Operating Budget, and the District's five-year Capital Improvement Program (CIP). With the exception of those changes identified in the revised GWDR and NCRW Agreement, the modifications were minor in nature, such as updating employee and contractor contact information, modifying current standard operational procedure language, and adding new emergency response equipment to the District's inventory list. The SSMP has been provided to the Board under separate cover and will be available at the meeting and District offices. Detailed results of the update process are described in the Sewer System Management Plan Audit/Update (Attachment 1). The review team has ensured that the District's revised SSMP comprises every aspect of the updated GWDR and the NCRW Agreement.

The SWRCB requires collection agencies to present the SSMP to the agency's governing board for approval at a public meeting prior to certification with the state. The proposed Resolution is provided as Attachment 2. The revised SSMP and supporting documents will be kept on file and available for review and the SWRCB will be notified of the SSMP update as directed in the GWDR.

Financial Impact

N/A

Attachments

1) Sewer System Management Plan Audit/Update
2) Proposed Resolution

Signature: _____

Michael Dixon, Maintenance Manager

cc: District File SFTY.03.01-PROC1.1

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Delta Diablo Sanitation District

2500 Pittsburg-Antioch Highway Antioch, CA 94509-1373 • (925) 756-1900

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BEFORE THE BOARD OF DIRECTORS
OF
DELTA DIABLO SANITATION DISTRICT

Re: **Approving Updated Sewer)**
System Management Plan) **RESOLUTION NO. 17/2013**

THE BOARD OF DIRECTORS OF DELTA DIABLO SANITATION DISTRICT HAS DETERMINED THAT:

WHEREAS, on May 2, 2006, the State Water Resources Control Board (SWRCB) adopted Statewide General Waste Discharge Requirements (GWDR) for Sanitary Sewer Systems, SWRCB Order No. 2006-0003, and Amendment Order No. WQ 2013-0058-EXEC on September 9, 2013; and

WHEREAS, pursuant to the statewide GWDR, public agencies that own and operate sanitary sewer systems greater than one mile in length must develop a Sewer System Management Plan (SSMP) in accordance with the SWRCB requirements; and

WHEREAS, the SSMP must be updated every five (5) years; and

WHEREAS, the Delta Diablo Sanitation District's staff has updated its SSMP to meet the most current wastewater discharge requirements of the SWRCB, as well as requirements of the 2013 Northern California Riverwatch Settlement Agreement; and

WHEREAS, the complete updated SSMP must be approved by the agency's governing body.

NOW, THEREFORE, BE IT RESOLVED that the Delta Diablo Sanitation District's Board of Directors does hereby approve the updated Delta Diablo Sanitation District Sewer System Master Plan.

PASSED AND ADOPTED on December 11, 2013, by the following vote:

AYES:	GLOVER, PARENT and HARPER	ABSENT:	NONE
NOES:	NONE	ABSTAIN:	NONE

I HEREBY CERTIFY that the foregoing is a true and correct copy of a Resolution adopted by the Board of Directors of Delta Diablo Sanitation District on December 11, 2013.

ATTEST: Federal D. Glover
Board Secretary

By: _____

Attachment: Updated SSMP (by Reference)

RESOLUTION NO. 17/2013

Section 4 Operation and Maintenance Program

4.1 Introduction

This section of the SSMP presents the District's Bay Point Gravity Sewer System, Operations and Maintenance (O&M) Program, and the O&M Program for the District's Conveyance System.

4.2 Regulatory Requirements for Operations & Maintenance Element of SSMP

4.2.1 RWQCB Requirement (Measures and Activities)

- Maintain up-to-date maps of the wastewater collection system facilities.
- Allocate adequate resources for the operations, maintenance, and repair of the collection system.
- Prioritize preventive maintenance activities.
- Identify and prioritize structural deficiencies and implement a program of short-term and long-term actions to address them.
- Provide contingency equipment to handle emergencies and spare/replacement parts intended to minimize equipment/facility downtime.
- Provide training on a regular basis for staff in collection system operations, maintenance, and monitoring.
- Implement an outreach program to educate commercial entities involved in sewer construction or maintenance about the proper practices for preventing blockages in private laterals. This requirement can be met by participating in a region-wide outreach program.

4.2.2 GWDR Requirement (Operations and Maintenance)

The summarized requirements for the Operations and Maintenance Program are:

- Maintain an up-to-date map of the sanitary sewer system, showing all gravity line segments and manholes: pumping facilities, pressure pipes and valves, and applicable storm water conveyance facilities.
- Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventative Maintenance (PM) Program should have a system to document scheduled and conducted activities, such as work orders.
- Develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets.

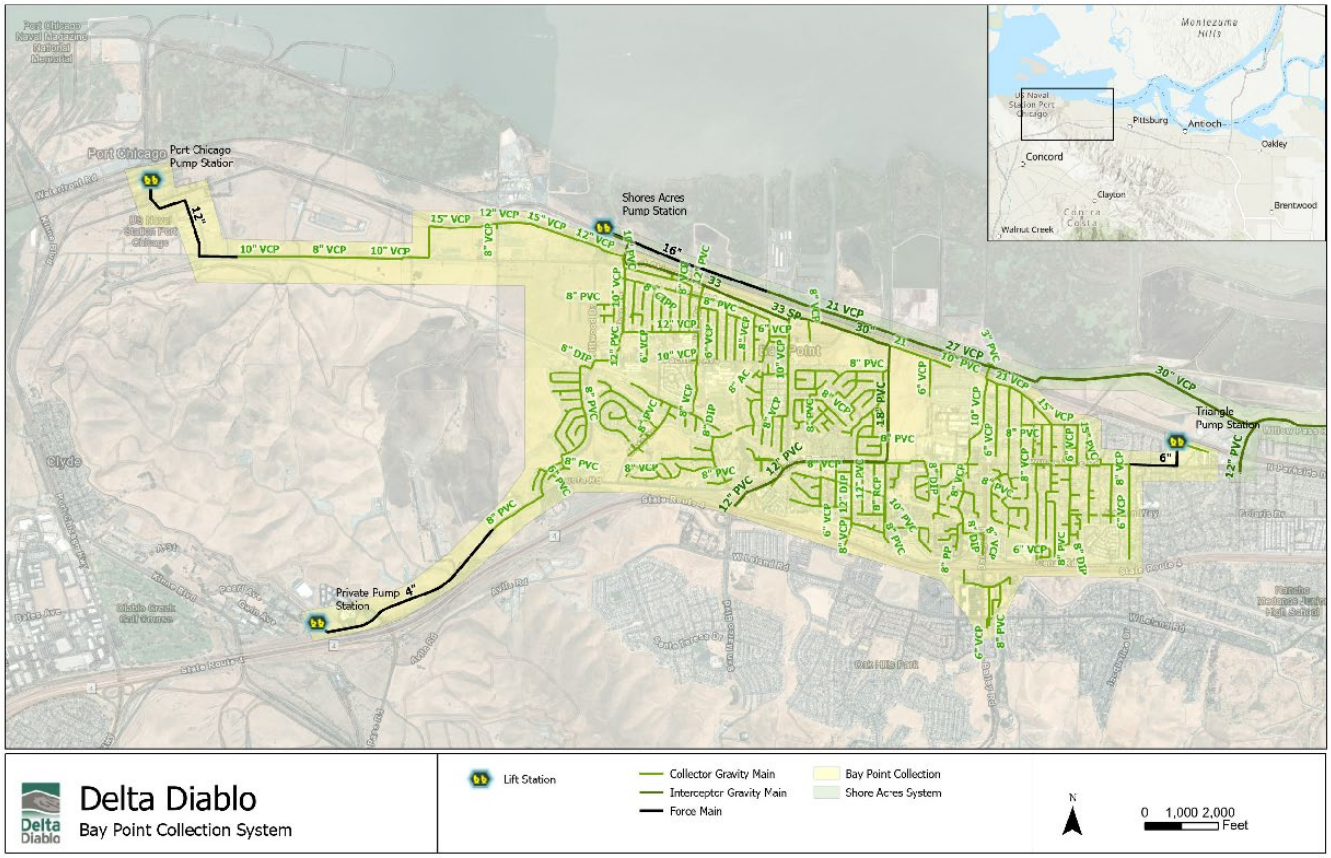
.4 The plan shall include a time schedule for implementing the short and long-term plans plus a schedule for developing the funds needed for the capital improvement plan.

- Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be appropriately trained and,
- Provide equipment and replacement part inventories, including identification of critical replacement parts.

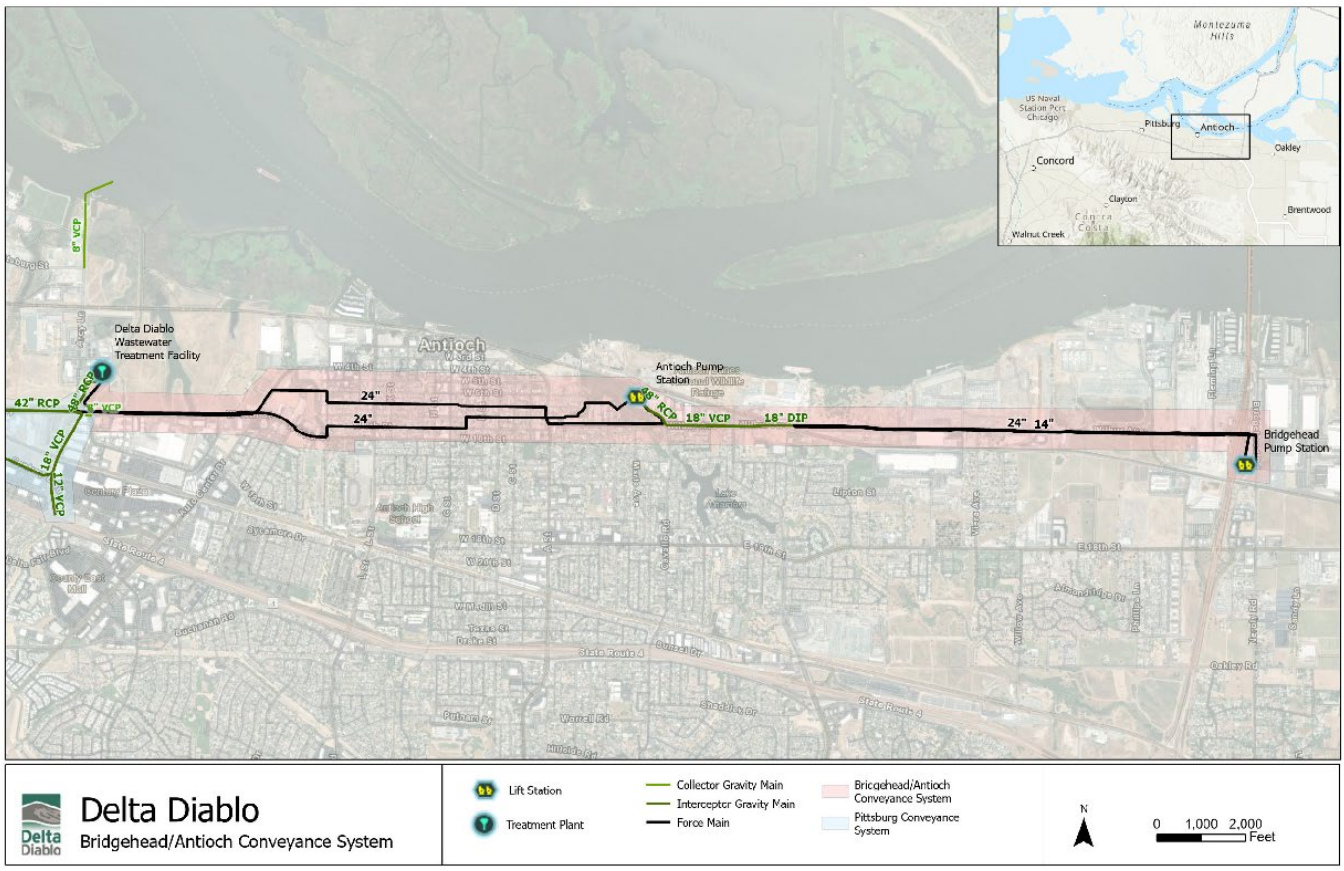
4.3 Collection System Mapping

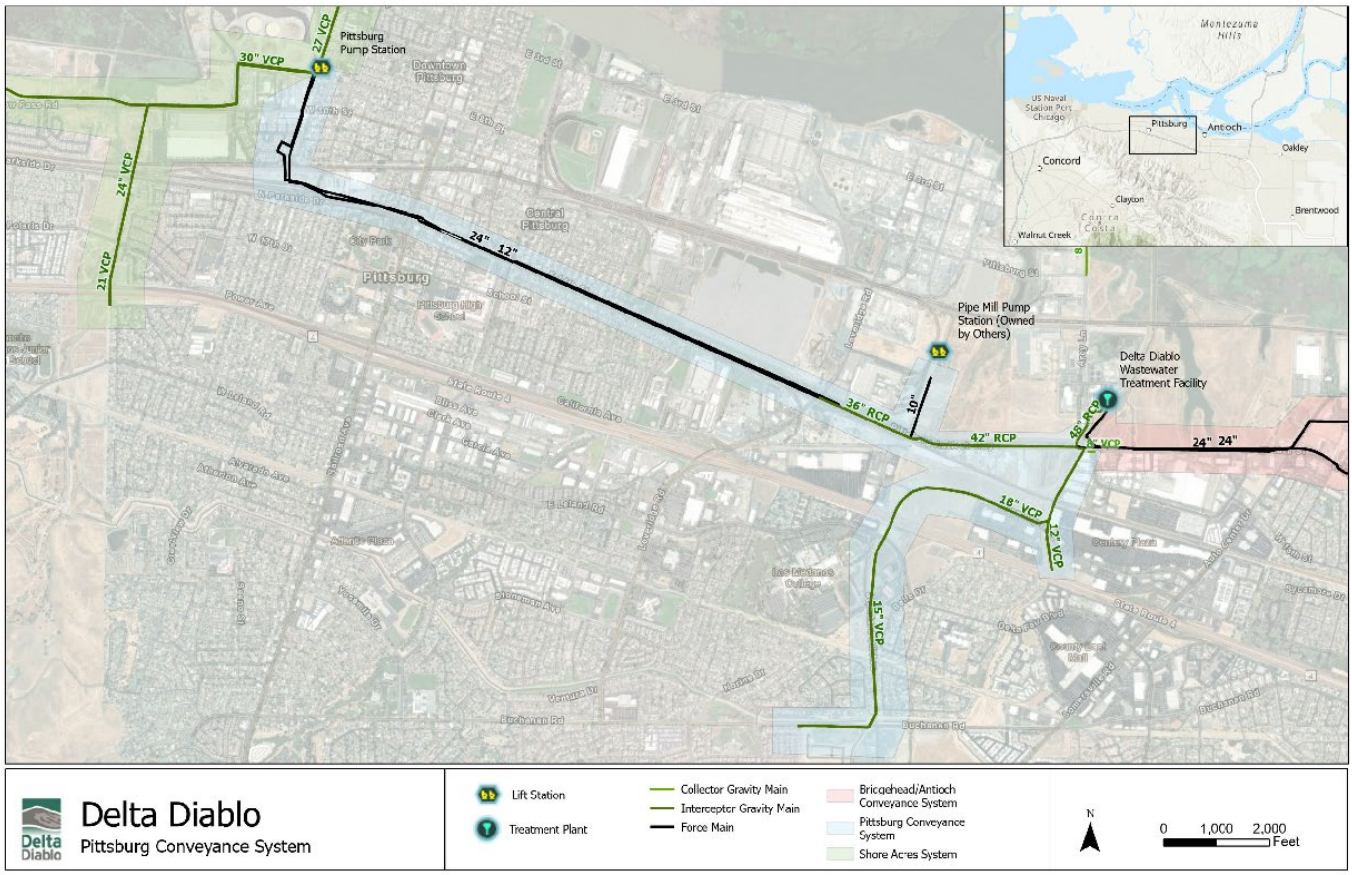
The District maintains its collection system maps for gravity sewers and conveyance system facilities using Geographical Information System (GIS). The District implemented GIS in 2013.

The field crews use hard copy maps that are produced from GIS. The hard copy maps are updated on an as-needed basis. Corrections that are identified by the field crews are forwarded to the Engineering Division for action as-soon-as-possible.




Shores Acres Pump Station
Triangle Pump Station
Pittsburg Pump Station
Pittsburg
Antioch
Concord
Oakley
Clayton
Brentwood
Walnut Creek
Delta Diablo
Shore Acres System
Lift Station
Collector Gravity Main
Interceptor Gravity Main
Force Main
Bay Point Collection
Pittsburg Conveyance System
Shore Acres System
N
0 1,000 2,000 Feet

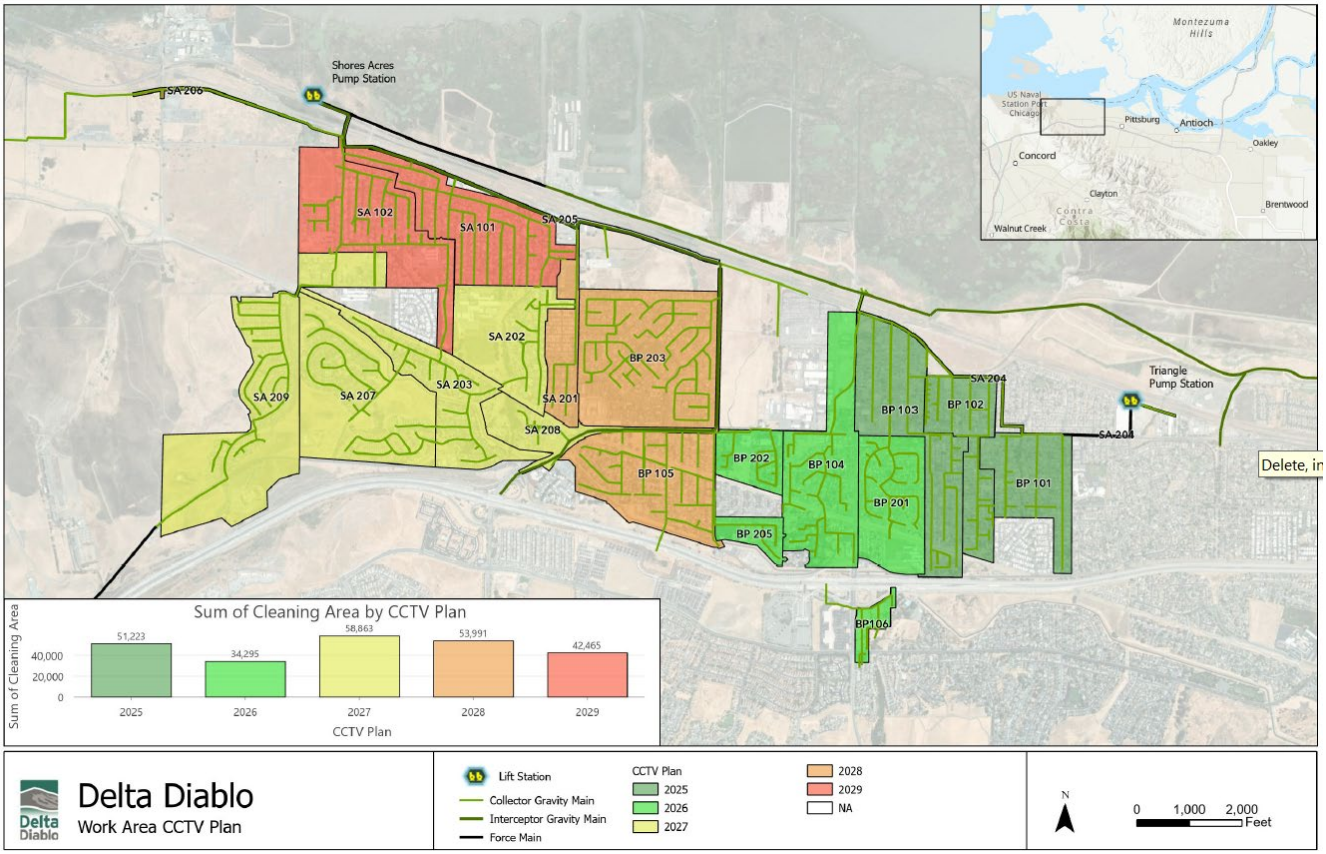

Delta Diablo Wastewater Treatment Facility
Antioch
Antioch Pump Station
Bridgehead Pump Station
Pittsburg
Concord
Oakley
Clayton
Brentwood
Walnut Creek
Delta Diablo
Bridgehead/Antioch Conveyance System
Lift Station
Treatment Plant
Collector Gravity Main
Interceptor Gravity Main
Force Main
Bridgehead/Antioch Conveyance System
Pittsburg Conveyance System
N
0 1,000 2,000 Feet



4.4 Preventive Maintenance for Gravity Sewers

4.4.1 Gravity Sewer

The District proactively cleans its sewer system every three years, and it preventively cleans sewers with a history of problems every 1, 3, 6, or 12 months. The District inspects its sewer system with a Closed Circuit Television (CCTV) unit as part of a five-year inspection program, utilizing the Pipeline Assessment Certification Program (PACP) rating system. (See Map Below).



The District uses underground contractors to correct problems identified by CCTV or the sewer cleaning crew. District staff maintains a prioritized list of known structural problems for future repair and rehabilitation. Rehabilitation priority is determined using the NASSCO PACP 1 to 5 grading system, where pipelines with grades of four or higher are immediately added to an existing or planned capital improvement project in the CIP.

Gravity sewer maintenance is currently scheduled using Mainsaver (the District's CMMS). Completed gravity sewer maintenance and CCTV inspections are recorded using work orders.

The District's standard operating procedure for sewer cleaning is included as Appendix 4-A.

4.4.2 Non-Routine Maintenance

Non-routine maintenance activities include investigation and response to any complaints regarding a manhole overflow, missing or shifted manhole covers, manhole covers that are excessively noisy, residential plumbing troubles, pump station malfunction, unexpected sewer odor, etc. Sewer complaints are investigated, and appropriate actions are taken to resolve the source of the problem. Non-routine maintenance activities are tracked in Munis.

4.5 Operation of Conveyance System

4.5.1 Pump Stations

Pump station operation is monitored by Operations staff using the District's Supervisory Control and Data Acquisition (SCADA) system. Pump station process parameters are transmitted to the treatment plant control room. Critical alarm conditions are also transmitted via cell phone to the Lead Operator.

Critical alarms include Communication Failure, Power Outage, Personnel Safety, Flow Diversion in Progress, Building Intrusion, and High Wet Well level. All alarms received at the treatment plant are archived in the SCADA system.

If it appears that a pump station is experiencing a SCADA communications failure, treatment plant personnel conduct onsite inspections to ensure that there is not a spill occurring at any of the District's pump stations. Inspections will discontinue when SCADA communication is restored.

A backup alarm system utilizes float switches installed above the normal high-level alarm in the wet wells and notifies the treatment plant control room via an auto-dialer and independent phone line of extreme high wet well level conditions and attempts to start a pump.

The major pump stations are monitored by a video surveillance system and intrusion alarms. Video images are transmitted via radio link to the treatment plant control room.

4.6 Preventative Maintenance for Conveyance System

4.6.1 Pump Stations

The District conducts inspections of its pump stations numerous times per week using checklists specific to each pump station. A binder with the Operating and Maintenance (O&M) manual for each station is kept at the respective sites and is updated as necessary.

Mechanical and electrical equipment preventive maintenance frequencies are established to meet accepted industry standards and manufacturer's recommendations. They are modified based on local operating conditions. Equipment maintenance is recorded in the District's CMMS. Data contained in the SCADA and CMMS systems is protected by the District's cybersecurity protocols.

Corrective maintenance work orders are issued to the in-house maintenance organization and include the priority for the activity.

4.6.2 Force main

The Antioch, Bridgehead, and Pittsburg pump stations have dual force mains. The Shore Acres station has a single force main.

Force main cleaning is every one-to-three-year intervals based on operating conditions, annual inspections and visual conditions that would indicate a force main problem. Force main appurtenances are inspected annually. The inspections include drain-back systems, blow-off valves, valves, and air-vacuum relief valves that are rotated semi-annually with spares. During these inspections any signs of needed force main cleaning are noted and scheduled. The annual right-of-way inspections are conducted to note any visual conditions that would indicate a problem with the force main.

The District utilizes chemicals or oxygen at the Antioch, Shore Acres, and Pittsburg pump stations to control the formation of hydrogen sulfide in the force mains.

Force main corrosion control systems are tested and adjusted annually.

4.6.3 Conveyance System Gravity Sewers

The District monitors the condition of its conveyance system gravity sewers using periodic visual and CCTV inspections. The results of these inspections are used to determine the condition of the gravity sewers and the need for cleaning

4.7 Rehabilitation and Replacement Plan for Collection and Conveyance System Assets

Defects observed during pump station, force main, and gravity line inspections are either scheduled for correction or are included in the Capital Improvement Plan using a risk based criteria for project timing. The District uses contractors for special services such as line repair and replacement.

The District has a Wastewater Capital Asset Replacement Fund (CAR) to cover the cost of the renewal and replacement of its collection and conveyance system assets. The CAR includes a financial plan that is intended to provide adequate funds for the replacement of an asset at the end of its reliable life. The District's Five-Year Capital Improvement Program allocates the funding necessary to cover the cost of the renewal and replacement of its collection and conveyance system assets. The District reviews its capital plan annually with input from the operations and maintenance staff. The current version of the District's Capital Improvement Plan is available on the District's website www.deltadiablo.org. The District will use the information from its condition assessment activities to determine appropriate levels of future funding.

4.8 Equipment and Critical Parts Inventory for Collection and Conveyance System O&M Programs

The list of the major equipment that District uses in the operation and maintenance of its sewer system, including gravity sewers, pump stations, force mains, and emergency response is included in Appendices 4-B and 6-J. Equipment and spare parts inventory are in the District warehouse and emergency response storage area. Purchasing staff has the authority to purchase routine repair items necessary to keep the warehouse properly stocked. The District's Capital Improvement Program includes multiple projects to evaluate, design and implement capital infrastructure improvements to increase the reliability and resiliency of the District's pumping and conveyance system, as outlined in the SSMP. The development of a Critical Sewer System Replacement Parts Inventory procedure was addressed as part of this project. These projects will also enhance the District's capability to effectively maintain and repair collection and conveyance system infrastructure.

4.9 Resources

The District's Maintenance Division resources that are allocated to the maintenance of the gravity sewer portion of the collection system facilities are shown on Table 4-1. The allocated resources of 2.25 Full-Time Equivalents (FTE) are adequate to meet the projected workload.

Table 4-1: Collection System Maintenance Resources for Gravity Sewer System

Position/Activity	FTE
Maintenance Manager	.25

Collection System Lead Worker	.5
Collection System Worker II	.75
Collection System Worker I	.75
Total	2.25

The District's Resource Recovery Services Department resources allocated to the conveyance system include plant operators for operational inspections, plant maintenance staff for preventive and corrective maintenance activities, and 0.5 FTEs from the collection system field crew for operations support activities. The District has allocated adequate resources to meet the conveyance system workload.

4.10 Outreach Program

The District is participating in the Bay Area Clean Water Agencies region-wide outreach program for plumbing contractors.

The District has been operating a Delta Household Hazardous Waste (DHHW) program since 1996 and opened a permanent facility, the Delta Household Hazardous Waste Collection Facility (DHHWF) in 2003. The District provides HHW management services for Eastern Contra Costa County. The facility provides residents with a means to dispose of HHW and non-recyclable waste including latex paint, motor oil, cooking oil, antifreeze, batteries, medicines (not including controlled substances), fluorescent lamps, pesticides, oil-based paint, household cleaners, and electronic waste. Strategic outreach and information sharing to stakeholders is regularly undertaken on behalf of the DHHWF through media outreach, advertising, community events, public speaking, targeted giveaways, website content, social media, marketing collateral materials, and partnership messaging.

4.11 Training Program for Collection and Conveyance Systems

4.11.1 District Staff

The District uses a combination of in-house classes, on-the-job training, conferences, seminars, and other training opportunities to train its wastewater collection system staff.

The District encourages its wastewater collection system employees to be certified in Collection System Maintenance by the California Water Environment Association. The certification process requires employees to demonstrate that they have participated in 12 hours of training every two years to renew their certificates.

4.11.2 Contractor Staff Working on District Projects

The District has developed a contract language that requires contractors working in the District's wastewater collection system to provide training for their employees regarding the potential impact of their activities on the operation of collection system facilities.

Appendix 4-A Standard Operating Procedure for Sewer Cleaning

General Safety Guidelines

The following safety guidelines should be followed when operating or servicing the high velocity flushing machine. Know and follow local, state and federal safety regulations as they apply to confined space entry, traffic control, and other job site safety rules. Refer to the manufacturer's manual as needed.

1. Ensure operators have personal protection equipment, which includes, but is not limited to: hard hats, gloves, hearing protection, non-slip footwear, reflective vests, and/or high visibility foul weather gear.
2. Ensure operators have proper tools for manhole cover removal.
3. Ensure cleaner is positioned properly following the manufacturer's operating instructions.
4. If not directly over the manhole opening, ensure the use of extension rollers for safe operation.
5. Ensure operator remains in front of the control panel always during operation, never leaving controls unattended. Do not use ropes, cords, or other devices to secure operating controls in open position during operation.
6. Be aware of any bystanders. Never let anyone stand directly in front of the hose reel during operation.
7. Ensure the correct nozzle is used for the pump rating and that the nozzle is in good condition.
8. Ensure nozzle and nozzle extension are tightly secured to the sewer hose end fitting.
9. Inspect the sewer hose continually for excessive scrapes, cuts, blisters, and/or kinks. Do not operate if any of these conditions appear until the hose is repaired or replaced.
10. Ensure the sewer hose is protected from sharp or rough edges during operation. Use the proper slipper guide or manhole roller to protect the hose and operator.
11. Ensure the sewer hose lever wand assembly is always used. Do not place hands on sewer cleaning hose when hose reel is in payout or retrieve operation.
12. During operation, be aware of the location of the nozzle in the pipe and do not allow the nozzle to back out of the pipe at full throttle.
13. Ensure operators remain clear of the manhole during operation. Never allow operators in the manhole while the machine is in operation.
14. Ensure operators use long-handled gaffing tools or hooked rope to remove or lower nozzles or tools from the far manhole to avoid entry. Read, understand, and follow all applicable confined space entry procedures if manhole entry is required.
15. Ensure operation of the cleaner during stoppages is done from the downstream dry manhole. Never attempt to place the nozzle in a full manhole. Injury can be caused if the nozzle is not in the pipe and exits the manhole under pressure.
16. Do not operate the hose reel in payout mode faster than the nozzle can pull the hose, creating a hose backlash.
17. Do not use the sewer hose as a pulling tool.
18. Do not rewind the sewer hose on the reel tightly without water pressure to avoid reel damage.
19. Adhere to all safety labels on the machine.
20. Do not operate the machine when excessive noise appears that is uncommon to normal operation.

21. When performing service work on the machine, shut the machine down and follow lock-out/tag-out procedures. Never place hands near moving components. Do not wear loose clothing near moving parts or components.
22. Always use a secondary prop for cowling doors when service work is performed.
23. Use only manufacturer recommended parts and tools.
24. Follow all manufacturer's recommended routine maintenance procedures for the machine and components. Ensure the system has been dewatered properly if storing outside during cold weather.
25. Be sure hose reel is connected to the hose swivel provided before turning hose reel on. This will prevent anyone from being struck by the hose.
26. Do not operate or pressurize your hose reel hose with a nozzle on it unless the nozzle has been inserted into a pipe or a closed container.
27. Never put your hands in front of or point a pressurized water hose at someone.

Daily Work Planning

1. Review scheduled work for the day to determine what will be needed to safely complete the job.
2. Review maps for set-up locations and footages.
3. Review traffic control.
4. Hold a job brief when work or personnel changes.
5. Document information when it's necessary.

Vehicle Inspection / Pre-Trip

1. Complete the DOT approved Driver's Vehicle Inspection Report.
2. When inspection is completed: sign, date and file.
3. If a vehicle safety issue arises during the inspection have it repaired immediately.
4. Verify that the hose reel is stowed, and transport pins are securely in place.
5. Verify that the vacuum boom is stored properly and locked for transport.
6. Make sure you have all the required traffic control, Personal Protective Equipment (PPE), first aid kit, gas meter, and cell phone.

Vehicle Operation

1. A trained two-person crew shall ALWAYS perform Collections Combination truck operations. If additional traffic control is required (like a flag person), work will be postponed until it can be done safely.
2. When cleaning crew gets close to the intended manhole (MH), the worker on the passenger side of the truck will exit the truck, place cones around the work area in front of the vehicle and then remove the MH cover, swing the hose reel out, and guide the driver into position.

The Delta Diablo Confined Space Procedure must be followed: When removing covers in areas suspected of, or subject to, flammable conditions (e.g., highly industrialized areas, smell of gasoline, gas station trunk lines, etc.) the air space immediately beneath the cover shall be monitored for flammable conditions prior to removing the cover. If the cover does not provide a sample port, the cover shall be lifted a few inches and not removed or fully opened until atmospheric conditions are determined.

3. After the vehicle is set up on the manhole, the remaining traffic control will be set up.
4. Before the driver exits the cab of the vehicle, they will place it into neutral and then set the air brakes, also verifying that both the arrow board and beacon are on and providing advance warning.

5. Wheel chocks are required on all grades and slippery road surfaces.
6. After the driver safely exits the truck, they will move to the front of the truck and deploy the hose reel.
7. Then a hydro cleaning hose with a 20' leader hose of a different color attached to the end of it will be lowered into the MH, inspecting the condition of the hose as it descends through the slipper guide / tiger tail into the upstream pipe invert.

Note: Never install the hydro nozzle into a surcharged manhole. There is no way to ensure the nozzle is in the pipe before water is routed to it. If the nozzle is not in the pipe, it can quickly curl upwards and exit the manhole at a high rate of speed causing serious injury. When attempting to clear a blockage, ALWAYS work from the downstream, dry manhole. This is the only way to be sure the nozzle is safely placed into the pipe with the slipper guide.

8. Engage the water pump then carefully raise the water pressure to approximately 500 PSI until the hose is in the line 4 to 6 feet, at which point the water pressure can be increased to a desired pressure (up to 3000 PSI) and begin paying out the hose to the distance specific for that line segment.
9. When the hose has traveled the desired distance, reduce the pressure to approximately 2,500 PSI. In some newer areas that are fairly deep, the worker can increase the pressure. It may be necessary in the older and shallower areas to reduce the pressure for safety reasons and reduce the possibility of sewer water backing up in the customer's house.
10. Adjust the reel speed control, so that retrieval rate is about 2 feet/second. Pulling the hose back at this rate allows the jets in the nozzle to keep debris moving downstream.
11. As the nozzle gets closer to the MH, the worker will check the MH channel to see how much debris is being brought back. If there is a sufficient amount of debris, it may be necessary to vacuum the debris from the channel. An excessive amount of debris may indicate the need to hydro-clean the sewer again to completely remove all debris.
12. Upon completion of the cleaning of each line segment, the worker will wash the walls and base of the MH for the purpose of odor and vector control.

In Case of an Emergency, the worker may need to shut the water pressure off quickly. To do this, the Operator can either turn off the switch to the auxiliary engine or push the red kill/stop button located on the opposite side of the hose reel from the auxiliary engine on-off switch.

13. At the end of each shift, the debris tank shall be emptied, and the fuel and water tanks topped full. This will reduce condensation in the fuel system and prepare the vehicle for quick emergency response.

Cleaning Level of Service

1. Hydro-cleaning is intended to remove all foreign materials from the pipe walls, inverts and structures.
2. The true success of a cleaning program is dependent upon the ability to view the internal condition of the sewer line through TV inspection.
3. When line cleaning is not followed by TV inspection, it will be up to the Collection System Worker to determine if a line has been successfully cleaned. Although the amount and type of debris removed, and personal experience assist in determining if a line is clear, this method is very subjective.
4. Although a 3,200 feet/day target has been established for hydro-cleaning, the speed, pressure and number of passes will be subject to the Collection System Worker.
5. All sludge, sand, dirt, rocks, grease and other solid material resulting from the cleaning operation shall be removed at the downstream manhole of the section being cleaned.

Handgun Operation

1. Position the water pump control valve and the hose reel control valve on the front of the hose reel in the OFF position.
2. Start the auxiliary engine and run at idle speed.
3. Remove the quick-disconnect plug from the handgun connection located under the main frame just behind the cab on the curbside.
4. Connect the female end of the handgun hose to the handgun and disconnect the male end of the handgun hose to the handgun connection on the main frame.
5. Make sure the handgun trigger is in the OFF position.
6. To pressurize the handgun, turn ON the handgun system ball valve located on the front bumper curbside.
7. Turn the bottom pump control valve on the front of the hose reel to the ON position.
8. The pressure of the handgun system is set at the factory between 650 and 750 PSI at auxiliary engine idle speed.

Note: NEVER run the auxiliary engine over idle speed while operating the handgun.

9. To depressurize the handgun system, turn OFF the bottom pump control valve first, and then turn OFF the handgun ball valve.

Safety Note: NEVER point the handgun at, or in the direction of another person.

Water Filling Procedure

1. Position truck at water source to receive fresh water supply.
2. If filling from a hydrant, charge or purge the hydrant before hooking up your fill hose. Allow the hydrant to run until clean water is running through. Connect your fill hose.

NOTE: Using clear water will help extend water pump valves, valve seats, valve springs, and nozzle life.

3. Turn on the hydrant. As you fill the tanks you will see the water level rise in the sight tube. Fill tanks until water begins to come out of the air vents in the caps either on the lower tanks or on the upper tanks, depending on which water system you have.

Note: Should you be required to fill from a source other than a hydrant, such as a creek, try to pump from the top of the water level to avoid sucking gravel into the tank. If this is done on a regular basis it is recommended that you install a pre-strainer to ensure only clean water gets into your water system.

Priming the Pump

While you are still connected to your water source, this is a good time to prime your water pump. This is accomplished by following steps:

1. Be sure all petcocks and drain valves have been closed and remove quick disconnect plug from handgun connection.
2. Start the auxiliary engine at idle.
3. Turn handgun valve ON (front bumper).
4. Turn water pump valve ON (hose reel bottom valve).
5. Once you have a solid high-pressure stream of water from the open handgun connection, turn water pump valve OFF.
6. Turn handgun valve OFF.
7. Turn hose reel valve ON.
8. Turn water pump valve ON.

9. Once you have a good flow of water from your hose reel, turn water pump valve OFF.
10. Turn hose reel valve OFF.
11. Turn auxiliary engine OFF.
12. Replace handgun quick disconnect plug.

Vacuum Breaker Operation

1. The vacuum breaker control is located on the top of the hose reel control panel on the curb side.
2. To engage the compressor, you must move the lever labeled vacuum located behind the hose reel near the front bumper on the driver's side of the truck.
3. On units with hydrostatic driven compressors, the parking brake must be engaged for the vacuum breaker doors to function.
4. While vacuuming, the vacuum breaker switch must be in the ON position with vacuum breaker doors open. When the debris body reaches its maximum capacity, the vacuum breaker doors will close, stopping all airflow.
5. When this condition occurs, you must either drain off the excess water in the debris body or dump the material out of the debris body to allow the vacuum breaker doors to reopen.
6. With the vacuum breaker switch in the ON position, the doors will also close when the operator disengages the parking brake. This feature is to ensure there will be no carry-over of material from the debris body to the vacuum compressor during transport.
7. With the vacuum breaker switch in the ON position, if the operator needs to stop the flow of air to dislodge any debris from the end of the air tube, he/she can reach over and turn the vacuum breaker switch to the OFF position to stop the air flow. Then, turn the switch back to the ON position and continue vacuuming.
8. The vacuum breaker switch should be left in the ON position at all times, except as described in #7.

Lubrication Note: There are two grease fittings on the vacuum breaker door assembly shaft that require grease monthly.

Boom Operation

Note: Only qualified boom operators shall be permitted to operate the boom equipment during cleanup operations.

1. Start engine and set parking brake to engage hydraulic system.
2. Unlatch boom from boom support.
3. Survey the area for hazards including low utility wires.
4. The joystick located on the curb side of the hose reel raises and lowers the boom. Push the detent button in the center of the joystick and lift up to raise the boom or push down to lower the boom. Release the joystick, and the boom action will stop. To move the boom to the right or left, push the detent button in the center of the joystick, and push toward the cab of truck to rotate the boom to the curb side. Pull the joystick toward the front to rotate the boom to the driver's side.
5. If your machine has a telescopic boom, there are two push buttons located at the control panel just below the joystick control marked IN and OUT.
6. The boom will rotate 270° degrees from side to side
7. There is a wireless remote pendant which controls all the boom and tank functions.
8. To store the boom for transporting the machine:

a. Retract boom all the way in.
b. Rotate boom over boom support bracket.
c. Lower boom into boom support and guide hose onto lower bracket provided.
d. Latch boom-to-boom support.

Note: NEVER transport unless boom is latched in the boom support.

References

Hydro flush Best Practices Manual, California Collection System Collaborative Benchmarking Group, February 2001.

California Manual on Uniform Traffic Control Devices (FHWA MUTCD 2003 Revision 1, as amended for use in California), US Department of Transportation, Federal Highway Administration, 2003.

Appendix 4-B Major Sewer System Equipment Inventory

Inventory Date _____

Inventory/Condition Checked by _____

Equipment Number	Major Equipment Type	Year Purchased
VEHICLE 84	E350 Ford Ibak (For the CCTV)	2025
VEHICLE 71	F350 Ford 4x4 Van stocked with spill response containment supplies	2012
VEHICLE 80	VACALL Hydro Cleaner	2020
PUMP 17-18	Portable 10” Emergency Pumps (2-Each)	2023
PUMP 13-14	Portable 6” Emergency Pumps (2-Each)	2005
PUMP 15-16	Portable 4” Emergency Pumps (2-Each)	2005

APPENDIX 4-C Critical Spares

Located in warehouse and Delta Diablo CMMS system.

Section 5 Design and Performance Provisions

5.1 Introduction

This element of the SSMP presents the District's Design and Construction Standards.

5.2 Regulatory Requirements for Design and Construction Element of SSMP

The summarized requirements for the Design and Construction Standards element of the SSMP are:

5.2.1 RWQCB Requirement

The collection system agency shall identify minimum design and construction standards and specifications for the installation, rehabilitation, and repair of new and existing sewer systems. The collection system agency must evaluate if the existing design standards are appropriate and up to date. If the collection system agency believes its current standards are appropriate, the collection system agency can refer to existing documentation.

The collection system agency shall identify procedures and standards for inspecting and testing the installation of new sewers, pump stations, and other appurtenances, and for rehabilitation and repair projects. As with design and construction standards, the SSMP should refer to existing documentation if standards for inspection and testing are already in place.

5.2.2 GWDR Requirement

The agency must have design and construction standards and specifications for the installation of new sewer systems and the rehabilitation and repair of existing sewer systems.

The agency must also have procedures and standards for inspecting and testing the installation of new sewers, pump stations, and other appurtenances, and for rehabilitation and repair projects.

5.3 Standard Specifications for Wastewater Facilities

The District's standards pertaining to the design, construction, and inspection of the Bay Point collection system are included in the latest edition of the Central Contra Costa Sanitary District Standard Specifications (Design Standards). The intent of the Design Standards is to provide design engineers with information on the requirements and preferences for facilities to be conveyed to the District for ownership, operation, and maintenance. The Design Standards provide information on the type of facilities and equipment that are acceptable to the District. The Design Standards also cover the requirements for inspection and testing prior to acceptance by the District. Standards for the repair and rehabilitation of existing facilities are also addressed in the Standard Specifications.

The design of the conveyance system facilities follows the District's Sewer System Master Plan and generally accepted practices for large diameter gravity sewers, force mains, and pump stations.

Section 6 Spill Emergency Response Plan

6.1 Introduction

The purpose of the Spill Emergency Response Plan (SERP) is to support an orderly and effective response to Sanitary Sewer Overflows (SSOs). The SERP provides guidelines for District personnel to follow when responding to, cleaning up, and reporting SSOs occurring within the District's service area.

6.2. Regulatory Requirements for SERP Element of SSMP

The summarized requirements for the SERP element of the SSMP are:

6.2.1 RWQCB Requirement

The collection system agency must develop an overflow emergency response plan that provides procedures for SSO notification, response, reporting, and impact mitigation.

6.2.2 GWDR Requirement

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 meet all the following.

- 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.

- Annually, review and assess effectiveness of the Spill Emergency Response Plan, and update the Plan as needed.

6.3 Goals

The District's goals for responding to SSOs are:

- Respond quickly to minimize the volume of the SSO.
- Contain the spilled wastewater to the extent feasible.
- Minimize public contact with the spilled wastewater.
- Eliminate the cause of the SSO.
- Mitigate the impact of the SSO; and
- Meet the regulatory reporting requirements.

6.4 Program Overview

The District has adopted service call/overflow response procedures requiring immediate response to minimize or eliminate an overflow. The collection van is stocked with spill response supplies and is available for use at any time. Field reports from collection system service calls and overflows are distributed to key personnel so that appropriate action can be taken and documented. The Service Call/Overflow Response Standard Operational Procedure (SOP), included as Appendix 6-D, is to aid staff in prompt and responsible SSO response and is intended only as a condensed version of this section of the SSMP.

6.5 SSO Detection

The processes that are employed to notify the District of the occurrence of an SSO include: observation by the public, receipt of an alarm, or observation by District staff during the normal course of their work.

6.5.1 Public Observation

Public observation is the most common way that the District is notified of blockages and spills. Contact information for reporting sewer spills and backups are on the District's website www.deltadiablo.org. The District's main telephone number is (925) 756-1900.

6.5.1.1 Normal Work Hours

The District's regular working hours are Monday through Friday from 8:00 a.m. to 5:00 p.m., except holidays. When a report of a sewer spill or backup is made, District staff receives the call, takes the information from the caller, and fills out the first section of the Collection System Service Call/Overflow Field Report (Field Report).

The person who took the call verbally communicates it to the Lead Operator and the collection system field crew (verbally, not voice mail) along with the Field Report information.

The person who took the call immediately sends an email to "Service Call Sewer" in the Global Address List in Outlook and documents the call in the Operations Log.

6.5.1.2 After Hours

Plant operations staff receives the call, obtains the information from the caller, and then completes the first part of the Field Report. The Lead Operator determines the appropriate response measures based on information provided by the caller.

6.5.2 Receipt of Alarm

The District's pump stations are monitored using SCADA and "Smart-Cover" technology is used in the conveyance pipe system. Plant operations staff monitors alarm conditions and SCADA flow data for abnormalities that could indicate an infrastructure failure. Plant operators receive and notify appropriate District staff of pump station alarm conditions.

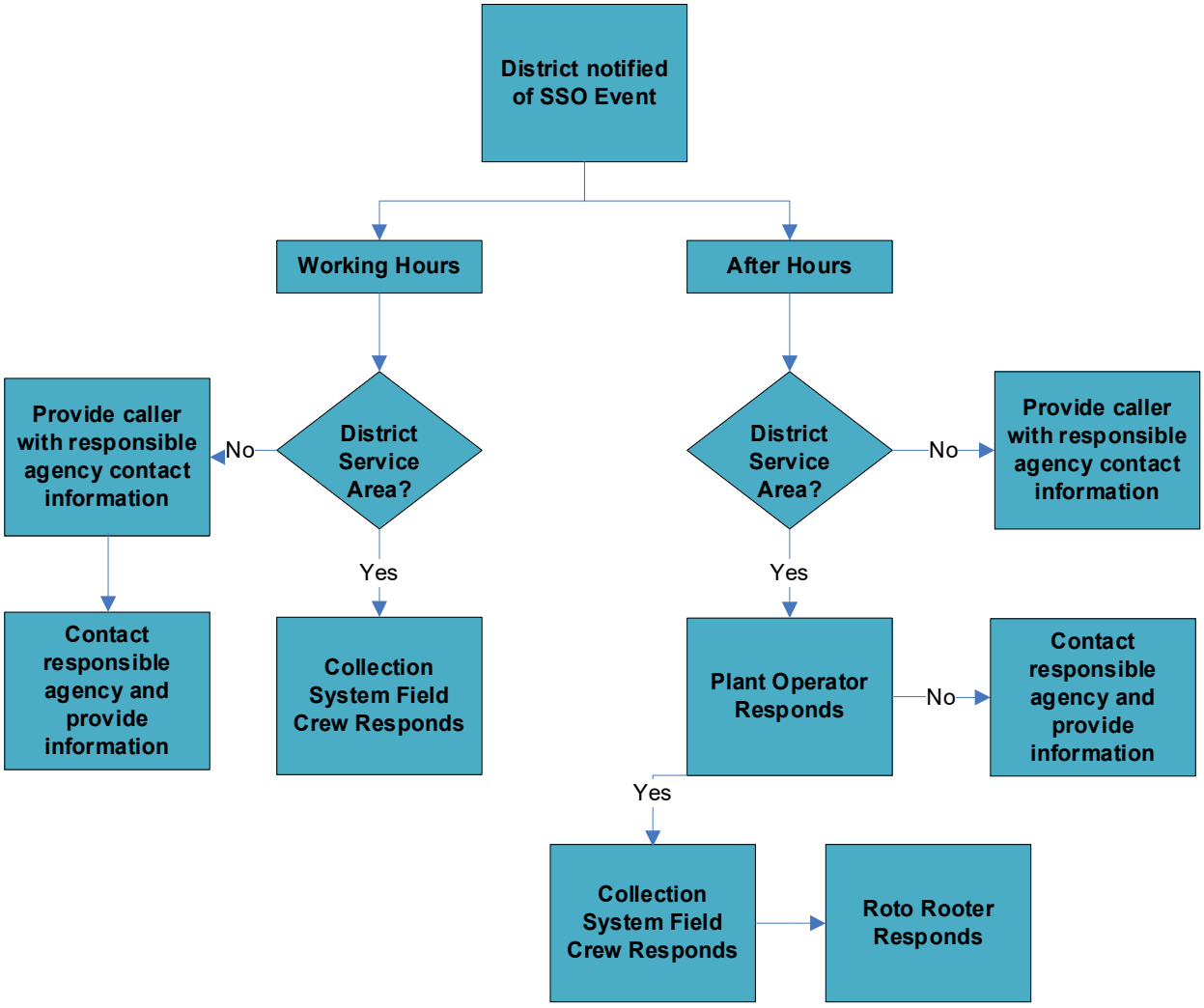
6.5.3 District Staff Observation

District staff conducts periodic inspections of its sewer system facilities as part of their routine activities. Any problems noted with the sewer system facilities are reported to designated District staff who, in turn, responds to emergency situations. Work orders are issued to address non-emergency conditions.

6.6 SSO Response Procedures

Sewer service calls and pump station alarms are considered high priority events that demand a prompt response. The notification and response procedure flow chart are shown on Figure 6-1. Emergency contact information is included as Appendices 6-A through 6-C.

Figure 6-1: Notification and Response Procedure Flow Chart



6.6.1 First Responder Priorities

The first responder's priorities are:

- To follow safe work practices.
- To respond promptly with the appropriate equipment.
- To contain the spill whenever feasible.
- To restore the flow as soon as possible.
- To minimize public access to and/or contact with the spilled sewage.
- To promptly notify the Lead Operator in event of an SSO.
- To return the spilled sewage to the sewer system.
- To restore the area to its original condition (or as close as possible).

6.6.2 Safety

The first responder is responsible for following safety procedures at all times. Special safety precautions must be observed when performing sewer work.

There may be times when District personnel responding to a sewer system event are not familiar with potential safety hazards peculiar to sewer work. In such cases it is appropriate to take the time to discuss safety issues, consider the order of work, and check safety equipment before starting the job.

6.6.3 Initial Response

The first responder must respond to the reporting party, pump station, or site of the problem and visually check for potential sewer stoppages or overflows. All sewer system calls require a response to the reported location of the event in an attempt to minimize or eliminate an overflow and prevent sewage from entering a drainage channel or water way if possible. Because time is of essence, we should always respond immediately with the goal of never exceeding a response of one hour.

The first responder (Collection Crew/Lead Operator) should:

- Verify the address and nearest cross street, making sure it is part of the District's conveyance system.
  - If not, provide the caller with the phone number of the responsible City and follow up by calling the City and providing the details of the call.
  - Provide assistance if requested.

- Determine appropriate response measures based on the circumstances and information provided by the caller (e.g., weather and traffic conditions, small back up vs. sewage flowing on the ground, to storm drain system, drainage channel or surface water.) If additional help is needed, the Lead Operator will contact other employees, contractors, and/or equipment supplier using the following:

  - Collection System Service Call/Overflow Call Out List for Off-Shift Response,
  - Appendix 6-A.
  - Emergency Contact List, Appendix 6-B.
  - Outside Contractor Phone List, Appendix 6-C.

- If the spill involves a force main or pump station, see procedures in Section regarding Emergency Response for Conveyance System Facilities below (Section 6.6.6).
- Respond with the combination sewer cleaning truck (Vac-Con) and/or spill response vehicle depending on the situation.
- Note arrival time at spill site.
- Verify the existence of a sewer system spill or backup.
- Field verifies the address and nearest cross street, making sure it is part of the District's sewer/conveyance system.
- Identify and clearly assess the affected area and extent of spill.
- Comply with all safety precautions (traffic, confined space, etc.)
- Contact caller.
- Notify the Lead Operator.
    - If the spill appears to be large, in a sensitive area, or there is doubt regarding the extent, impact, or how to proceed.
    - If additional help is needed for line cleaning or repair, containment, recovery, lab analysis, and/or site cleanup.
- If the spill is large or in a sensitive area, document conditions upon arrival with sufficient photographs to clearly illustrate the impact of the SSO.
- Decide whether to proceed with clearing the blockage to restore the flow or to initiate containment measures. The guidance for this decision is:
    - Small spills – proceed with clearing the blockage.
    - Moderate or large spill where containment is anticipated to be simple – proceed with the containment measures.
    - Moderate or large spills where containment is anticipated to be difficult – proceed with clearing the blockage; however, call for additional assistance after 15 minutes without clearing the blockage and implement containment measures.

6.6.4 Restore Flow

Use the appropriate cleaning tools, set up downstream of the blockage and hydro clean upstream from a clear manhole. Attempt to remove the blockage from the system and observe the flows to ensure that the blockage does not recur downstream. Follow Standard Operating Procedures for use of Vac-Con or other equipment included in Appendix 4-A.

If the blockage cannot be cleared within a reasonable time (+/- 15 minutes), or sewer requires construction repairs to restore flow, then initiate containment and/or bypass pumping. If assistance is required, immediately contact other employees, contractors, and equipment suppliers.

- Collection System Service Call/Overflow Call Out List for Off-Shift Response,
- Appendix 6-A.
- Emergency Contact List, Appendix 6-B.
- Outside Contractor Phone List, Appendix 6

6.6.5 Initiate Spill Containment Measures

The first responder should attempt to contain as much of the spilled sewage as possible using the following steps:

- Determine the immediate destination of the overflowing sewage.
- Plug storm drains using air plugs, sandbags, and/or plastic mats to contain the spill, whenever appropriate. If spilled sewage has made contact with the storm drainage system, attempt to contain the spilled sewage by plugging downstream storm drainage facilities.
- Contain/direct the spilled sewage using dike/dam or sandbags.
- Pump around the blockage/pipe failure/pump station.

6.6.6 Emergency Response for Conveyance System Facilities

Failure of a pump station or force main requires immediate action. On-site diversion systems are available at the Bridgehead, Antioch, Pittsburg and Shore Acres pump stations. A portion of the pump station flow can be diverted into emergency storage basins.

The first responder (Collection Crew/Lead Operator) to a potential conveyance system failure should:

- Determine whether flow can be restored within a reasonable time (+/- 15 minutes).
- If it appears that flow cannot be restored within a reasonable time or if the conveyance system facility requires construction and/or repairs, then employ contingency plans covering containment, bypass pumping, contractual assistance, etc.
- If assistance is required, immediately contact other employees, contractors, and equipment suppliers as required, using the following:
  - Collection System Service Call/Overflow Call Out List for Off-Shift Response,
  - Appendix 6-A.
  - Emergency Contact List, Appendix 6-B.
  - Outside Contractor Phone List, Appendix 6-C.

- Act to contain and return spilled sewage to the sewer system:
  - Determine the immediate destination of the overflowing sewage.
  - Plug storm drains using air plugs, sandbags, and/or plastic mats to contain the spill, whenever appropriate. If overflowing sewage has made contact with the storm drainage system, attempt to contain the spilled sewage by plugging downstream storm drainage facilities.
  - Contain/direct the spilled sewage using dike/dam or sandbags.

6.7 Recovery and Clean Up

The recovery and clean up phase begin when the flow has been restored and the spilled sewage has been contained as much as to the extent possible. The SSO recovery and clean up procedures are:

6.7.1 Water Quality Sampling, Testing and Reporting

Water quality sampling and testing is required by the State Water Board, and anytime District staff believe that sampling and testing can help confirm that surface waters are no longer contaminated with sewage. The water quality sampling procedures are:

- The first responder should notify the Lead Operator or Laboratory Staff to collect samples. Samples should be collected as soon as possible after the discovery of the SSO event. The Lab staff has historically responded during off hours for every SSO event where water quality sampling has been required. Even with this reliable response track record management staff has the option of placing O&M staff (including lab staff) on standby for extended holidays or when large storm events are anticipated.
- The water quality samples should be collected from upstream of the spill, from the spill area, and downstream of the spill in flowing water (e.g., creeks). The water quality samples should be collected near the point of entry of the spilled sewage and every 100 feet along the shore of stationary water bodies.
- The District's laboratory will analyze the results to determine the nature and impact of the discharge. Additional samples will be taken to determine when posting of warning signs can be discontinued. The basic analyses should include total Coliform, Fecal Coliform, Biochemical Oxygen Demand (BOD), Dissolved Oxygen, pH, and Ammonia Nitrogen.

State Water Board (CWIQS) Requirements:

Water Quality Sampling and Monitoring (CWIQS)

Conduct water quality sampling **within 48 hours** after initial SSO notification for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters and develop a Water Quality Monitoring Plan.

Water quality results are required to be uploaded into CIWQS for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters.

Required Elements:

- Sampling protocols.
- Information about how agency will account for spill travel time.
- Decide appropriate bacteria indicator - look at applicable NPDES permit for your agency or your regional agency (if satellite). NPDES permit is based on Basin Plan but more specific to your agency.
- Indicate that bacteria indicator and ammonia will be sampled (minimum).
- Indicate that samples will be analyzed by accredited or certified laboratory.
- Indicate how sampling equipment/instruments/supplies will be maintained and/or calibrated.

SSO Technical Report (CIWQS)

Submit within 45-Calendar days after the end date of any Category 1 SSO in which 50,000 gallons or greater are spilled to surface waters.

Required Elements:

1. **Causes and Circumstances of the SSO**
   a. Explanation for how and when SSO was discovered.
   b. Diagram showing the SSO failure point, appearance point(s), and final destination(s).
   c. Description of method and data used to calculate SSO volume, including volume recovered.
   d. Description of cause(s) of SSO.
   e. Copies of original field crew records used to document SSO.
   f. Historical maintenance records for failure location.

2. **Enrollee's Response to SSO**
   a. Narrative description of chronological actions taken to end SSO.
   b. Explanation of how the SSMP Overflow Emergency Response plan was implemented to respond to and mitigate the SSO.
   c. Final corrective action(s) completed and/or planned to be completed, including a schedule for actions not yet completed.

3. **Water Quality Monitoring**
   a. Description of water quality sampling activities conducted including analytical results and evaluation of the results.
   b. Detailed location map illustrating water quality sampling points.

6.7.2 Estimate the Volume of Spilled Sewage

Use the methods outlined in Appendix 6-G to estimate the volume of the spilled sewage. Wherever possible, document the estimate using photos of the SSO site before and during the recovery operation.

6.7.3 Recovery of Spilled Sewage

Vacuum up or pump the spilled sewage and discharge it back into the sanitary sewer system.

6.7.4 Clean up and Disinfection

Clean up and disinfection procedures should be implemented to reduce the potential for human health issues and adverse environmental impacts that are associated with an SSO event. The procedures described are for dry weather conditions and should be modified as required for wet weather conditions. Where cleanup is beyond the capabilities of District staff, a cleanup contractor will be used.

6.7.4.1 Private Property

Appendices 6-K through 6-R contain procedures related to spills involving private property including backups into residences and businesses.

6.7.4.2 Hard Surface Areas

Collect all signs of sewage solids and sewage-related material either by hand or with the use of rakes and brooms.

Wash down the affected area with clean water until the water runs clear. Take all reasonable steps to contain and vacuum up the wastewater. Disinfect all areas that were contaminated from the overflow using the disinfectant solution of household bleach diluted 10:1 with water. Apply minimal amounts of the disinfectant solution using a hand sprayer. Document the volume and application method of disinfectant that was employed. Allow area to dry. Repeat the process if additional cleaning is required.

6.7.4.3 Landscaped and Unimproved Natural Vegetation

Collect all signs of sewage solids and sewage-related material either by hand or with the use of rakes and brooms or heavy equipment.

Wash down the affected area with clean water until the water runs clear. The flushing volume should be approximately three times the estimated volume of the spill.

Either contain or vacuum up the wash water so that none is released.

Allow the area to dry. Repeat the process if additional cleaning is required.

6.7.4.4 Natural Waterways

Cal OES should be notified in the event an SSO significantly impacts any creeks, gullies, or natural waterways. Cal OES will provide the professional guidance needed to effectively clean up spills that occur in these sensitive environments.

Clean up should proceed quickly to minimize negative impact. Any water that is used in the cleanup process should be de-chlorinated prior to use.

6.7.4.5 Wet Weather Modifications

Omit flushing and sampling during heavy storm events with heavy runoff where flushing is not required, and sampling would not provide meaningful results.

6.7.5 Follow-Up Activities

If sewage has reached the storm drain system, the Vac-Con should be used to vacuum/pump out the catch basin and any other portion of the storm drain that may contain sewage.

If an overflow occurs at night, the location should be re-inspected first thing the following day. The responder should look for any signs of sewage solids and sewage-related material that may warrant additional cleanup activities

6.8 Public Notification

Post signs and place barricades to keep vehicles and pedestrians away from contact with spilled sewage. Do not remove the signs until directed by the Resource Recovery Services Director. A sample warning sign is included as Appendix 6-I.

Creeks, streams and beaches that have been contaminated because of an SSO should be posted at visible access locations until the risk of contamination has subsided to acceptable background

levels. The warning signs, once posted, should be checked every day to ensure that they are still in place.

Major spills may warrant broader public notice. The General Manager will authorize the Public Information Manager to contact local media when significant areas may have been contaminated by sewage. The Public Information Manager will maintain the contact information for local media.

6.9 Failure Analysis Investigation

The objective of the failure analysis investigation is to determine the "root cause" of the SSO and to identify corrective action(s) needed that will reduce or eliminate future potential for the SSO to reoccur.

The investigation should include reviewing all relevant data to determine appropriate corrective action(s). The investigation should include:

- Reviewing and completing the Collection System Service Call/Overflow Field Report;
- Reviewing past maintenance records.
- Reviewing available photographs.
- Conducting a CCTV inspection to determine the condition of the line segment immediately following the SSO and reviewing the video and logs; and
- Interviewing staff who responded to the spill.

The product of the failure analysis investigation should be the determination of the root cause and the identification of the corrective actions. The Collection System Failure Analysis Form (Appendix 6-F) should be used to document the investigation.

6.10 SSO Categories

The California State Water Resources Control Board (SRWCB) has established guidelines for classifying and reporting SSOs. Reporting and documentation requirements vary based on the type of SSO.

There are four categories of SSOs as defined by the SWRCB[3]:

- **Category 1** - Any volume of sewage resulting from a failure in the Enrollee's sanitary sewer system that:
  A. Reach surface water and/or reach a drainage channel tributary to a surface water, or
  B. Reach a Municipal Separate Storm Sewer System (MS4) and are not fully captured and returned to the sewer system.
- **Category 2** – Discharges of untreated or partially treated wastewater of 1,000 gallons or greater that do not reach surface water, a drainage channel or separate storm sewer system unless the entire amount to the storm drain system is fully recovered.
- **Category 3** – Spills less than 1,000 gallons that do not reach surface waters.
- **Private Lateral Sewage Discharges** - Sewage discharges that are caused by blockages or other problems within a privately-owned lateral.

[3] State Water Resources Control Board Monitoring and Reporting Program No. 2006 0003-DWQ (as revised by Order No. WQ 2008-0002.EXEC) Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (as revised by Order No.2013-0058-EXEC).

6.11 SSO Documentation Notification and Reporting

All SSOs should be thoroughly investigated and documented for use in managing the sewer system and meeting established reporting requirements. The procedures for investigating and documenting SSOs are:

6.11.1 Internal SSO Reporting Procedures

6.11.1.1 Category 2 & 3 SSOs

The first responder will fill out the Collection System Service Call/Overflow Field Report and distribute it to those listed on the Field Report.

6.11.1.2 Category 1 SSOs

- **Notify:** Operations Manager, Maintenance Manager, Operation and Maintenance Supervisors, Resource Recovery Services Director, General Manager, and Public Information Manager.

- **Immediate Phone Notification:** To Resource Recovery Services Director for spills estimated to be over 10,000 gallons or if expected to enter a local waterway.

- **Onsite Supervisor:** Will provide notification as soon as logistically possible by e-mail.

- **Notification Will Include:**
  - Location
  - Spill Start Time
  - Spill Rate (Estimated)
  - Current Estimated Volume
  - Current Mitigation Efforts in Progress
  - Additional Pertinent Information Such as Traffic Disruption, Residential or Infrastructure Damage, etc.
  - Who is Lead Operator?
  - Who is in Charge on Scene?
  - Is There any Public or Media on Scene (How Many?)

- **Follow Up Notification:** Will be provided as necessary when conditions change examples as follows: Spill is stopped, spill gets significantly worse, reporters or politicians call or show up at spill site, homeowner damage begins to occur, etc.). Method of notification will be dependent on the type of change being reported.

6.11.2 External SSO Notification Procedures[4]

The California Integrated Water Quality System (CIWQS) electronic reporting system should be used for reporting SSO information to the SWRCB whenever possible. A flow chart is included as Figure 6-2 showing the external reporting response requirements based on the type of SSO.

[4] State Water Resources Control Board Monitoring and Reporting Program No. 2006-0003-DWQ (as revised by Order No. WQ 2008-0002.EXEC) Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (as revised by Order No. 2013-0058-EXEC)

6.11.2.1 Notification:

- Within two hours of becoming aware of any Category 1 SSO greater than or equal to 1,000 gallons discharged to surface water or spilled in a location where it probably will be discharged to surface water, notify the California Office of Emergency Services (Cal OES) 1 (800) 852-7550 or (916) 845-8911 and obtain a notification control number.

6.11.3 CIWQS Reporting:

- **Category 1 SSO:** Submit draft report within three business days of becoming aware of the SSO and certify within 15 calendar days of SSO end date.

- **Category 2 SSO:** Submit draft report within 3 business days of becoming aware of the SSO and certify within 15 calendar days of the SSO end date.

- **Category 3 SSO:** Submit certified report within 30 calendar days of the end of month in which SSO the occurred.

- **CWIQS SSO Technical Report:** Submit within 45 calendar days after the end date of any Category 1 SSO in which 50,000 gallons or greater are spilled to surface waters. See Section 6.7.1 for report details.

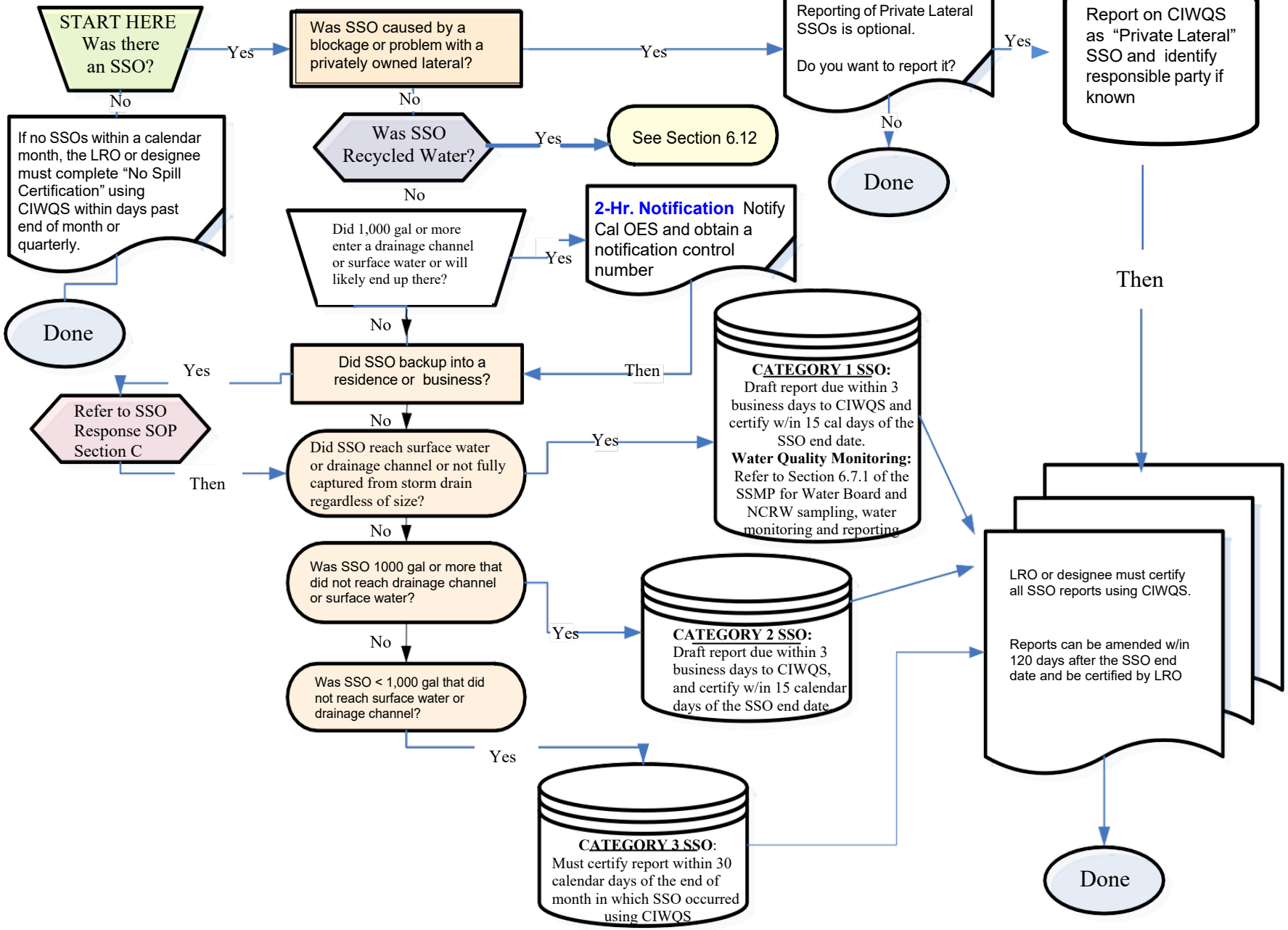
- **"No Spill" Certification:** Certify that no SSOs occurred within 30 calendar days of the end of the month or, if reporting quarterly, the quarter in which no SSOs occurred.

- **Collection System Questionnaire:** Update and certify every 12 months.

- If **multiple appearance points** for SSO from sewer system, complete one SSO report in CIWQS.

- **CIWQS Report Amendments** – The District has 120 days to change an SSO report, however if you request more time by providing justification for why the additional information was not available prior to the end of the 120 days to the State Water Board SSO Reduction Program staff.

Figure 6-2: SSO External Reporting Requirement Flow Chart



California Integrated Water Quality Systems (CIWQS) Mandatory Reporting Program (MRP) Requirements On-Line Reporting Web Site, Statewide General Waste Discharge Executive Order No. 2006-0003-DWQ (as revised by Order No. WQ 2008-0002.EXEC) Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (as revised by Order No. 2013-0058-EXEC Effective September 9, 2013):

www.waterboards.ca.gov/water_issues/programs/sso

For questions with filling out the report, contact Gil Velasquez at (916) 322-1400.

User ID: _____ Password:_____

Note: The LROs have the Log-in and Password information.

Each person who will be reporting information On-Line will need to log onto the system and provide user information. Use Waste Discharge Identification Number **(WDID) #2SSO10127**. Complete the appropriate SSO Event Form based on Category of SSO. The following information may be required for each category of SSO event depending on the Category of SSO:

A. Location of SSO by entering GPS coordinates.
B. Applicable Regional Water Board, i.e., Bay Point and Pittsburg Region 2, Antioch Region 5.
C. County where SSO occurred.
D. Whether or not the SSO entered a drainage channel and/or surface water.
E. Whether or not the SSO was discharged to a storm drainpipe that was not fully captured and returned to the sanitary sewer system.
F. Estimated SSO volume in gallons.
G. SSO source (manhole, cleanout, etc.)
H. SSO cause (mainline blockage, roots, etc.)
I. Time of SSO notification or discovery
J. Estimated operator arrival time.
K. SSO destination
L. Estimated SSO end time.
M. SSO Certification. Upon SSO Certification, the SSO Database will issue a Final SSO Identification (ID) Number.
N. Estimated SSO volume that reached surface water, drainage channel, or not recovered from a storm drain.
O. Estimated SSO amount recovered.
P. Response measures and corrective action taken.
Q. If samples were taken, identify which regulatory agencies received sample results (if applicable). If no samples were taken, N/A must be selected.
R. Parameters that samples were analyzed for (if applicable).
S. Identification of whether or not health warnings were posted.
T. Beaches impacted (if applicable). If no beach was impacted, N/A must be selected.
U. Whether or not there is an ongoing investigation.
V. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the overflow and schedule of major milestones for those steps.
W. OES Control Number (if applicable).
X. Date OES was called (if applicable).
Y. Time OES was called (if applicable).
Z. Identification of whether or not County Health Officers were called.
AA. Date County Health Officer was called (if applicable) and,
BB. Time County Health Officer was called (if applicable).

6.11.4 Internal SSO Documentation

6.11.4.1 Category 1, 2, and 3 SSOs

The first responder will complete the Collection System Service Call/Overflow Field Report (Appendix 6-E) and provide copies to the LRO.

The first responder will follow the procedures and complete the Sewer Backup Summary Report (Appendix 6-M) if an SSO has occurred in a residence or building.

Staff will prepare a file for each individual SSO. The file should include the following information:

- Initial service call information
- Collection System Service Call/Overflow Field Report Form
- Copies of the CIWQS report forms
- Volume estimate
- Failure analysis investigation results
- Appropriate maps showing the spill location
- Photographs of spill location
- Water quality sampling and test results, if applicable

6.11.5 External SSO Record Keeping Requirements[4]

The GWDR requires that individual SSO records be maintained by the District for a minimum of five years from the date of the SSO. This period may be extended when requested by a Regional Water Board Executive Officer. All records shall be made available for review upon State or Regional Water Board staff's request. Records shall be retained for all SSOs, including but not limited to the following when applicable:

- SSO event records.
- Records documenting Sewer System Management Plan (SSMP) implementation and changes/updates to the SSMP.
- Records to document Water Quality Monitoring for SSOs of 50,000 gallons or greater spilled to surface waters.
- Collection system telemetry records if relied upon to document and/or estimate SSO Volume.
- Self-maintained records shall be available during inspections or upon request.

Every SSO event is an opportunity to evaluate the response and reporting procedures. Each overflow event is unique, with its own elements and challenges including volume, cause, location, terrain, and other parameters.

As soon as possible after major SSO events, all of the participants, from the person who received the call to the last person to leave the site, should meet to review the procedures used and to discuss what worked and where improvements could be made in responding to and mitigating future SSO events. The results of the debriefing should be recorded and tracked to ensure the action items are completed.

6.12 Recycled Water Spills

❖ State Water Resource Control Board (SWRCB) – The SWRCB does not currently monitor recycled water spills. Any unauthorized spill within the Treatment Facility shall be reported as part of the Treatment Facility Permit to Operate.

❖ Regional Water Quality Control Boards (RWQCB)– The District's recycled water program is split between two RWQCB. The two regions which the District provides recycled water within includes, Region 2 – San Francisco Bay Regional Water Quality Control Board (Pittsburg) and Region 5 – Central Valley Regional Water Quality Control Board (Antioch). However, Region 2, herein referred to as RWQCB, has been designated the single RWQCB to regulate the thresholds established on the subsequent pages shall be reported to Region 2 as follows:

[4] State Water Resources Control Board Monitoring and Reporting Program No. 2006-0003-DWQ (as revised by Order No. WQ 2008-0002.EXEC) Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (as revised by Order No. 2013-0058-EXEC)

Regional Water Quality Control Board

Recycled Water Spill Notification Protocol

A. <u>For any spill or other unauthorized release of more than 50,000 gallons of</u> <u>recycled water that discharges to land and overflows outside of the use area</u>, the Site Supervisor or designated agency contact identified in the Recycled Water Program must take the following steps:

1. As soon as emergency response measures are completed, but no later than **24 hours** after the spill or other unauthorized release, notify the San Francisco Bay Regional Water Quality Control Board and the Division of Drinking Water via the email addresses listed below.

2. Notify the Regional Water Board Spill Line via telephone or email.

3. Provide written confirmation via email to the Regional Water Board and the Division of Drinking Water within **15 calendar days** from the date of notification that includes the information listed below.

B. <u>For any spill or other releases greater than 1,000 gallons of recycled water that discharges to surface water or may reach surface water</u> (e.g., drainage ditch, storm drain), the Site Supervisor or designated agency contact identified in the Recycled Water Program must take the following steps:

1. As soon as emergency response measures are completed, but no later than **24 hours** after the spill or other unauthorized release, notify the Regional Water Board via email and telephone.

2. Notify the Regional Water Board Spill Line via telephone or email. Staff may advise to contact the California Office of Emergency Services.

3. Provide written confirmation via email to the Regional Water Board within **15 calendar days** from the date of notification that includes the information listed below.

4. For spills or other unauthorized releases of recycled water greater than **50,000 gallons** that have **not been dechlorinated** and discharge to **surface water**, collect, at a minimum, a water quality sample of the recycled water and analyze for residual chlorine. If accessible and feasible, provide a sampling result at the point of discharge to the surface water.

Provide the following information when you notify the agencies:

a. Date and time the spill began and ended
b. Location of the spill
c. If the spill entered a storm drain or surface water. Name of surface water if known
d. Estimated volume of the spill or flow if the spill is ongoing
e. Estimated time of repair
f. Cause of the spill
g. Agencies involved with the response actions
h. Corrective actions taken or plans for corrective action
i. Whether adverse impacts related to the spill were observed such as excessive sedimentation or a fish kill
j. Photograph(s), coordinates, or a map of the spill location[1]
k. Recycled water chlorine residual value (if the spill volume is greater than 50,000 gallons to surface water. Refer to section B.4 above for applicable conditions).

A spill reporting form is attached that can be used as a template but is not required. Attach any other relevant information that is not addressed in the form.

Spill Contact Information

San Francisco Bay Regional Water Quality Control Board

Phone: (510) 622-2390

Contact: Melissa Gunter

Email: WDR.monitoring@waterboards.ca.gov
Melissa.Gunter@waterboards.ca.gov

San Francisco Bay Regional Water Quality Control Board Spill Line

Phone: (510) 622-2369

Email: RB2SpillReports@waterboards.ca.gov

State Water Resources Control Board Division of Drinking Water

Phone: (510) 620-3454

Contact: Marco Pacheco

Email: Marco.pacheco@waterboards.ca.gov
DDW-RWP-DIST04@waterboards.ca.gov

California Office of Emergency Services

Phone: (916) 845-8911 or (800) 852-7550

[1] If a map is prepared, the spill location can be hand drawn on the map.
[2] A current version of the map is accessible online at https://www.waterboards.ca.gov/drinking_water/programs/districts/

Regional Water Quality Control Board

Name:	Phone:
Agency:	
Site Name:	
Location:	
Date:	
Contact for Follow-up (Name/Phone):	

INFORMATION ON SPILL OR UNAUTHORIZED DISCHARGE
Date/time spill or discharge began:
Date/time spill or discharge ended:
Location of spill or discharge:
Did the recycled water enter or will it enter storm drains or receiving waters (e.g., rivers, creeks, lakes, or ocean); if so identify.
Estimated volume of spill or discharge (gallons):
Estimated time of repair:
If still ongoing, estimate flow rate (gallons/minute):
Agencies/entities involved with repair and/or clean-up:
Cause of the spill or discharge:
Corrective actions taken and when, or plan to correct spill/discharge:

6.13 Post SSO Event Debriefing

Every SSO event is an opportunity to evaluate the response and reporting procedures. Each overflow event is unique with its own elements and challenges including volume, cause, location, terrain, and other parameters.

As soon as possible after major SSO events, the participants from the person who received the call to the last person to leave the site, should meet to review the procedures used and to discuss what worked and where improvements could be made in responding to a mitigating future SSO events. The results of the debriefing should be recording and tracked to ensure the action items are completed. If necessary, the District will use information gathered during the debriefing to amend an SSO report to add information and/or correct errors.

6.14 Equipment

The District maintains emergency response equipment located at the District Treatment Facility.

The equipment inventory is computerized and inspected annually using a checklist, included as Appendix 6-J. The major equipment is used at least annually to ensure that personnel and the equipment can perform adequately in an emergency.

In addition, the District maintains specialized equipment that is required to support this Overflow Emergency Response Plan, including:

Closed Circuit Television (CCTV) Inspection Unit – A CCTV Inspection Unit is required to determine the root cause for all SSOs from gravity sewers. **Camera** – A digital or disposable camera is required to record the conditions upon arrival, during clean up, and upon departure.

Emergency Response Truck – A four-wheel drive van is required to store and transport the equipment needed to effectively respond to sewer emergencies. The equipment and tools should include spilled sewage containment and clean up materials.

GPS Unit (Global Positioning System) – A handheld GPS unit or Google Earth is required to determine the coordinates of spills for use in meeting RWQCB SSO reporting requirements.

Combination Sewer Cleaning Truck – A combination high velocity sewer cleaning truck with vacuum tank is required to clear blockages in gravity sewers, vacuum spilled sewage, and wash-down the impacted area following the SSO event.

Portable Generators, Portable Pumps, Piping, and Hoses – The list of portable equipment that is required to support this plan is included as Appendix 6-J.

6.15 SSO Response Training

This section provides information on the training that is required to support this Overflow Emergency Response Plan.

6.15.1 Initial and Annual Refresher Training

All District personnel who may have a role in responding to, reporting, and/or mitigating a sewer system overflow should receive training on the contents of this SERP. All new employees should receive training before they are placed in a position where they may have to respond. Current employees should receive annual refresher training on this plan and the procedures to be followed.

6.15.2 SSO Response Drills

Periodic training drills should be held to ensure that employees are up to date on the procedures, the equipment is in working order, and the required materials are readily available. The training drills should cover scenarios typically observed during sewer related emergencies force main. The results and the observations during the drills should be recorded and action items should be tracked to ensure completion. Real response situations provide the most useful experience and will be considered as appropriate training.

6.15.3 SSO Training Record Keeping

Records should be kept of all training that is provided in support of this plan. The records for all scheduled training courses and for each overflow emergency response training event should include date, time, place, content, name of trainer(s), and names of attendees.

6.16 Contractors Working on District Sewer Facilities

All contractors working on District sewer facilities are contractually required to develop a project-specific Overflow Response Plan. All contractor personnel are required to receive training in the contractor's Overflow Response Plan and to follow it in the event that they cause or observe an SSO.

Appendix 6-A Collection System Service Call/Overflow Call Out List for Off-Shift Response

Delta Diablo Collection System Personnel:

Monday – Friday 6:30 a.m. to 4:00 p.m.

Name	Title	Contact Number
Trevor Simpson	Maintenance Supervisor	(925) 303-8500 (work cell)
Anthony DeJesus	Collections Systems Worker II	(925) 382-8937 (work cell)
Taylor Amaro	Collections Systems Worker II	(925) 382-9788 (work cell)
Michael Sprague	Collection Systems Worker I	(925) 260-5306 (work cell)

In the event Collection System personnel are not readily available:

Name	Title	Contact Number
Delta Diablo Operations	Lead Operator	(925) 382-6960 (work cell)

Secondary Contacts:

Name	Contact Number	Alternate Contact Number
City of Pittsburg	(925) 252-4936	
City of Antioch	(925) 779-6950	(925) 778-2441 (Police Dispatcher)
Central Contra Costa Sanitary District	(925) 228-9500 General Number	(925) 766-0160 (24-Hr. Cell) On-Call Crew

Appendix 6-B Emergency Contact List

Agency/Utility/Other	Phone Number	Notes
Bay Area Air Quality Mgmt. Dist.	(415) 771-6000	
Republic Services	(925) 685-4711	Grit/Screenings Disposal
Golden State Water	(925) 458-2090 (800) 999-4033	Bay Point Water Calls
Calif. Dept. of Health Services Operator Cert.	(916) 341-5639	
California Highway Patrol	(707) 551-4100	Non-Emergencies
California Office of Emergency Services (Cal OES)	(916) 845-8911 (800) 852-7550	Emergency Services/State Warning Center
Cal/OSHA	(925) 602-6517	
California Integrated Water Quality System (CIWQS) http://www.waterboards.ca.gov/water_issues/programs/sso// User ID/Password: (LROs have Log-In & Password) Waste Discharge ID Number: 2SSO10127	(916) 341-55988	
California Regional Water Quality Control Board, Bay Area, Region 2 **Bill Johnson, Environmental Program Manager** Bill.Johnson@waterboards.ca.gov **Robert Schlipf, Senior Water Resource Control Engineer** Robert.Schlipf@waterboards.ca.gov	(510) 622-2300 (510) 622-2369 (510) 622-2460	Main Line Voice Mail Fax
Kerry O'Connor Kerry.OConnor@waterboards.ca.gov	(510) 622-2465	Delta Diablo NPDES Case Manager
Michael Chee **Michael.Chee@waterboards.ca.gov**	(510) 622-2333	NPDS Wastewater Division
California Regional Water Quality Control Board, Central Valley, Region 5		
Anne Walters **Anne.Walters@waterboards.ca.gov**	(916) 464-4840	
Cal Trans	(510) 286-6359	24-Hour, Radio Dispatched
Central Contra Costa Sanitary District	(925) 933-0990 (925) 766-0160 (925) 933-0955	24-Hour (Overflow) After Hours Standby Cell
Chemtrec	(800) 424-9300	Chemical Gas Release/Emergencies

Agency/Utility/Other (Cont'd)	Phone Number	Notes
City of Antioch		
Antioch Police	(925) 778-2441	
Sewer Problems	(925) 778-2441	After Hours (Police Dispatch)
Sewer Problems	(925) 779-6950	Normal Business Hours
Water Problems	(925) 778-3911	After Hours (Police Dispatch)
Water Treatment Plant	(925) 779-7029 (925) 779-7027	
City of Bay Point/Shore Acres		
Water Problems	(925) 458-2090	California Cities Water Service
Water Problems (After Hours)	(800) 999-4033	California cities Water Service
City of Bethel Island		
Sewer Problems	(925) 625-2279	Ironhouse Sanitary District
City of Oakley		
Sewer Problems	(925) 625-2279	Ironhouse Sanitary District
Water Problems	(925) 625-2112 (925) 625-3798	Diablo Water District 24 Hours - Emergency
City of Pittsburg		
Pittsburg Police	(925) 646-2441	Non-Emergencies
Sewer Problems	(925) 252-4936	
Water Problems	(925) 252-4936	24-Hour
Comcast	(800) 945-2288	To Notify Any Problems

Agency/Utility/Other (Cont'd)	Phone Number	Notes
Contra Costa County Environmental Health Dept.	(925) 608-5500 (M-F) (925) 383-5445 (cell 1) (925) 383-4945 (cell 2)	Kristian Lucas Director of Environmental Health Hazardous Material Spills
Contra Costa County Fire District Non-Emergency Station 81 (W. 10th Street, Antioch)	911 (925) 941-3330 (925) 933-1313	**Emergency**
Contra Costa County Flood Control	(925) 313-7000 (925) 313-2000	24-Hour Number is the Sheriff
Contra Costa County Sheriff	(925) 646-2441	
Contra Costa County Public Works Department	(925) 646-2441 After Hrs. call the Sheriff's Dept. (925) 313-2000 or 911	24-Hr Flood control, plugged storm drains for Bay Point and Share Acres
Contra Costa Mosquito & Vector Control District	(925) 685-9301	
Contra Costa County Water District	(925) 688-8095 (Phone Forwarded After Hours)	Between 7:00 a.m. and 3:30 p.m.
California Department of Fish & Wildlife Game	(916) 445-0045 (916) 445-0045	Wildlife Protection (Dispatch)
EBMUD	(866) 403-2683	**Emergency**
National Response Center Pacific Southwest (NRC) Environmental Protection Agency (EPA)	(800) 424-8802 (800) 300-2193	Reporting Oil & Hazardous Discharges Emergency Spill Line
Hospitals		
Sutter Delta Medical Center	(925) 779-7200	
Kaiser – Delta Fair Medical Offices	(925) 779-5000	M-F 8 a.m.- 5 p.m.
Naval Federal Police – Military Ocean Terminal Concord	(925) 246-4041	
AT&T - VERIZON	611	
Business Customer Service (AT&T)	(800) 275-0014	

Agency/Utility/Other (Cont'd)	Phone Number	Notes
Pacific Gas & Electric		
Emergency & Customer Service (24 Hr.)	(800) 743- 5000	
Information on Power Outages	(800) 743-5000	
Account Representative	(800) 743-5002	
Police Departments		
Antioch Police	(925) 778-2441	Non-Emergencies
Pittsburg Police	(925) 646-2441	Non-Emergencies
Sheriff's Dispatch	(925) 646-2441	Non-Emergencies
Recycled Water Facility (RWF)		
Delta Energy Center (DEC) Power Plant	(925) 252-2060 (925) 382-1328	Control Room 24 Hours Cell Phone Nextel
Los **Medanos** Energy Center (LMEC) Power Plant	(925) 252-2005	Control Room

Appendix 6-C Outside Contractor Phone List

Contractor / Supplier	Phone Number
Centrifuge	
Andritz Separation	(510) 614-1717
Unico Mechanical	(707) 745-4540
Collection System	
Absolute Plumbing	(925) 676-1900
City of Antioch Public Works Department	(925) 779-6950 (24 Hours)
City of Pittsburg Corp Yard	(925) 252-4936
Sweeping Corporation of America SCA (Antioch/Bay Point) (Street Sweeping)	(209) 329-1917 (Jesse Cell) (408) 228-4563 (Office)
Nor-Cal Pipeline Services – CCTV, Hydro, Repairs	(916) 442-5400 (24-Hr.)
Presidio Systems	(925) 456-8400 (925) 683-6438
TMB Restoration Services (CRSMA – Recommended)	(707) 252-5480
RES Environmental Services (Restoration)	(925) 432-1755 (925) 584-0074 (Bob) (925) 580-5272 (Craig)
Service Master Restoration Services adobbs@smrstore.cnet	(800) 480-8439 (415) 336-6258 (Andy Dobbs)
Mission Communication	(877) 993-1911
Subtronic Corp: Utility Location, Leak Detection, Smoke Test (Current District Contractor)	(925) 228-8771
Underground Services Alert (USA) -North	(800) 642-2444 Or 811
USA Marking (American Leak Detection Co.)	(800) 353-5325
Vallejo Electric	(707) 642-4315
Williams Sanitary	(925) 634-4855

Contractor / Supplier (Cont'd)	Phone Number
Chemical Release	
CHEMTREC	(800) 424-9300
Corteva Agriscience Main Gate Emergency Chlorine Leak (24-hour response) Main Gate	(925) 432-5278
Presidio Systems	(925) 456-8400 (925) 683-6438
Electrical	
Calcon Systems, Inc. (Frank Ortega)	(925) 277-0665
Contra Costa Electric	(925) 229-4250
D. W. Nicholson Corporation	(510) 887-0900
Dahl-Beck Company	(510) 237-2325 (800) 466-4395
Fairfield Electric (Bob Skinner)	(707) 446-2800
Eaton Electric	(800) 386-1911
Presidio Systems	((925) 456-8400 (925) 683-6438
Russ Electric	(800) 654-3020
Silva Electric	(209) 836-2040 (Office) (209) 649-8800 (Cell)
Telstar Instruments	(925) 671-2888
Electric Motor Repair	
Dahl – Beck Electric Co.	(510) 237-2325
IEM	(209) 275-8099
Vincent Electric Motor Co.	(510) 639-4500
Vallejo Electric Motor Co.	(707) 642-4315 (Office) (650) 833-8495
General Equipment Rental	
American Crane	(209) 838-8815
Cresco	(925) 827-0151 (Pleasant Hill) (925) 228-9811 (Martinez)
Superior Crane	(925) 689-0250 or (925) 766-0601 (Cell)
United Rentals	(925) 757-7900 (408) 383-9270
Generator - Rental/Repair	
California Diesel & Power	(925) 229-2700 (Option #2 for 24-Hour)
Collicutt Energy Services	(916) 371-1667
Cummins West, Inc.	(510) 351-6101
Peterson Power Systems	(510) 895-8400

Contractor / Supplier (Cont'd)	Phone Number
HVAC	
Cal-Neva Environmental Systems	(925) 687-9980
Prime Mechanical	(877) 635-4328
Pacific Coast Trane Service	(408) 481-3600 (408) 481-3700 (After Hours)
Schneider Electric	(877) 822-2601 (650) 291-2581 (Joe's Cell)
Instrumentation	
Calcon Systems, Inc.	(925) 277-0665 (925) 570-8479 (Cell) (Frank Ortega)
Robicon (VFDs) Siemens	(724) 334-6228
Caltest Analytical Laboratory	(707) 258-4000
Fisher Scientific	(800) 766-7000
Grainger (Lab Safety Supply)	(800) 356-0783
HACH Company	(800) 525-5940
TechKnowsion, Inc. (SCADA/PLC) Ted Bunnell	(925) 939-8324 (Office) (925) 768-5602
TelStar Instruments	(925) 671-2888
Miscellaneous	
B.R. Towing	(925) 757-3100
Arrowhead Towing	(925) 757-6539
Clean Harbors Safety Kleen	(707) 747-6699
East Bay Central Valley Tire	(925) 427-5225
OMNI Alarm	(800) 367-1091
Battalion One Fire Protection Inc.	(510) 653-8075
Inshore Divers (Buoy Repair)	(925) 439-7227
Global Diving and Salvage (Buoy Repair)	(925) 439-7227
Clean Harbors Environmental Services	(707) 747-6699
Oil and Fuel	
Armor Petroleum (UST Repairs)	(707) 437-6668
Asbury Environmental Services dba World Oil	(800) 727-2879
Ramos Oil Company	(916) 371-2570 (Main # West. Sacramento) (916) 777-5545 (Isleton) (707) 425-5780 (Fairfield)
Flyers Energy	(707) 590-6276 (Martinez) (707) 546-0766 (Santa Rosa 24-Hour)
Hunt & Sons (Current Delta Diablo Provider)	(925) 755-3835 (Antioch) (800) 734-2999 (Sacramento)
Golden Gate Petroleum	(925) 228-2222

Contractor / Supplier (Cont'd)	Phone Number
Construction	
Antioch Paving Co	(925) 757-0123
Absolute Plumbing	(925) 676-1900
Nor-Cal Pipeline Services – CCTV, Hydro, Repairs	(916) 442-5400 24-Hour
Presidio Systems, Inc.	(925) 456-8400
Con-Quest Contractors	(415) 206-0524
Pump – Repair and Rental	
Rain for Rent	925-679-2803
United Rentals (Trash Pumps/Tank Rental)	(800) 422-8265 24-Hour
Switch Gear/Breaker Repair & Service	
Emerson (ASCO)	(800) 972-2726
Russ Electric	(800) 654-3020
Waukesha Engine/Co-Generation	
Bay Power (Scot Campbell)	(530) 295-8151
Peterson Power	(707) 746-8243 (Benicia) (510) 895-8400 (San Leandro)

Appendix 6-D Service Call/Overflow Response SOP

The purpose of this Standard Operational Procedure (SOP) is to aid staff in prompt and responsible SSO response and is intended only as a condensed version of the Spill Emergency Response Plan (SERP) Section (6) of the Sewer System Management Plan (SSMP).

Addressing Service Calls (Section A):

- After Hours: Plant operations staff receives the call, obtains the information from the caller and completes the first portion of the Collection System Service Call/Overflow Field Report (Field Report) (Appendix 6-E of the SSMP). An e-mail should be sent to "Service Calls-Sewer" in the Global Address List in Outlook documenting the details of the call immediately after dispatching a response crew. After the field response, an email is sent out the Service Call Sewer.

- Monday - Friday between 6:30 a.m. - 4:00 p.m.: All service calls will be immediately directed to Collection's personnel verbally along with the "Field Report" detailing the specifics of the call. The Lead Operator must also be contacted verbally with an immediate follow-up email to "Service Calls-Sewer."

- The Collection Crew/Lead Operator shall field verify the address and nearest cross street, making sure it's part of the District's conveyance system. If not, provide the caller with the phone number of the responsible City and follow up by calling the City yourself, providing the details of the call. Provide assistance if requested.

- The response measures will be based on the information provided by the caller (weather and traffic conditions, small back up vs. sewage flowing on the ground, into a storm drain system, drainage channel or surface water.). If additional help is needed, the Senior Operator will contact other employees, contractors, and/or equipment suppliers:

    - Collection System Service Call/Overflow Call Out List for Off-Shift Response, Appendix 6-A of the SSMP.
    - Emergency Contact List, Appendix 6-B of the SSMP.
    - Outside Contractor Phone List, Appendix 6-C of the SSMP.

Responding to SSOs "Real or Potential" (Section B):

- The Collection Crew/Operator (First Responder) shall visit the site in an attempt to minimize or eliminate an overflow. Because time is of the essence, we should always respond immediately with the goal of never exceeding one hour. Respond with the combination sewer cleaning truck and/or spill response vehicle depending on the situation. Follow the standard operating procedure in the Spill Emergency Response Plan located in the response van. The vehicle keys are located in the Collections office and an extra set of response vehicle keys are also stored in the COP.

- Upon arrival at the site, clearly assess the situation and comply with all safety precautions (traffic, confined space, etc.) and verify the existence of a sewer system spill or backup.

- SSO Notification and Reporting: Accurate and responsive reporting is vital. Refer to the SSO External Reporting Requirement Flow Chart (Figure 6-2).

- The response crew shall initiate the SERP (Appendix 6-E of the SSMP) and provide copies as stated at the bottom of the field report.

- Identify and assess the affected area and extent/impact of the spill and request additional help as needed for line cleaning or repair, containment, recovery, lab analysis and site cleanup.

- Using the appropriate cleaning equipment, set up downstream of the blockage and hydro clean upstream from a clear manhole. Attempt to remove the blockage from the system and observe the flows to ensure that the blockage does not recur downstream (Standard Operating Procedure for Sewer Cleaning, Appendix 4-A of the SSMP).

- If the blockage cannot be cleared within a reasonable time (±15 minutes) or conveyance system requires construction repairs, contingency plans must be employed as needed including containment, bypass pumping, contractual assistance etc. If assistance is required, immediately contact other employees, and equipment suppliers as required. Contact the Construction Inspector or District Engineer if construction services are required. See Collection System Service Call/Overflow Call-Out List, Emergency Phone Numbers, and Outside Contractors Phone List (included as Appendices 6-A through 6-C of the SSMP).

- Signs warning the public of a sewage release should be posted in the affected area. Use barricades, caution tape, cones, etc. as needed. Signs should include, at a minimum, the words “raw sewage” (Appendix 6-I of the SSMP). Warning signs should remain posted until County Health or Regional Board staff authorizes their removal, or until receiving water sample results indicate background levels (levels as determined by upstream samples) have been attained.

- Water quality sampling and testing is required by the State Water Board and anytime District staff believe that sampling and testing can help confirm that surface waters are no longer contaminated with sewage. Refer to Section 6.7.1 of the SSMP for full details on water quality, sampling, testing, and reporting.

Back-Ups into Homes or Businesses (Section C):

Clean up and disinfection procedures should be implemented without delay to reduce the potential for human health issues and adverse environmental impacts that are associated with an SSO event. It is imperative that employees communicate effectively with the District customers, which results in greater confidence in our ability to address the problem satisfactorily. In the event of a backup into a home or business, inform the Resource Recovery Services Director, Human Recourses and Risk Manager, and refer to Appendices 6-K through 6-R of the SSMP to guide staff through the process.

Addressing Service Calls (Section A):

- Collection System Service Call/Overflow Field Report (Appendix 6-E)
- Collection System Service Call/Overflow Call Out List for Off-Shift Response (Appendix 6-A)
- Emergency Contact List (Appendix 6-B)
- Outside Contractor Phone List (Appendix 6-C)

Responding to SSOs (Section B):

- Collection System Failure Analysis Form (Appendix 6-F)
- Methods for Estimating Spill Volume (Appendix 6-G)
- Manhole Overflow Flow Rate Guide (Appendix 6-H)
- Sample Warning Sign (Appendix 6-I of the SSMP)
- SSO External Reporting Requirement Flow Chart (Figure 6-2)
- Emergency Response Inventory List (Appendix 6-J)

Back Ups into Homes or Businesses (Section C):

- Private Property Damage Procedures – Customer Relations Guidelines (Appendix 6-K)
- CSRMA Recommended Sewer Backup Response and Claims Handling Procedure (Appendix 6-L)
- Sewer Backup Summary Report (Appendix 6-M)
- Hotel Selection Form (Appendix 6-N)
- Customer Information Regarding Sewer Backup Claim (Appendix 6-O)
- Affected Personal Property Inventory Log (Appendix 6-P)
- Customer Acknowledgment That Offer of Sewer Cleaning Services Has Been Declined (Appendix 6-Q)
- Release of all Claims for Sewer Backup Losses (Appendix 6-R)
- Delta Diablo Claim Form

Appendix 6-E Collection System Service Call/Overflow Field Report

INITIAL INFORMATION

Date Service Call Received :_____ Time Service Call Received: _____ A.M.☐/P.M.☐

Call Received By: _____ Caller's Name: _____

Phone #: _____ Caller's Address: _____

Location of Overflow: _____ Cross Street: _____

Description of Complaint:_____ _____

Did the caller observe the time that SSO began? Y☐/N☐ Time:_____ A.M.☐/P.M.☐

Did the caller observe any sewage entering a storm drain or water way? _____ If yes, where?_____

Name of Crew Member(s) Dispatched:_____

Date and Time Dispatched:_____

RWQCB: Region 2 (Bay Point/Pittsburg) ☐ Region 5 (Antioch/Conveyance System East of the T P) ☐

FIELD REPORT FOR RESPONSE CREW'S USE

Date & Time First Responder Arrived At Site:_____ A.M.☐/P.M.☐

Response Crew:_____ ___

Date & Time Containment Crew Arrived At Site:_____ A.M.☐/P.M.☐

Estimated ongoing SSO discharge rate (GPM) if ongoing when crew arrived at the site:_____

Asset Type:_____ Work Area:_____ U/S Asset#:_____ D/S Asset#:_____

Location of SSO:_____

Size of Line: _____ Length of Line: _____ Pipe Material Type: _____

Easement: Yes☐/No☐ GPS Coordinate: _____

Additional Information:_____

_____

_____

COMPLETE REMAINDER OF FORM IF AN OVERFLOW OR SYSTEM BLOCKAGE/FAILURE HAS OCURRED

Time Overflow Started: _____ Time Overflow Stopped: _____ Duration of SSO: _____

Description of how the Start/Stop Date and Time was determined:_____

Complainant/Informant:_____

Witness Statements:

_____

District Visual Observation:

_____

Estimated Volume and Flow Rate (Est. Volume Divided by Est. Flow Rate):

_____

Additional Information:

_____

Est. Total Volume (Gallons): _____

Describe how overflow quantity was calculated:

_____

- Smart Estimation Workbook ☐ Method Used? _____
- Manhole Overflow Guide Appendix 6-H ☐
- Other ☐ Method Used? _____

Did the SSO discharge to a drainage channel or surface water? (CIWQS Question #20) Y☐/N☐

If No, how many gallons spilled to storm drain system: _____

Gallons Recovered: _____

Final SSO/Spill Destination (CIWQS #15):_____

Estimated Total Gallons Spilled (CIWQS #2): _____

Estimated Gallons Recovered (CIWQS #2b, 2d, 2f, 2h): _____

Estimated gallons (greater than 0) that reached surface water, drainage channel, or not recovered from a storm drain (CIWQS #2a, 2c, 2e): _____

Gallons not contained (Absorbing into ground, evaporating, etc.), and /or returned to the sewer system, but didn't either drainage channel or surface water: _____

Containment Clean Up Measures:

_____

Additional Information:

_____

Weather: Sunny ☐ Cloudy ☐ Rainy ☐ Rain for Several Days ☐ _____

Primary Cause: Roots ☐ Grease ☐ Debris ☐ Vandalism ☐ Construction Damage ☐

Pipe Failure ☐ Pump Station Failure ☐ Power Failure ☐ Capacity ☐ Other☐ _____

Additional Information:

_____

Source of SSO: Manhole ☐ Gravity Main ☐ Force Main: ☐ ARV: ☐
Clean Out: ☐ Private Lateral: ☐ Pump Station: ☐
(Name:_____) Other:☐
_____

Pictures/Video Taken: Yes ☐ No ☐ By: _____

Saved Location: _____

SAMPLE COLLECTION AND ANALYSIS

Samples Taken By: _____

Location of Samples: _____

Explanation if sample not collected or Lab analysis not performed:

_____

Affected Area: _____

Describe Property Damage:

_____

Signs Posted: Yes ☐ No ☐ Barricaded: Yes ☐ No ☐ Neighbors Notified: Yes ☐ No ☐

CAT I ☐ CAT II ☐ CAT III ☐ OES SSO#:

_____

Regulatory Agency Notified: Yes ☐ No ☐ Contact/Details:

_____

Caller/Customer Notified Re Status: Yes ☐ No ☐ If not, Why:

_____

Caller/Customer follow-up communication within 3-5 days of the event: Yes ☐ No ☐ If not, Why: _____

Follow-up measures:

_____

Work Order No.: _____

Frequency of Existing PM Program: _____ Last Date PM Performed:

_____

Recommendations on how to eliminate future problems:

_____

Failure Analysis Complete: Yes ☐ No ☐ Date: _____

Form Completed By: _____ Date: _____

*DISTRIBUTE THE FINAL FIELD REPORT TO THE POC FRONT DESK WITH COPIES TO THE OPERATIONS SUPERVISOR, PLANT MANAGER, RESOURCE RECOVERY SERVICES DIRECTOR, AND MAINTENANCE MANAGER

SKETCH OF AREA: (INCLUDE MANHOLES, INTERSECTIONS, LOCATION OF STOPPAGE, ETC.)

Appendix 6-F Collection System Failure Analysis Form

Collection System Failure Analysis Form			
Incident Report #		**Prepared By**	
SSO/Backup Information			
Event Date/Time	**Address**		
Volume Spilled	**Volume Recovered**		
Cause			
Summary of Historical SSOs/Backups/Service Calls/Other Problems			
Date	**Cause**	**Date Last Cleaned**	**Crew**
Records Reviewed By		**Record Review Date**	
Summary of CCTV Information			
CCTV Inspection Date		**Tape Name/Number**	
CCTV Tape Reviewed By		**CCTV Review Date**	
Observations			
Recommendations			
	No Changes or Repairs Required		
	Maintenance Equipment		
	Maintenance Frequency		
	Repair (Location and Type)		
	Add to Capital Improvement Rehabilitation/Replacement List: Yes No		
Maintenance Manager **Review Date**		**Resource Recovery Services Director** **Review Date**	

Appendix 6-G Methods for Estimating Spill Volume

A variety of approaches exist for estimating the volume of a sanitary sewer spill. The person preparing the estimate should use the method most appropriate to the sewer overflow in question and use the best information available. The Sewer Overflow Volume Estimation Workbook (SMART) that lists a number of estimation methods including:

- Start Time
- Eyeball
- Drop Bucket
- Photo Comparison
- Upstream Connections
- Ponded Sewage (a/v)
- Storm Drain (a/v)
- Flow
- Lower Lateral
- Lift Station
- Rate Tables
- Post Flow Event Monitoring

SMART Workbooks have been distributed to Operations, Maintenance, and Collection Departments.

Appendix 6-H Manhole Overflow Flow Rate Guide

City of San Diego
Metropolitan Wastewater Department

Reference Sheet for Estimating Sewer Spills from Overflowing Sewer Manholes

All estimates are calculated in gallons per minute (gpm)

Wastewater Collection Division
(619) 654-4160


5 gpm


25 gpm


50 gpm


100 gpm


150 gpm


200 gpm


225 gpm


250 gpm


275 gpm

All photos were taken during a demonstration using metered water from a hydrant in cooperation with the City of San Diego's Water Department.

rev. 4/99

Appendix 6-I Sample Warning Sign

WARNING

RAW

SEWAGE

DELTA DIABLO

(925) 756-1900

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Appendix 6-J Emergency Response Inventory

EMERGENCY RESPONSE EQUIPMENT AND STORAGE ROOM INVENTORY FORM

Description	Size	Quantity	Actual	Needed	Comments
Fire Hose	1 ½ inch	6 Rolls			
Fire Hose	2 ½ inch	3 Rolls			
Lay Flat Hose	4-inch	20 Rolls			
Lay Flat Hose	6-inch	10 Rolls			
Suction Hose	4-inch	4 Rolls			
Basket Strainer	4-inch	1			
Test Plug – Long	3-inch	3			
Test Plug – Long	12-18 inch	1			
Test Balls	4-inch	2			
Test Balls	6-inch	3			
Test Balls	8-inch	1			
Orange Cones		25			
Pointed Shovels		3			
Flat Shovels		3			
Hydrant Wrench		1			
Hammer		1			
Irrigation T-Wrench		1			
Hooks		2			
Manhole Hook		1			
Blue Hose	2-inch	6 Rolls			
Buckets	5 gal.	2			
Red Garbage Cans		2			
Tote Misc., Cam Fittings		1			

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Backflow Toolbox		1			
Tote Gorman Rupp Floats		1			

Description	Size	Quantity	Actual	Needed	Comments
Snow Shovels		2			
Wacker Pump	4-inch	1			
Orange Fold Out of Barricades		1			
Allegro Pneumatic Blower		1			
110 Volt Allegro Blower	8-inch	1			
110 Volt Allegro Blower	16-inch	1			
Dayton Generator		1			
12 Volt Allegro Blower		1			
Honda Light and Generator	1000 Watt	2			
Generator – Gas	1350 Watt	1			
Generator – Gas	5500 Watt	1			
Hose for Blower	8-inch	1			
Stream Light Rechargeable Flashlights		2			
Hydrant Adapters	2½ - 1½ inch	2			
Hydrant Tee	2½ - 1½ inch	1			
Fire Hose Nozzles	1½ inch				
Large Gloves		2 Boxes			
Portable Trash Pump	4-inch	1			

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Description	Size	Quantity	Actual	Needed	Comments
Extra Large Gloves		2 Boxes			
Ear Plugs		1 Box			
Caution Tape		2 Rolls			
Duct Tape		2 Rolls			
Nylon Ropes		2			
Garden Hoses		2			
Extension Cord Reel		2			
Cam Lock Gaskets	6-inch	15			
Cam Lock Gaskets	4-inch	20			
Raw Sewage Signs		36			
Garbage Bags	3-mil	1 Box			
Submersible Flygt Pump	2-inch	1			

EMERGENCY RESPONSE TRAILER (ENCLOSED)

Description	Size	Quantity	Actual	Needed	Comments
Safety Rails		1 Set			
Ladder	4 feet	1			
Yellow Poles		4			
Garden Hoses		2			
Burlap Bags		1 Tote			
Absorbent Socks		1 Tote			
Petroleum Socks		1 Tote			
Submersible Pump	½ HP	2			

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Description	Size	Quantity	Actual	Needed	Comments
Blower Hose		1			
Fire Hose	1½ inch	6			
Lay Flat Hoses	2-inch	3			
Lay Flat Hoses	2-inch	3			
Misc. Plugs		1 Tote			
Raw Sewage Signs		1 Can			
Safety Cones		24			
Manhole Barricades		3			
Yellow Emergency Spill Drain Covers and Containers		2			
Blower Hard Elbow		1 Tote			
Dual Halogen Lights		1 Tote			
Rope		1 Tote			
Air Hose		1 Tote			
Electrical Cords		1 Tote			
Beacons and Reflective Covers		1 Tote			
Rigid Vacuum		1			
Electric Air Compressor		1			
Honda Light and Generator		1			
Manhole Hook		2			
Manhole Hook	Large	1			
Safety Hose Ramp		3			

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Description	Size	Quantity	Actual	Needed	Comments
Pointed Shovel		1			
Flat Shovel		1			
Shelter Canopy		1			
110-Volt Blower		1			
Men Working Signs		1 Cart			
Grappling Hook		1			

FRONT OF EMERGENCY RESPONSE TRAILER (ENCLOSED)

Description	Size	Quantity	Actual	Needed	Comments
Generator Power Cord		1			
Self-Retracting Line		1			
Full Body Harness		1			
Harness Stool		1			
Winch and Tri-Pod		1			
Hard Hats		3			
Safety Vest		3			
Caution Tape		3			
Ammonia Test Kit		6			
E.R. Guide		1			
S.D.S.		1			
Igloo Cooler		1			
Toolbox		1			
Dewalt Tool Kit		1			
Water Jug		1			
Ear Plugs (Box)		1			
First Aid Kit		1			
Emer. Flashlight – LED		2			

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Description	Size	Quantity	Actual	Needed	Comments
Gloves – Nitrile (Box)	L	2			
Gloves – Nitrile (Box)	XL	2			
ON THE TRAILER TONGUE					
Description	**Size**	**Quantity**	**Actual**	**Needed**	**Comments**
Generator and Solar Panel	5000 Watts	1			

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CSO EQUIPMENT AND STORAGE ROOM INVENTORY SHEET

Equipment	Amount	Location	Comments
¼ Hp Submersible Pump	1	Storage Rack (3)	
Air Tank	1	Storage Rack (3)	
8" Alum Suction Tube	1	Storage Rack (3)	
Reflective Barricades	6 Ea.	Storage Rack (2)	
Barricade Lights	6 Ea.	Storage Rack (1)	
Drain Covers 3'x3'	1	Storage Rack (3)	
Drain Cover Material		Storage Rack (3)	
Footage Wheels	2	Storage Rack (3)	
"Generac" Generator	1	Storage Rack (3)	
3" Suction Hose 20'	5	Storage Rack (4)	
Misc. Combo Truck Parts		Storage Rack (4)	
Air Compressor	1	Storage Rack (3)	
Overflow Devices	4-6	Storage Rack (3)	
Pipe Air Plug 4"X6"	1	Storage Rack (2)	
Pipe Air Plug 6"X 10"	1	Storage Rack (2)	
Pipe Air Plug 8"X 12"	1	Storage Rack (2)	
Pipe Air Plug 12"X 18"	2	Storage Rack (2)	
Pipe Air Plug 15" X 21"	1	Storage Rack (2)	
Pipe Air Plug 15" X 30"	1	Storage Rack (2)	
Pipe Air Plug 20" X 36"	1	Storage Rack (2)	
Plug Air Hoses	4	Storage Rack (3)	
Plug Tether Ropes	4	Storage Rack (3)	
Air Gauges	4	Storage Rack (3)	
Pole Cam/Tripod	1	Storage Rack (4)	
Power Flares/Light	10	Storage Rack (1)	
Push and Rod Reel	1	Storage Rack (4)	
Cues Power Winch	1		

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Sand Bag Fillers	2	Storage Rack (3)	
Traffic Signs (Road Work Ahead)	3	Next to Storage Rack (1)	
Traffic Signs (Lane Closed Ahead)	3	Next to Storage Rack (1)	
Signs Stands	6	Next to Storage Rack (1)	
Traffic Cones	50-100	Next to Storage Rack (1)	
Reflective Cone Sleeves	50-100	Storage Rack (1)	
Tri Pod/Harness/Winch	1	Storage Rack (3)	
Troy Bilt Generator	1	Storage Rack (3)	
Receiver & Ball	2	Storage Rack (2)	
Wheel Chocks	2	Storage Rack (3)	
3” Discharge Hose	4	Storage Rack (3)	
Stop/Slow Paddles	2	Storage Rack (1)	

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COLLECTION EQUIPMENT AND STORAGE ROOM INVENTORY (SUPPLIES)

Supplies	Amount	Location	Comments
Air	3-5	Storage Rack (1)	
Construction Adhesive	12-24 Tubes	Storage Rack (1)	
Dechlor Tabs	18-24 Ea.	Storage Rack (3)	
Grade Stakes	12-24 Ea.	Storage Rack (1)	
Leak Stop Grout	1 Bucket	Storage Rack (1)	
Marking Flags Recycle Water Line	25-50 Ea.	Storage Rack (1)	
Marking Flags FM	25-50 Ea.	Storage Rack (1)	
Marking Flags Gravity	25-50 Ea.	Storage Rack (1)	
Marking Paint Black	1 Case	Storage Rack (1)	
Marking Paint Green	4-8 Cases	Storage Rack (1)	
Marking Paint Purple	4-8 Cases	Storage Rack (1)	
Marking Paint Red	1 Case	Storage Rack (1)	
Marking Paint White	1 Case	Storage Rack (1)	
Plastic Fence (Orange)	1-2 Rolls	Storage Rack (1)	
Misc. PPE	2 of Each	Storage Rack (1)	
Rain Gear	2-4	Storage Rack (1)	
Visquin- Plastic Rolls	2-3	Storage Rack (1)	
Vacall Grease Tubes	12-24	Storage Rack (4)	
Vacall Coolant	2-4	Storage Rack (4)	
Vacall Power Steering Fluid	2-4	Storage Rack (4)	

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COLLECTION EQUIPMENT AND STORAGE ROOM INVENTORY (TOOLS)

Tools	Amount	Location	Comments
ARV Toolbox	1	Storage Rack (3)	
Mission Communication Toolbox	1	Storage Rack (3)	
Battery Powered Grease Gun	1	Work Bench	
Grounding Rod	2	Storage Rack (4)	
Manhole Hooks	3	Storage Rack (2)	
Nozzles/Skids	4	Storage Rack (3)	
Sewer Poles/Misc. Tools	6	Barrel in The Corner	
T-Handle Valve Wrench	2	Barrel in The Corner	
Curb Stop Wrench	2	Barrel	
Brooms	2	Barrel	
Square Tip Shovels	2	Barrel	
Round Point Shovels	2	Barrel	
Footages Wheels	2	Storage Rack (3)	
Sand Bag Fillers	2	Storage Rack (3)	

EMERGENCY RESPONSE PIPE TRAILER (OPEN)

10-inch Emergency Response Trailer	**6 and 4-inch Emergency Trailer**
Approximately 600-feet of 10-inch Pipe	**Approximately 1,000 feet of Pipe**
10-inch Pipe Fittings	**6 and 4-inch Pipe Connectors**
10-inch Pipe Connectors	

EMERGENCY RESPONSE PORTABLE PUMPS

TYPE	QUANTITY	LOCATION
4” Portable Trash Pump #4	1	Small Lock Up
6” Pump	1	Small Lock Up
6” Trash Pump	1	Large Lock Up
3” Trash Pump	1	Emergency Storage Room
2” Trash Pump	1	Emergency Storage Room
2” Trash Pump	1	Trailer
1 HP Sump Pump	2	Tool Room

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Appendix 6-K Private Property Damage Procedures

CUSTOMER RELATIONS GUIDELINES

It is important for employees to communicate effectively with the District's customers, especially in a sewage backup situation. How we communicate – on the phone, in writing, or in person – is how we are perceived. Good communication with the homeowner results in greater confidence in our ability to address the problem satisfactorily, less time to resolve the claim, and less damage done to the property.

As a representative of the District, you will occasionally have to deal with an irate homeowner. A backup is a stressful event and even a reasonable homeowner can become irate should he/she perceive us as being indifferent, uncaring, unresponsive, or incompetent.

Although sometimes difficult, effective management of a sewage backup situation is critical. If it is not managed well, the situation can end up in a costly prolonged process with the homeowner. We want the homeowner to feel assured that we are responsive and the homeowner's best interest is a top priority.

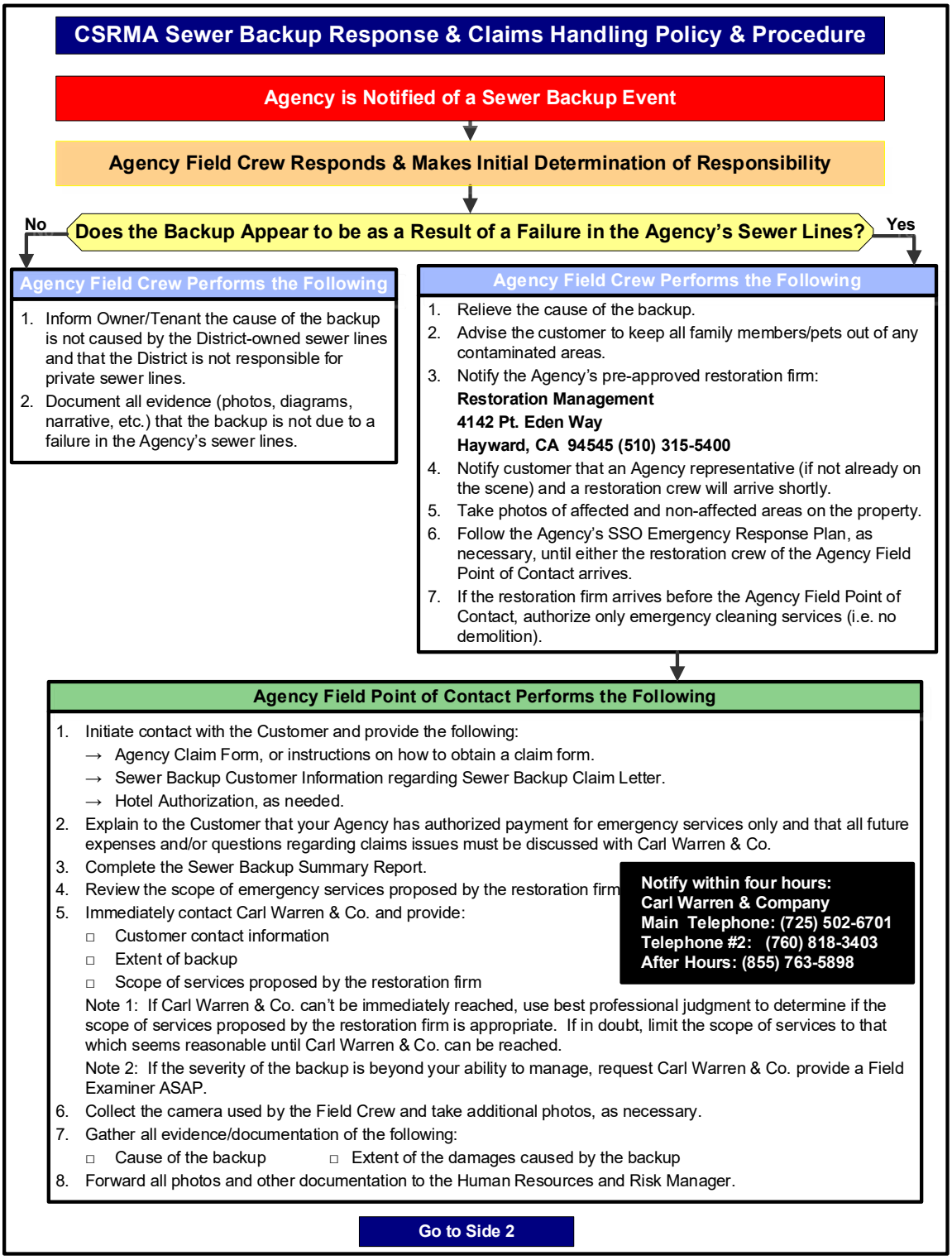
Communication Tips

1. Give the homeowner ample time to explain the situation. Show interest in what the homeowner has to say, no matter how many times you have heard it before, or how well you understand the problem.
2. As soon as possible, let the customer know that you will determine if the source of the sewer backup is in the sewer main and, if it is, will have it corrected as quickly as you can.
3. Acknowledge the homeowner's concerns. For example, if the homeowner seems angry or worried about property damage, say something like, "I understand you're concerned about the possible damage to your property. A professional cleanup crew can restore the area, and if it is determined that the District is at fault, the property owner has the right to file a claim for any reasonable repairs or losses resulting from this incident".
4. Express regret for any inconveniences caused by the incident, but do not admit fault.
5. As much as possible, keep the homeowner informed on what is being done and will be done to correct the problem.
6. Keep focused on getting the job done in a very professional manner. Don't wander from the problem with too much unnecessary small talk with the homeowner.
7. Don't find fault or lay blame on anyone.
8. Make sure someone follows up with a telephone call to ensure everything is being handled as it should be.

Before you leave, make sure the homeowner has the name and telephone number of someone at the District to call if he/she has questions or wants information. The Customer Information Letter contains this information and you should take the time to review this with the homeowner.

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Appendix 6-L CSRMA Recommended Sewer Backup Response and Claims Handling Procedure



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CSRMA Sewer Backup Response & Claims Handling Policy & Procedure

Start Here from Side 1

Agency "Human Resources and Risk Manager"

1. Review the Sewer Backup Summary Report, photos taken and all other documentation/evidence provided by the Agency Field Point of Contact.
2. Set up a claims file and insert copies of all relevant information.
3. Immediately contact Carl Warren & Co. and discuss the following:
   - □ Documentation gathered
   - □ Plan of action
   - □ Alternate living arrangements, if necessary (ensure Carl Warren & Co. assumes responsibility for managing alternate living arrangements/incidentals from this point forward).
4. Document the date, time, and content of the discussion with Carl Warren & Co. and place in the claim file (NOTE: Document all phone conversations/other communication with the Customer and Carl Warren & Co. from this point forward and keep in the claim file).
5. Immediately forward the Sewer Backup Summary Report, photos and all other relevant evidence/documentation gathered to Carl Warren & Co.
6. Direct all Customer concerns and questions regarding the adjustment of their claims to the Carl Warren & Co. Claims Adjustor or Account Manager or to the CSRMA Program Administrators.
7. Communicate with the Claims Adjustor and/or Account Manager bi-weekly, as necessary to keep informed of the status of the claim and provide information, as necessary.
8. Ensure the Claims File is kept current with all communications between Carl Warren & Co., the Customer, the restoration firm, and other involved parties.
9. Provide internal status reports, as necessary, to appropriate members of management staff.

Carl Warren & Company
Tel (725) 502-6701 / Fax (866)254-4423
P.O. Box 2411
Tustin, CA 92781

Carl Warren & Co. Perform the Following

1. Initiate contact with Owner/Tenant as soon as possible, but no later than the first business day after notification of the loss.
2. Make all necessary arrangements for lodging, food and incidentals beyond those made by the Agency immediately following the loss.
3. Negotiate and oversee the restoration firms' work to ensure proper scope of cleaning, disinfection, and demolition.
4. Investigate, adjust, and administer claim to closure.
5. Whenever prudent to do so, have claimant agree, as a condition of claims settlement, to install and maintain, at their expense, a Backwater Prevention Device meeting local requirements on their service lateral.
6. For claims where the estimated settlement timeframe is greater than 30-days, provide the Agency's Claims Management Coordinator with status reports bi-weekly, as necessary or as requested by the Human Resources and Risk Manager.
7. For claims with issues complicating movement towards settlement, immediately notify the CSRMA Program Administrator's for guidance.
8. When circumstances warrant, or when requested, dispatch a Field Adjustor to the location of the sewer backup.

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Appendix 6-M Sewer Backup Summary Report

SEWER BACKUP SUMMARY REPORT

INSTRUCTIONS: Please fill this form out as completely as possible and provide to Delta Diablo HR & Risk Manager

TIME DISTRICT STAFF ARRIVED ON-SITE: _____ **TIME CLEANING CONTRACTOR CALLED**:_____

SECTION A

DATE: TIME:	EMPLOYEE NAME:
RESIDENT: STREET ADDRESS: CITY, STATE AND ZIP: PHONE::	PROPERTY MANAGER(S): STREET ADDRESS: CITY, STATE AND ZIP: PHONE:

CAUSE OF FLOODING:

LOCATION/SEWER: ☐ STREET ☐ REAR EASEMENT ☐ MANHOLE#_____ TO _____
☐ MAINLINE ☐ SERVICE LINE ☐ DOUBLE-WYE

DAMAGE: ☐ BLACK WATER ☐ GREY WATER ☐ FRESH WATER

OF PEOPLE LIVING AT RESIDENCE:

COMMENTS:

CLEANING SERVICES: ☐ REQUESTED BY OWNER – WAIT FOR CLEANING CONTRACTOR TO ARRIVE
☐ DECLINED BY OWNER – ENSURE DECLINATION FORM 4B IS SIGNED

SECTION B

APPROXIMATE AGE OF HOME: _____ # OF BATHROOMS: _____ # OF ROOMS AFFECTED: _____

APPROXIMATE AMOUNT OF SPILL: _____ *(GALLONS)*

APPROXIMATE TIME SEWAGE HAS BEEN SITTING: _____*(HOURS/DAYS)*

NUMBER OF PICTURES TAKEN:_____ DIGITAL OR FILM?_____

DOES THE CUSTOMER HAVE A BACKFLOW PREVENTION DEVICE (BPD)? ☐ YES ☐ NO
IF YES, WAS THE BPD OPERATIONAL AT THE TIME OF THE OVERFLOW? ☐ YES ☐ NO

HAVE THERE BEEN ANY PREVIOUS SPILLS AT THIS LOCATION? ☐ YES ☐ NO ☐ UNKNOWN

TYPE OF FLOORING IN THE ROOM AFFECTED:

☐ TILE	*CONDITION OF TILE AND SEAMS (CRACKING, VISIBLE OPEN SPACES, ETC.)*
☐ CARPET ☐ WOOD	*CONDITION OF FLOORING AND JOINTS (CRACKING, VISIBLE OPEN SPACES, ETC.)*
☐ OTHER	*PLEASE IDENTIFY:*

HAS THE RESIDENT HAD ANY PLUMBING WORK DONE RECENTLY? ☐ YES ☐ NO ☐ UNKNOWN
IF YES, PLEASE DESCRIBE:

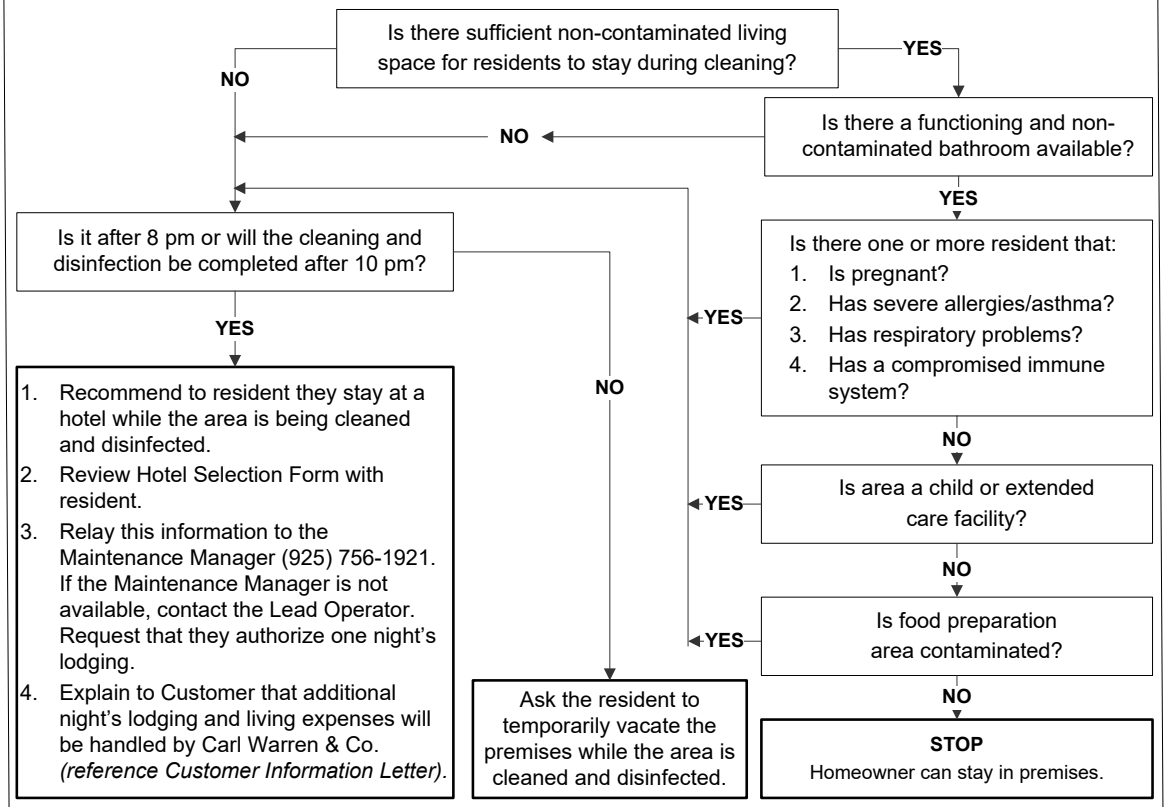
ARE THERE BASEBOARDS: ☐ YES ☐ NO BASEBOARD MATERIAL: _____

CONDITION OF BASEBOARDS:
☐ BASEBOARD BOTTOM HAS TIGHT SEAL WITH FLOOR
☐ BASEBOARD TOP HAS TIGHT SEAL WITH WALL
☐ BASEBOARD HAS SPACE BETWEEN BOTTOM & FLOOR
☐ BASEBOARD HAS SPACE BETWEEN BASEBOARD & WALL

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SEWER BACKUP SUMMARY REPORT

SECTION C LIVABILITY ASSESSMENT



Please diagram the rooms affected *(shade the areas most heavily affected)*.

SECTION D CLEANING CONTRACTOR

Company Name:_____ Phone:_____ Arrival Time:_____

Comments:_____

_____

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Appendix 6-N Hotel Selection Form

HOTEL SELECTION FORM

INSTRUCTIONS TO EMPLOYEE:

1. Contact the Maintenance Manager and request authorization of 1 (one) night of lodging for selected hotel. If the Maintenance Manager is not available, contact the Operations Manager.
2. Explain to resident that only one night lodging has been authorized. Other allowances/ incidentals are not authorized.
3. Instruct the hotel and the resident that this emergency authorization is for **LODGING ONLY – NO FOOD, MINIBAR, MOVIE, PHONE** or **OTHER CHARGES**, however notify the homeowner to keep food receipts.

INSTRUCTIONS TO RESIDENT:

It is recommended that you temporarily relocate to one of the hotels listed below for your safety and convenience while your home is being cleaned. Please note that this Emergency Authorization is granted under the following terms and conditions:

1. This authorizes payment of 1 (one) night's stay at one of the hotels listed below.
2. This authorization is good for room and tax only – no phone, food, mini-bar, movie or other charges.
3. If you have questions, please contact Delta Diablo at (925) 756-1900.

I/We have read and understood the terms and conditions under which this offer of temporary relocation is offered. Further, we agree to abide by the terms and conditions described herein.

Employee Signature: _____ **Title:**_____

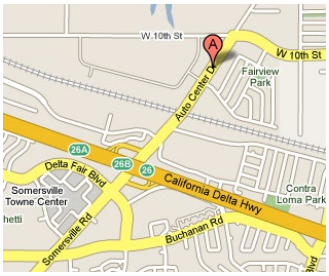
Customer Signature: _____ **Date**: _____

Hampton Inn & Suites
1201 California Avenue, Pittsburg, CA
(925) 473-1000



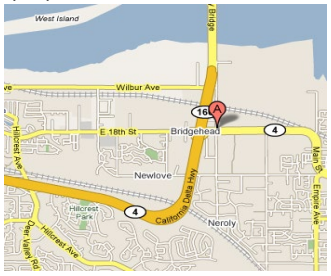
☐

Suites by Wyndham
1605 Auto Center Dr., Antioch, CA
(925) 522-0010



☐

Best Western Plus Delta Inn & Suites
5549 Bridgehead Rd, Oakley, CA
(925) 755-1222



☐

Mark in Order of Preference

Distribution Instructions – Top Copy to District's Human Resources and Risk Manager; Middle Copy to Customer; Bottom Copy to Carl Warren & Co.

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Appendix 6-O Customer Information Regarding Sewer Backup Claim

CUSTOMER INFORMATION REGARDING SEWER BACKUP CLAIMS

DELTA DIABLO

Customer Information Regarding Sewer Backup Claims

Address: _____

Dear Mr./Ms.: _____ Date: _____

We recognize that sewer back flow incidents can be stressful and require immediate response when all facts concerning how an incident occurred are unknown. Rest assured that we do all we can to prevent this type of event from occurring. Nevertheless, occasionally tree roots or other debris in the sewer lines can cause a backup into homes immediately upstream of the blockage. At this time the Delta Diablo is investigating the cause of this incident.

If the Delta Diablo is found to be responsible for the incident, we are committed to cleaning and restoring your property and to protecting the health of those affected during the remediation process.

The cleaning contractor provided by the Delta Diablo has been selected because of their adherence to established protocols that are designed to assure all parties thorough, cost-effective and expeditious cleaning services. Delta Diablo will pay this cleanup contractor's fee. You also have the right to select your own cleaning contractor, but Delta Diablo does not guarantee payment of these expenses and reserves the right to refuse or dispute any fees that are not usual and customary.

The company assigned to **manage** the necessary cleaning and restoration process is Restoration Management, and you can reach them directly at (510) 315-5400. It is possible however that **other** contractors may be involved in any needed restoration service. Carl Warren and Company, noted below, has the final responsibility for processing any claims for damages that are submitted.

If you wish to discuss this matter, or submit a claim for damages, please contact either of the following:

Human Resources and Risk Manager, Delta Diablo (925) 756-1969

Carl Warren and Company Claims Administrator: (725) 502-6701

What you need to do now:

Delta Diablo has prepared this brief set of instructions to help you minimize the impact of the loss by responding promptly to the situation.

- □ Do not attempt to clean the area yourself, let the cleaning and restoration company assigned handle this.
- □ Keep people and pets away from the affected area(s).
- □ Do not remove items from the area – the cleaning and restoration company will handle this.
- □ If you had recent plumbing work, contact your plumber or contractor and inform them of this incident.
- □ If you intend to file a claim, do so as soon as practical – The California Government Code, Sections 900 – 960 requires the filing of a written claim and outlines specific time lines and notice procedures that must be used in order to have a claim considered.

I/We acknowledge receipt of this letter.

Employee Signature: _____ Date: _____

Customer Signature: _____ Date: _____

Distribution Instructions – Top Copy to District's Human Resources and Risk Manager; Middle Copy to Customer; Bottom Copy to Carl Warren & Co.

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Appendix 6-P Affected Personal Property Inventory Log

AFFECTED PERSONAL PROPERTY INVENTORY LOG

INSTRUCTIONS: Homer or Business Owner – Please complete and provide to Delta Diablo.

QTY	DESCRIPTION OF EACH ITEM	WHERE PURCHASED		AGE	COST	REPLACEMENT VALUE
		STORE	CITY			

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Appendix 6-Q Customer Acknowledgment that Offer of Sewer Cleaning Services has been Declined

CUSTOMER ACKNOWLEDGEMENT THAT OFFER OF SEWAGE CLEANING SERVICES HAS BEEN DECLINED

Property Owner Name: _____

Property Owner Phone Number: _____

Customer Address: _____

Customer Phone: _____

On (date) _____ at (time) _____ approximately _____ gallons of (check one)

_____ Sewage _____Grey Water _____Toilet Bowl Water

Overflowed from (check one):

_____ Toilet _____Shower/Tub _____Washer

_____ Other – Specify: _____

The overflow affected the following areas (check one):

___ Bathroom _____ Hallway _____ Kitchen _____ Bedroom _____ Garage _____ Crawlspace

_____ Other – Specify: _____

The overflow affected the following materials (check one):

___ Tile ___ Linoleum ___ Carpet ___ Wood Flooring ___ Other – Specify: _____

___ Area Rugs ____ Towels ____ Clothing ____ Misc. – Specify: _____

_____

Photos Were _____ Were Not _____ Taken. Number of Photos: _____

CUSTOMER – PLEASE READ AND SIGN BELOW:

I/We acknowledge that Delta Diablo has offered to provide professional cleaning and decontamination services to remediate the sewage backup and/or overflow described above and that we declined the offer. We further understand and acknowledge that because we have declined, any necessary remediation activities will be conducted without Delta Diablo assistance and that Delta Diablo will not accept responsibility for the quality of work performed by persons other than those engaged by Delta Diablo. Delta Diablo will also not accept responsibility for any charges related to this incident that are not usual and customary.

The information above was explained to the customer by (please print): _____

Employee Signature: _____ **Title:** _____

Customer Signature: _____ **Date:** _____

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Appendix 6-R Release of all Claims for Sewer Backup Losses

1. PURPOSE

The purpose of the Delta Diablo Spill Emergency Response Plan (SERP) is to support a prompt, orderly, and effective response to spills (sanitary), reduce spill volumes, and collect information for prevention of future spills. A "spill" in this document is defined, by State Water Resources Control Board (SWRCB) Order No. WQ 2022-0103-DWQ (SSS WDR) as a discharge of sewage from any portion of a sanitary sewer system due to a sanitary sewer system overflow, operational failure, and/or infrastructure failure.

The SERP provides guidelines for District personnel to follow in responding to, cleaning up, reporting, and properly documenting spills that may occur within the District's service area. This SERP satisfies the SSS WDR, which requires wastewater collection agencies to have a Spill Emergency Response Plan.

Additionally, the SERP outlines procedures for responding to sanitary sewer spill backups into structures as required by the District's insurer. "Backup" is a term typically used by insurers to describe property damage resulting from exposure and contact to untreated or partially treated sewage.

2. POLICY

The District's employees are required to report all spills from agency owned sewer mains and publicly owned laterals found and to take the appropriate action to secure the spill area, properly report to the appropriate regulatory agencies, relieve the cause of the spill, and ensure that the affected area is cleaned as soon as possible to minimize health hazards to the public and protect the environment. The District's goal is to respond to sewer system spills as soon as possible following notification. The District will follow reporting procedures regarding sewer spills as set forth by the San Francisco Regional Water Quality Control Board and the SSS WDR.

3. DEFINITIONS AS USED IN THIS SERP

ANNUAL REPORT: An Annual Report (previously termed as Collection System Questionnaire in previous State Water Board Order No. 2006-0003-DWQ) is a mandatory report in which the District provides a calendar-year update of its efforts to prevent spills.

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

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

CALIFORNIA INTEGRATED WATER QUALITY SYSTEM (CIWQS): CIWQS is the statewide database that provides for mandatory electronic reporting as required in State and Regional Water Board-issued waste discharge requirements.

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

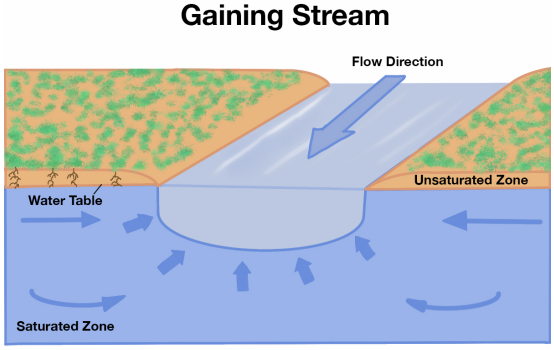
DRAINAGE CONVEYANCE SYSTEM: A drainage conveyance system is a publicly- or privately-owned separate storm sewer system, including but not limited to drainage canals, channels, pipelines, pump stations, detention basins, infiltration basins/facilities, or other facilities constructed to transport stormwater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

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

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

FATS, OILS, AND GREASE (FOG): Refers to fats, oils, and grease typically associated with food preparation and cooking activities that can cause blockages in the sanitary sewer system.

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



LATERAL (INCLUDING LOWER AND UPPER LATERAL): A lateral is an underground segment of smaller diameter pipe that transports sewage from a customer's building or property (residential, commercial, or industrial) to the District's main sewer line in a street or easement. Upper and lower lateral boundary definitions are subject to local jurisdictional codes and ordinances, or private system ownership. A lower lateral is the portion of the lateral located between the sanitary sewer system main, and either the property line, sewer clean out, curb line, established utility easement boundary, or other jurisdictional locations. An upper lateral is the portion of the lateral from the property line, sewer clean out, curb line, established utility easement boundary, or other jurisdictional locations, to the building or property.

LEGALLY RESPONSIBLE OFFICIAL: Legally Responsible Official is an official representative, designated by the District, with authority to sign and certify submitted information and documents required by the SSS WDR.

MAINLINE SEWER: Refers to District wastewater collection system piping downstream of the sewer laterals that is not a private sewer lateral connection to a building.

MAINTENANCE HOLE OR MANHOLE: Refers to an engineered structure that is intended to provide access to a sanitary sewer for maintenance and inspection.

NOTIFICATION OF A SPILL: Refers to the time at which the District becomes aware of a spill event through observation or notification by the public or other source.

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

- Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property;
- Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal; and
- Occurs during, or as a result of, the treatment or disposal of wastes.

PREVENTATIVE MAINTENANCE: Refers to maintenance activities intended to prevent failures of the wastewater collection system facilities (e.g., cleaning, CCTV, inspection).

PRIVATE LATERAL SEWAGE SPILL: – Spills that are caused by blockages or other problems within a privately-owned lateral.

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

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

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

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

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

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

For purpose of the SSS WDR, sanitary sewer systems include only systems owned and/or operated by the District.

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

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

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SEWER BACKUP: A sanitary sewer spill resulting from a sanitary sewer system overflow, operational failure, and/or infrastructure failure in a publicly owned sewer system, with an appearance point and subsequent discharge into a structure.

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

- **Category 1 Spill**

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

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

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

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

- **Category 2 Spill**

A Category 2 spill is a spill of 1,000 gallons or greater, from or caused by a sanitary sewer system regulated under the SSS WDR that does not discharge to a surface water.
A spill of 1,000 gallons or greater that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system, is a Category 2 spill.

- **Category 3 Spill**

A Category 3 spill is a spill of equal to or greater than 50 gallons and less than 1,000 gallons, from or caused by a sanitary sewer system regulated under the SSS WDR that does not discharge to a surface water. A spill of equal to or greater than 50 gallons and less than 1,000 gallons, that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 3 spill.

- **Category 4 Spill**

A Category 4 spill is a spill of less than 50 gallons, from or caused by a sanitary sewer system regulated under the SSS WDR that does not discharge to a surface water. A spill of less than 50 gallons that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 4 spill.

TRAINING: Training is in-house or external education and guidance needed that provides the knowledge, skills, and abilities to comply with the SSS WDR.

WASH DOWN WATER: Wash down water is water used to clean a spill area.

WASTE: Waste, as defined in Water Code section 13050(d), includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal

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origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal.

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

WATERS OF THE UNITED STATES: Waters of the United States are surface waters or waterbodies that are subject to federal jurisdiction in accordance with the Clean Water Act.

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

4. STATE REGULATORY REQUIREMENTS FOR ELEMENT 6, SPILL EMERGENCY RESPONSE PLAN

The Sewer System Management Plan (SSMP) must include an up to date Spill Emergency Response Plan (SERP) to ensure prompt detection of and response to spills, to reduce spill volumes, and collect information for prevention of future spills. The SERP 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 (e.g., 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 the SSS WDR, State law and regulations, and applicable Regional Water Board Orders;
- Ensure that appropriate staff and contractors implement the SERP 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;

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- Conduct post-spill assessments of spill response activities;
- Document and report spill events as required in the SSS WDR; and
- Annually, review and assess effectiveness of the Spill Emergency Response Plan, and update it as needed.

The Sewer System Management Plan is available to the public at https://www.deltadiablo.org/sanitary-sewer-management-plan.

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5. SPILL EMERGENCY RESPONSE PLAN OBJECTIVES

The SERP includes measures to protect public health and the environment. The District will respond to spills from its system(s) in a timely manner that minimizes water quality impacts and nuisance by:

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

Additionally, District Staff will:

- Work safely;
- Properly document each spill event in a separate file including photos and/or video where applicable;
- Collect information for prevention of future spills;
- Minimize public contact with the spilled wastewater;
- Mitigate the impact of the spill;
- Meet the regulatory reporting requirements;
- Evaluate the causes of failure related to spills;
- Perform post-spill response evaluation for adherence to procedures and effectiveness of response; and
- Revise response procedures, modify maintenance practices, or provide additional training based on the results from the debrief and failure analysis of spills, if needed.

6. SPILL DETECTION AND NOTIFICATION

ref. SSS WDR*, ATTACHMENT D, Element 6, Page D-6*

The processes that are employed to notify the District of the occurrence of a spill include: observation by the public, receipt of an alarm, or observation by District staff during the normal course of their work.

6.1 FAcility ALARMS

The District operates five wastewater pump stations and one diversion facility. In the event of a station failure, the Supervisory Control and Data Acquisition (SCADA) alarm system is activated and the District is contacted. To prevent spills, wastewater from the wet well can either diverted to an equalization tank, be pumped into a vacuum truck for disposal to a nearby sanitary sewer manhole, or bypassed around the station into the sanitary sewer system. Additionally, historically problematic and/or difficult to access manholes and air relief valves are equipped with sensors that can notify District staff of abnormal flows.

6.2 Public Observation

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Public observation is the most common way that the District is notified of blockages and spills. Contact numbers and information for reporting sewer spills and backups are on the District's website: https://www.deltadiablo.org. The District's telephone number for reporting sewer problems is (925) 756-1900.

- Normal Work Hours: Monday - Friday between 7:00 a.m. - 4:30 p.m.: All service calls will be immediately directed to Collections personnel verbally along with the "Field Report" detailing the specifics of the call. The Lead Operator must also be contacted verbally with an immediate follow-up email to "Service Calls-Sewer."
- After Hours: Plant operations staff receives the call, obtains the information from the caller and completes the first portion of the Collection System Service Call/Overflow Field Report (Field Report) (Appendix 6-E of the SSMP). An e-mail should be sent to "Service Calls- Sewer" in the Global Address List in Outlook documenting the details of the call immediately after dispatching a response crew.

When calls are received, either during normal work hours or after hours, the individual receiving the call will collect and include in the spill event file, at a minimum, the following information to record the complaint:

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

6.3 DISTRICT STAFF OBSERVATION

District staff conducts periodic inspections of its sewer system facilities as part of their routine activities. Any problems noted with the sewer system facilities are reported to appropriate District staff that, in turn, responds to emergency situations. Work orders are issued to correct non-emergency conditions.

6.4 CONTRACTOR OBSERVATION

Contractors working on the District sewer system will be informed of contractor spill response procedures. Contractors working on behalf of property owners will be provided spill response information by the District Engineering Staff when they pull a permit. The following procedures are to be followed in the event that a contractor/plumber causes or witnesses a sanitary sewer spill. If the contractor/plumber causes or witnesses a spill they should:

1. Immediately notify the District at (925) 756-1900 and provide the following information if available:
   a. Date, time contractor first noticed the spill
   b. Description of the contractor's observation, including any information regarding whether the spill has reached surface waters or a drainage conveyance system
   c. Contractor's contact information

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2. Protect storm drains.
3. Protect the public.
4. Direct ALL media and public relations requests to the Resource Recovery Services Director.

6.5 NO OBSERVATION

If there are no witnesses or no call was received for a spill, the District staff will contact nearby residences or business owners in the vicinity of the spill, in an attempt to obtain information that brackets a given start time that the spill began. This information will be collected and documented on the Sanitary Sewer Spill Report in the Sanitary Sewer Spill/Backup Response Workbook.

7. SPILL RESPONSE PROCEDURES *(Ref.* SSS WDR*), ATTACHMENT D Element 6 page D-6)*

7.1 SEWER SPILL/BACKUP RESPONSE SUMMARY

The District will respond to spills as soon as feasible following notification of a spill/backup.

If it is not possible that the spill/backup is due to a failure in the District-owned/maintained sewer lines the Collections System Crew performs the following:

- Follows the instructions in the Sanitary Sewer Spill/Backup Response Workbook.
- If the customer is not home the Collections System Crew completes the Door Hanger and leaves it on the customer's door.
- If the customer is home the Collections System Crew:
  - Explains that the blockage is in the customer's lateral and the District does not have legal authority to maintain or perform work on privately owned laterals.
  - Recommends to the customer that they hire a licensed contractor to clear their line.
  - Gives the customer the Your Responsibilities as a Private Property Owner pages from the Sanitary Sewer Spill/Backup Response Workbook.

If it is possible that the spill/backup is due to a failure in the District-owned/maintained sewer lines the Collections System Crew:

- Follows the instructions in the Sanitary Sewer Spill/Backup Response Workbook.
- Notifies Maintenance Manager and/or Maintenance Supervisor of the incident.
- Relieves blockage and cleans impacted areas.
- Forwards the completed Sanitary Sewer Spill/Backup Response Workbook to the Maintenance Manager and/or Maintenance Supervisor.

The Collections System Crew, Maintenance Manager, or Maintenance Supervisor performs required regulatory reporting in accordance with the Sanitary Sewer Spill/Backup Response Workbook's Regulatory Reporting section.

If the overflow has impacted private property, the Collections System Crew:

- Follows the instructions in the Sanitary Sewer Spill/Backup Response Workbook.

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- Provides the customer with forms and information as indicated in the Sanitary Sewer Spill/Backup Response Workbook.
- Forwards the completed Sanitary Sewer Spill/Backup Response Workbook to the Maintenance Manager and/or Maintenance Supervisor.

The Maintenance Manager and/or Maintenance Supervisor notifies the Human Resources and Risk Manager of incident.

The Human Resources and Risk Manager or designee:

- Reviews incident reports, claim form and other incident information and forwards, as appropriate, to Carl Warren & Co.
- Communicates with claimant as appropriate.
- Communicates with Carl Warren & Co. to adjust and administer the claim to closure.
- Properly documents in writing all activities and communications before approving the final event file.

7.2 FIRST RESPONDER PRIORITIES

The first responder's priorities are:

- Prompt response to spills with the appropriate and necessary equipment.
- To follow safe work practices.
- To reduce spill volume and contain the spill wherever feasible.
- To restore the flow in the sewer system as soon as practicable.
- To minimize public access to and/or contact with the spilled sewage.
- To promptly notify the Maintenance Manager and/or Maintenance Supervisor in event of a spill needing additional resources, and/or impacting environmentally sensitive areas.
- To return the spilled sewage to the sewer system.
- To restore the area to its original condition (or as close as possible).
- To collect information for the prevention of future spills.
- Properly document the spill and response activities on the forms provided in the Sanitary Sewer Spill/Backup Response Workbook, including photos and/or video where practicable.

7.3 SAFETY

The first responder is responsible for following safety procedures at all times. Special safety precautions must be observed when performing sewer work. There may be times when District personnel responding to a sewer system event are not familiar with potential safety hazards peculiar to sewer work. In such cases it is appropriate to take the time to discuss safety issues, consider the order of work, and check safety equipment before beginning response activities.

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If the first responders encounter access restrictions or unsafe conditions that prevent its compliance with spill response requirements or monitoring requirements in the SSS WDR, the District provides written documentation of access restrictions and/or safety hazards in the corresponding required report.

7.4 INITIAL RESPONSE

The first responder must respond to the site of the spill/backup and visually check for potential sewer stoppages. The first responder will:

- Note arrival time at the site of the spill/backup.
- Verify the existence of a public sewer system spill or backup.
- Identify and assess the affected area and extent of spill.
- Assess the spill location(s) and spread using photography, global positioning system (GPS), and other best available tools.
- Contact caller if time permits.
- Document the spill according to the requirements described in Section 10 of this SERP, including taking photos and/or videos of overflowing manhole(s)/cleanout(s).
- Take steps to contain, recover, and return the spill to the sanitary sewer as feasible. For procedures refer to the Sanitary Sewer Spill/Backup Response Workbook.
- Protect surface waters to the extent practicable. For procedures refer to the Sanitary Sewer Spill/Backup Response Workbook.
- Implement pre-planned coordination and collaboration with storm drain agencies and other utility agencies/departments prior, during, and after a spill event.

7.5 INITIATE SPILL CONTAINMENT MEASURES

The first responder will attempt to contain as much of the spilled sewage as possible using the following steps:

- Determine the immediate destination of the overflowing sewage.
- Plug storm drains using air plugs, sandbags, and/or plastic mats to contain the spill, whenever appropriate. If spilled sewage has made contact with the storm drainage system, attempt to contain the spilled sewage by plugging downstream storm drainage facilities.
- Contain/direct the spilled sewage using dike/dam or sandbags.
- Vacuum retrieve sewage whenever practicable.
- Pump around the blockage/pipe failure.

Containment efforts will be documented. For procedures refer to the Sanitary Sewer Spill/Backup Response Workbook.

7.6 RESTORE FLOW

Using the appropriate cleaning equipment, set up downstream of the blockage and hydro-clean upstream from a clear manhole. Attempt to remove the blockage from the system and observe the flows to ensure that the blockage does not reoccur downstream. If the blockage cannot be cleared within a reasonable time from arrival,

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or sewer requires construction repairs to restore flow, then initiate containment and/or bypass pumping. If other assistance is required, immediately contact the Maintenance Manager and/or Maintenance Supervisor. For procedures refer to the Sanitary Sewer Spill/Backup Response Workbook.

7.7 EQUIPMENT

This section provides a list of specialized equipment that may be used to support this Spill Emergency Response Plan.

- *Closed Circuit Television (CCTV) Inspection Unit* – A CCTV Inspection Unit is required to determine the root cause for all spills from gravity sewers.
- *Camera* – A digital or disposable camera (photo, video or phone) is required to record the conditions upon arrival, during clean up, and upon departure.
- *Emergency Response Trucks* – A utility body pickup truck, or open bed is required to store and transport the equipment needed to effectively respond to sewer emergencies. The equipment and tools will include containment and clean up materials.
- *Portable Generators, Portable Pumps, Piping, and Hoses* – Equipment used to bypass pump, divert, or power equipment to mitigate a spill.
- *Combination Sewer Cleaning Trucks* – Combination high velocity sewer cleaning trucks with vacuum tanks are required to clear blockages in gravity sewers, vacuum spilled sewage, and wash down the impacted area following the spill event.
- *Air plugs, sandbags and plastic mats*
- *Spill Sampling Kits*
- *Portable Lights*

Standard operating procedures for equipment that may be necessary in the event of a sanitary sewer overflow or backup can be found on SharePoint.

8. RECOVERY AND CLEANUP *(Ref.* SSS WDR*, Element 6, ATTACHMENT D, Page D-6)*

The recovery and cleanup phase begins immediately after the flow has been restored and the spilled sewage has been contained to the extent possible. The spill recovery and cleanup procedures are described in the following sections.

8.1 ESTIMATE THE FLOW AND VOLUME OF SPILLED SEWAGE

A variety of approaches exist for estimating the volume of a sanitary sewer spill. The Collections System Crew members should use the method most appropriate to the sewer overflow in question and reference the Sanitary Sewer Spill/Backup Response Workbook which provides four (4) methods:

- Eyeball Estimation Method
- Duration and Flow Rate Calculation Method
- Area/Volume Method
- Upstream Connections Method

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In addition, the following will be documented on the Sewer Spill Report form:

1. Description, photographs, and GPS coordinates of the system location where the spill originated. If a single spill event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the spill appearance point explanation field;
2. Estimated total spill volume exiting the system;
3. Description and photographs of the extent of the spill and spill boundaries;
4. Did the spill reach a drainage conveyance system? If yes:
   - Description of the drainage conveyance system transporting the spill;
   - Photographs of the drainage conveyance system entry location(s);
   - Estimated spill volume that reached the drainage conveyance system;
   - Estimated spill volume fully recovered from the drainage conveyance system;
   - Estimated spill volume remaining within the drainage conveyance system;
   - Estimated spill volume discharged to a groundwater infiltration basin or facility, if applicable;
   - Estimated spill travel time from the point of entry into the drainage conveyance system to the point of discharge into the receiving water.
5. Estimated total spill volume recovered.

8.2 RECOVERY OF SPILLED SEWAGE

Vacuum up and/or pump the spilled sewage and wash down water and discharge it back into the sanitary sewer system. Thoroughly recover and dispose of sewage and wash down water.

8.3 CLEAN-UP AND DISINFECTION

Clean up procedures will be implemented to reduce the potential for human health issues and adverse environmental impacts associated with a spill event. The procedures described are for dry weather conditions and will be modified as required for wet weather conditions. Where cleanup is beyond the capabilities of District staff, a cleanup contractor will be used.

Private Property

District crews are responsible for the cleanup when the property damage is minor in nature and is outside of private building dwellings, such as in front, side and backyards, easements, etc. In all other cases, affected property owners can call a water damage restoration contractor to complete the cleanup and restoration. If the overflow into property is the definite cause of District system failure, the property owner can call out a water damage restoration contractor to complete the cleanup and restoration. In both cases, property owners may submit a claim form.

Hard Surface Areas

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Collect all signs of sewage solids and sewage-related material either by protected hand or with the use of rakes and brooms. Wash down the affected area with clean water and/or deozyme or similar non-toxic biodegradable surface disinfectant until the water runs clear. The flushing volume will be approximately three times the estimated volume of the spill. Take steps to contain and vacuum up the wastewater. Allow area to dry. Repeat the process if additional cleaning is required.

Landscaped and Unimproved Natural Vegetation

Collect all signs of sewage solids and sewage-related material either by protected hand or with the use of rakes and brooms. Wash down the affected area with clean water until the water runs clear. The flushing volume will be approximately three times the estimated volume of the spill. Either contain or vacuum up the wash water so that none is released. Allow the area to dry. Repeat the process if additional cleaning is required.

Natural Waterways

The Department of Fish and Wildlife will be notified by CalOES for spills greater than or equal to 1,000 gallons. For spills less than 1,000 gallons, contact Contra Costa County Environmental Health for direction.

Wet Weather Modifications

Collect all signs of sewage solids and sewage-related material either by protected hand or with the use of rakes and brooms. Omit flushing and sampling during heavy storm events (i.e., sheet of rainwater across paved surfaces) with heavy runoff where flushing is not required and sampling would not provide meaningful results.

8.4 PUBLIC NOTIFICATION

Signs will be posted and barricades put in place to keep vehicles and pedestrians away from contact with spilled sewage. Contra Costa County Environmental Health instructions and directions regarding placement and language of public warnings will be followed. Additionally, the Collections System Crew will use their best judgment regarding supplemental sign placement in order to protect the public and local environment. Signs will not be removed until directed by Contra Costa County Environmental Health.

Creeks, streams, and beaches that have been contaminated as a result of a spill will be posted at visible access locations until the risk of contamination has subsided to acceptable background bacteria levels. Document the number and location of posted signs. The area and warning signs, once posted, will be checked every day to ensure that they are still in place. Photographs of sign placement will be taken.

In the event that an overflow occurs at night, the location will be inspected first thing the following day. The field crew will look for any signs of sewage solids and sewage-related material that may warrant additional cleanup activities.

When contact with the local media is deemed necessary, the Resource Recovery Services Director or their designee will provide the media with all relevant information.

9. WATER QUALITY *(Ref.* SSS WDR*, Element 6, Attachment A - DEFINITIONs page A-5, Attachment E1 2.3 through 2.4 pages E1-5 through E1-8)*

9.1 SURFACE WATERS OF CONCERN

The following waters of the State are in the District's service area:

- Sacramento River Delta

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- San Joaquin River
- Kirker Creek
- New York Slough

9.2 WATER QUALITY SAMPLING AND TESTING

For sewage spills in which an estimated 50,000 gallons or greater are discharged into a surface water, the District will conduct the following water quality sampling as soon as possible but no later than **18 hours** after the District's knowledge of a potential discharge to a surface water. Collect one water sample, each day of the duration of the spill, at:

- The DCS-001 location as described in section 9.5 (Receiving Water Sampling Locations) below, if sewage discharges to a surface water via a drainage conveyance system; and/or
- Each of the three receiving water sampling locations in section 9.5 (Receiving Water Sampling Locations) below;

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

The Lab staff will collect water quality samples in accordance with the SSS WDR.

The Lab staff collecting the samples will complete the Chain of Custody prior to transferring ownership of the samples to the District lab and/or contract lab.

The Lab shall analyze the collected receiving water samples for the following constituents:

- Ammonia, and
- Appropriate bacterial indicator(s) per the applicable Basin Plan water quality objectives, including one or more of the following from the table below, unless directed otherwise by the Regional Water Board: *ref. San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan), November 5, 2019*

Water Quality Objectives for Bacteria[a]				
Beneficial Use	**Fecal Coliform[a] (MPN/100mL)**	**Total Coliform[a] (MPN/100mL)**	**Enterococcus (CFU/100mL)[g]**	**E. coli (CFU/100mL)[g]**
Water Contact Recreation			geometric mean < 30 STV < 110	geometric mean < 100 STV < 320

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Water Quality Objectives for Bacteria[a]				
Beneficial Use	**Fecal Coliform[a] (MPN/100mL)**	**Total Coliform[a] (MPN/100mL)**	**Enterococcus (CFU/100mL)[g]**	**E. coli (CFU/100mL)[g]**
Shellfish Harvesting[b]	median < 14 90th percentile < 43	median < 70 90th percentile < 230[c]		
Non-contact Water Recreation[d]	mean < 2000 90th percentile < 4000	geometric mean < 100		
Municipal Supply: Surface Water[e]	geometric mean < 20			
Municipal Supply: Groundwater		< 1.1[f]		

Notes:

a. Based on a minimum of five consecutive samples equally spaced over a 30-day period.

b. Source: National Shellfish Sanitation Program.

c. Based on a five-tube decimal dilution test or 300 MPN/100 ml when a three-tube decimal dilution test is used.

d. Source: Report of the Committee on Water Quality Criteria, National Technical Advisory Committee, 1968.

e. Source: California Department of Public Health recommendation.

f. Based on multiple tube fermentation technique; equivalent test results based on other analytical techniques, as specified in the National Primary Drinking Water Regulation, 40 CFR, Part 141.21(f), revised June 10, 1992, are acceptable.

g. Numeric values are from Part 3 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California based on Section 7958 of Title 17 of the California Code of Regulations, 69FR 67217 et seq., and 40 CFR Part 131.41 (effective date December 16, 2004). The Enterococcus objective applies to marine and estuarine waters where the salinity is greater than 1 part per thousand more than 5 percent of the time. The E. coli objective applies to freshwaters where the salinity is equal to or less than 1 part per thousand 95 percent or more of the time. The geometric mean for enterococcus and E. coli is computed weekly for all samples in a 6-week interval. There is no fecal coliform objective to protect water contact recreation for inland surface waters, enclosed bays, or estuaries, but a fecal coliform objective protecting this use remains in

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the California Ocean Plan. The STV is the statistical threshold value and shall not be exceeded by more than 10 percent of the samples collected in a calendar month.

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

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

9.3 LAB SELECTION

Analytical Lab

Samples collected for spill response and background monitoring purposes will be analyzed at the District lab or contract lab, which is accredited through the California State Water Resources Control Board Environmental Laboratory Accreditation Program (ELAP). ELAP provides evaluation and accreditation of environmental testing laboratories to ensure the quality of analytical data used for regulatory purposes to meet the requirements of the State's drinking water, wastewater, shellfish, food, and hazardous waste programs. The State agencies that monitor the environment use the analytical data from these accredited labs. The ELAP-accredited laboratories have demonstrated capability to analyze environmental samples using approved methods.

Getting Samples to the Lab

At all times, sample hold times identified below will be observed in accordance with the following:

Analytical Parameter	Maximum Holding Time	Required Container Type	Required Preservative	Minimum Amount
Ammonia (NH3 as N); SM 4500NH3 B/C or B/G	28 days	Plastic / Glass	H_2SO_4 pH <2 +0-6°C	200 mL
Coliform, Total / Fecal; SM 9221 B/E	8 hours – wastewater/stormwater 30 hours – drinking water	Plastic (sterile)	$Na_2S_2O_3$ + 0-10°C; No regulatory temp. req. for drinking water)	100 mL
Coliform, Total / E.Coli; SM 9223 B	8 hours	Plastic (sterile)	$Na_2S_2O_3$ + 0-10°C;	100 mL

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(Present/Absent or Quantitray)			No regulatory temp. req. for DW	
Enterococcus by Enterolert	8 hours	Plastic (sterile)	$Na_2S_2O_3$ + 0-10°C	100 mL

Once samples are collected, they will be transported by Lab staff to the lab to be processed.

9.4 WATER QUALITY ANALYSIS SPECIFICATIONS

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

Sufficiently Sensitive Methods

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

Environmental Laboratory Accreditation Program-Accredited Laboratories

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

9.5 RECEIVING WATER SAMPLING LOCATIONS

Receiving water samples shall be collected at the following locations.

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

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

Receiving Surface Water Sampling (RSW)[5]

Sampling Location	Sampling Location Description
RSW-001: Point of Discharge	A point in the receiving water where sewage initially enters the. receiving water.

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

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RSW-001U: Upstream of Point of Discharge	A point in the receiving water, upstream of the point of sewage discharge, to capture ambient conditions absent of sewage discharge impacts.
RSW-001D: Downstream of Point of Discharge	A point in the receiving water, downstream of the point of sewage discharge, where the spill material is fully mixed with the receiving water.

9.6 STREAM VELOCITY MEASUREMENTS

If sampling is performed after the spill has stopped, the velocity of the impacted surface water must be determined to estimate spill travel time and select an accurate downstream sample location. One way to measure the spill travel time is to use a velocity probe (such as a Global Water FP111-S Flow Probe) to determine the rate of flow in the water body. In cases where a water velocity probe is used, the manufacturer's instructions will be followed.

9.7 SAMPLE TYPES

Grab Samples

Grab samples are appropriate for the characterization of surface waters at a particular time and place, to provide information about minimum and maximum concentrations, and to allow for the collection of variable sample volume.

Grab samples may be collected directly into the sample container, or a clean decontaminated intermediate container may be used if a wading sample is not possible or safe. If an intermediate container is used, when in the field, double rinse the sampling device (bucket, automatic sampler) with sample water prior to collecting the sample and be sure to discard rinse water downstream of where sample will be collected. If samples are collected in a bucket and distributed into a consolidation collection container, swirl the contents of the bucket as it is being poured into the consolidation collection container to avoid settling of solids (and pour in back-and-forth pattern – *e.g.*, 1-2-3-3-2-1).

- Grab Sample: A grab sample is defined as an individual sample collected at a given time. Grab samples represent only the condition that exists at the time the sample is collected (US EPA 1977).

- Surface Grab Sample: A sample collected at the water surface (i.e., skimming) directly into the sample container or into an intermediate container such as a clean bucket. A single or discrete sample collected at a single location.

Field Blanks

Field Blanks are used to evaluate the potential for contamination of a sample by site contaminants from a source not associated with the sample collected (e.g., airborne dust, etc.). Sterile, deionized water is taken into the field

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in a sealed container. This is the stock water. The stock water is then poured into the sample container. The containers and sample submission forms are labeled as "Field Blank." The same template selected for the test samples should be used. Field blanks are subject to the same holding time limitations as samples. The appropriate FIELD QC box on the sample Chain of Custody form should be checked.

9.8 SAMPLE LABELING AND CHAIN OF CUSTODY PROCEDURES

At a minimum, the following grab samples will be collected, in duplicate:

- Field Blank: See Section 9.7 for discussion.
- Upstream: A point in the receiving water, upstream of the point of sewage discharge, to capture ambient conditions absent of sewage discharge impacts.
- Source: A point in the receiving water where sewage initially enters the receiving water. See Section 9.6 for information on determining velocity of the surface water in order to determine the Source sample location.
- "Downstream" of spill: A point in the receiving water, downstream of the point of sewage discharge, where the spill material is fully mixed with the receiving water. This location will vary with the velocity of the surface water to be sampled (*see Section 9.6)*.
- A point in a drainage conveyance system before the drainage conveyance system flow discharges into a receiving water.

Sample labels shall be completed for each sample, using waterproof ink.

Photos or video of each sample location will be taken, properly labeled with date, time, and view direction, and a map of the photo locations completed. Photos and videos shall include relevant landmarks to identify sampling locations and their surroundings.

Due to the evidentiary nature of samples collected during enforcement investigations, possession must be traceable from the time the samples are collected until they are analyzed. To maintain and document sample possession, a Surface Water Sample Chain of Custody Record (see Sewer Spill/Backup Response Workbook) must be completed. A sample is under custody if:

- It is in your possession, or
- It is in your view, after being in your possession, or
- It was in your possession and under your control to prevent tampering, or
- It is in a designated secure area.

As few people as possible should handle samples. The person taking the samples is personally responsible for the care and custody of the samples collected until they are transferred or dispatched properly.

Samples are accompanied by a chain of custody record. When transferring the possession of samples, the individuals relinquishing and receiving will sign, date, and note the time on the record. This record documents sample custody transfer from the sampler, often through another person, to the analyst at the laboratory. The samples are typically transferred to the sample-receiving custodian at the laboratory.

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9.9 SPILL TECHNICAL REPORT: Spill Technical Report for Individual Category 1 Spill in which 50,000 Gallons or Greater Discharged into a Surface Water

For any spill in which 50,000 gallons or greater discharged into a surface water, **within 45 calendar days** of the spill end date, the Maintenance Manager shall submit a Spill Technical Report to the online CIWQS Sanitary Sewer System Database. The Spill Technical Report will be prepared in coordination with the Engineering Department and must include the following information:

1. Spill causes and circumstances, including at minimum:
    - Complete and detailed explanation of how and when the spill was discovered;
    - Photographs illustrating the spill origin, the extent and reach of the spill, drainage conveyance system entrance and exit, receiving water, and post-cleanup site conditions;
    - Diagram showing the spill failure point, appearance point(s), the spill flow path, and ultimate destinations;
    - Detailed description of the methodology employed, and available data used to calculate the discharge volume and, if applicable, the recovered spill volume;
    - Detailed description of the spill cause(s);
    - Description of the pipe material, and estimated age of the pipe material, at the failure location;
    - Description of the impact of the spill;
    - Copy of original field crew records used to document the spill; and
    - Historical maintenance records for the failure location.
2. District's response to the spill:
    - Chronological narrative description of all actions taken by the District to terminate the spill;
    - Explanation of how the Sewer System Management Plan SERP was implemented to respond to and mitigate the spill; and
    - Final corrective action(s) completed and a schedule for planned corrective actions, including:
        - Local regulatory enforcement action taken against an illicit discharge in response to this spill, as applicable,
        - Identifiable system modifications, and operation and maintenance program modifications needed to prevent repeated spill occurrences, and
        - Necessary modifications to the SERP to incorporate lessons learned in responding to and mitigating the spill.
3. Water Quality Monitoring, including at minimum:

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- Description of all water quality sampling activities conducted;
- List of pollutant and parameters monitored, sampled and analyzed; as required in Section 9.2.
- Laboratory results, including laboratory reports;
- Detailed location map illustrating all water quality sampling points; and
- Other regulatory agencies receiving sample results (if applicable).

5. Evaluation of spill impact(s), including a description of short-term and long-term impact(s) to beneficial uses of the surface water.

10. NOTIFICATION, MONITORING, REPORTING AND RECORDKEEPING REQUIREMENTS

ref. SSS WDR Attachment E-1 and E-2

10.1 REPORTING REQUIREMENTS

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

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

Refer to APPENDIX A for detailed reporting requirements by spill category.

10.2 REGULATOR REQUIRED NOTIFICATIONS

10.2.1 Spill Category 1: Spills to Surface Waters

Spill Requirement	Due	Method
Notification	**Within two (2) hours** of the District's knowledge of a Category 1 spill of 1,000 gallons or greater, discharging or threatening to discharge to surface waters notify the California Office of Emergency Services and obtain a notification control number.	California Office of Emergency Services at: (800) 852-7550 (Section 1 of Attachment E1 of the SSS WDR)

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Spill Requirement	Due	Method
Monitoring	• Conduct spill-specific monitoring; • Conduct water quality sampling of the receiving water within **18 hours** of initial knowledge of spill of 50,000 gallons or greater to surface waters.	(Section 2 of Attachment E1 of the SSS WDR)
Reporting	• Submit Draft Spill Report **within three (3) business days** of the District's knowledge of the spill; • Submit Certified Spill Report **within 15 calendar days** of the spill end date; • Submit Spill Technical Report **within 45 calendar days** after the spill end date for a Category 1 spill in which **50,000 gallons or greater** discharged to surface waters; and • Submit Amended Certified Spill Report **within 90 calendar days** after the spill end date.	(Section 3.1 of Attachment E1 of the SSS WDR)

10.2.2 Spill Category 2: Spills of 1,000 Gallons or Greater That Do Not Discharge to Surface Waters

Spill Requirements	Due	Method
Notification	**Within two (2) hours** of the District's knowledge of a Category 2 spill of 1,000 gallons or greater threatening to discharge to waters of the State: Notify California Office of Emergency Services and obtain a notification control number.	California Office of Emergency Services at: (800) 852-7550 (Section 1 of Attachment E1 of the SSS WDR)
Monitoring	Conduct spill-specific monitoring.	(Section 2 of Attachment E1 of the SSS WDR)

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Reporting	• Submit Draft Spill Report **within three (3) business days** of the District's knowledge of the spill; • Submit Certified Spill Report **within 15 calendar days** of the spill end date; and • Submit Amended Certified Spill Report **within 90 calendar days** after the spill end date.	(Section 3.2 of Attachment E1 of the SSS WDR)

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

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

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

Spill Requirements	Due	Method
Notification	Not Applicable	Not Applicable
Monitoring	Conduct spill-specific monitoring.	(Section 2 of Attachment E1 of the SSS WDR)

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Reporting	• If, during any calendar month, Category 4 spills occur, certify monthly, the estimated total spill volume exiting the sanitary sewer system, and the total number of all Category 4 spills into the online CIWQS Sanitary Sewer System Database, within 30 days after the end of the calendar month in which the spills occurred. • Upload and certify a report, in an acceptable digital format, of all Category 4 spills to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occur.	(Section 3.4, 3.6, 3.7 and 4.4 of Attachment E1 of the SSS WDR)

10.2.5 District Owned and/or Operated Lateral Spills That Do Not Discharge to Surface Waters

Spill Requirements	Due	Method
Notification	**Within two (2) hours** of the District's knowledge of a spill of 1,000 gallons or greater, from an District- owned and/or operated lateral, discharging or threatening to discharge to waters of the State: Notify California Office of Emergency Services and obtain a notification control number. Not applicable to a spill of less than 1,000 gallons.	California Office of Emergency Services at: (800) 852-7550 (Section 1 of Attachment E1 of the SSS WDR)
Monitoring	Conduct visual monitoring.	(Section 2 of Attachment E1 of the SSS WDR)

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Reporting	• Upload and certify a report, in an acceptable digital format, of all lateral spills (that do not discharge to a surface water) to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occur. • Report a lateral spill of any volume that discharges to a surface water as a Category 1 spill.	(Sections 3.6, 3.7 and 4.4 of Attachment E1 of the SSS WDR)

10.3 COMPLAINT RECORDS

The District maintains records of all complaints received whether or not they result in sanitary sewer overflows. These complaint records include, but are not limited to, records documenting how the District responded to notifications of spills. Each complaint record must, at a minimum, include the following information:

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

All complaint records will be maintained for a minimum of five years whether or not they result in a spill. Spill files (field notes, spill/Backup Response Workbook) are kept in MUNIS and SharePoint.

11. POST-SPILL ASSESSMENTS OF SPILL RESPONSE ACTIVITIES

(ref. SSS WDR*, Element 6, ATTACHMENT D, Page D-6)*

Every spill event is an opportunity to evaluate the District's adherence to response and reporting procedures and effectiveness of the response. Each spill event is unique, with its own elements and challenges including volume, cause, location, terrain, climate, and other parameters.

As soon as possible after spill events all the participants, from the person who received the call to the last person to leave the site, will meet to review the procedures used and to discuss what worked and where improvements could be made in responding to and mitigating future spill events. The results of the debriefing will be documented and tracked to ensure the action items are completed as scheduled.

11.1 FAILURE ANALYSIS INVESTIGATION

The objective of the failure analysis investigation is to determine the "root cause" of the spill and to identify corrective action(s) needed that will reduce or eliminate future potential for the spill to reoccur or for other spills to occur.

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The investigation will include reviewing all relevant data to determine appropriate corrective action(s) for the line segment. The investigation may include:

- Reviewing and completing the Sanitary Sewer Spill Report and any other documents related to the incident
- Reviewing the incident timeline and other documentation regarding the incident
- Reviewing communications with the reporting party and witness
- Reviewing volume estimate, volume recovered estimate, volume estimation assumptions, and associated drawings
- Reviewing available photographs
- Interviewing staff that responded to the spill
- Reviewing past maintenance records
- Reviewing past CCTV records,
- Conducting a CCTV inspection to determine the condition of all line segments immediately following the spill and reviewing the video and logs,
- Reviewing any Fats, Oils, and Grease (FOG) related information or results
- Post spill debrief records
- Interviews with the public at the spill location

The product of the failure analysis investigation will be the determination of the root cause and the identification and scheduling of the corrective actions. The Collection System Failure Analysis Form (in Sanitary Sewer Spill/Backup Response Workbook) will be used to document the investigation.

12. SPILL RESPONSE TRAINING

(ref. SSS WDR*), Element 6, Attachment D 4.3 page D-5 and Element 6 page D-6*

This section provides information on the training that is required to support this Spill Emergency Response Plan.

12.1 INITIAL AND ANNUAL REFRESHER TRAINING

All District personnel who may have a role in responding to, reporting, and/or mitigating a sewer system spill will receive training on the contents of this SERP. All new employees will receive training before they are placed in a position where they may have to respond. Current employees will receive annual refresher training on this SERP and the procedures to be followed. The District will document all training.

Affected employees will receive annual training on the following topics by knowledgeable trainers:

- The requirements of the SSS WDR, Element 6
- The District's Spill Emergency Response Plan procedures and practice drills

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- Containment and cleanup methods
- Researching and documenting Sanitary Sewer Spill start times
- Skilled estimation of spill volume for field operators
- Electronic CIWQS reporting procedures for staff submitting data
- State Water Resources Control Board Employee Knowledge Expectations

Through SWRCB Employee Knowledge Expectations training, the employee will be able to answer the following:

1. Please briefly describe your name and job title.
2. Please describe for us approximately when you started in this field and how long you have worked for your agency.
3. Please expand on your current position duties and role in responding in the field to any spill complaints.
4. Please describe your SOPs used to respond/mitigate spills when they occur.
5. Describe any training your agency provides or sends you to for conducting spill volume estimates.
6. We are interested in learning more about how your historical spill response activities have worked in the field. We understand from discussions with management earlier that you use the SERP from the SSMP. Please elaborate on how you implement and utilize the procedures in the plan.
7. Historically, before any recent changes, can you please walk us through how you would typically receive and respond to any spill complaints in the field?
8. Can you tell us who is responsible for estimating spill volumes discharged? If it is you, please describe how you go about estimating the spill volume that you record on the work order/service request forms?
9. What other information do you collect or record other than what is written on the work order form?
10. Describe if and when you ever talk with people that call in spills (either onsite or via telephone) to further check out when the spill might have occurred based on what they or others know? If you do this, can you tell us where this information is recorded?
11. We understand you may be instructed to take pictures of some sewer spills/backups into structures. Other than these spills, when else would you typically take any pictures of a spill?
12. Please walk us through anything else you'd like to add to help us better understand how your field crews respond and mitigate spill complaints.

12.2 SPILL RESPONSE DRILLS

Periodic training drills or field exercises will be held to ensure that employees are up to date on these procedures, equipment is in working order, and the required materials are readily available. The training drills will cover scenarios typically observed during sewer related emergencies (e.g., mainline blockage, mainline failure, and lateral blockage). The results and the observations during the drills will be recorded and action items will be tracked to ensure completion.

12.3 SPILL TRAINING RECORD KEEPING

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Records will be kept of all training that is provided in support of this SERP for 5 years. The records for all scheduled training courses and for each overflow emergency response training event will include date, time, place, content, name of trainer(s), names and titles of attendees, brief narrative description of the training, including training method(s), and training materials and/or equipment used.

12.4 CONTRACTORS WORKING ON DISTRICT SEWER FACILITIES

All contractors working on District sewer facilities will be required to follow the spill response instructions on the Sanitary Sewer Spill Response Instructions for Contractors (Appendix D). Additional training may be required depending on the nature of the work on any or all of the following:

- The requirements of the SSS WDR, Element 6
- Communication procedures to District in the event a spill is caused or witnessed
- The District's Spill Emergency Response Plan procedures and practice drills
- Skilled estimation of spill volume for field operators
- Electronic CIWQS reporting procedures for staff submitting data

13. SEWER BACKUP INTO/ONTO PRIVATE PROPERTY CLAIMS HANDLING POLICY

It is the policy of the District that a claims form shall be offered to anyone wishing to file a claim. The following procedures will be observed for all sewer overflows/backups into/onto private property:

- District staff will offer a District claim form irrespective of fault whenever it is possible that the sanitary sewer backup may have resulted from an apparent blockage in the District-owned sewer lines or whenever a District customer requests a claim form. The claim may later be rejected if subsequent investigations into the cause of the loss indicate the District was not at fault.
- It is the responsibility of the Collections System Crew to gather information regarding the incident and notify the Maintenance Manager and/or Maintenance Supervisor or their designee.
- It is the responsibility of the Human Resources and Risk Manager or their designee to review all claims and to oversee the adjustment and administration of the claim to closure.

14. AUTHORITY

This SERP is written in accordance with the SSS WDR.

15. APPENDICES

A. Reporting Requirements by Spill Category

B. Collection System Service Call/ Overflow Field Report

C. Door Hanger

D. Sanitary Sewer Spill Response Instructions for Contractors

E. Sanitary Sewer Spill/Backup Response Workbook

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APPENDIX A:
Reporting Requirements by Spill Category

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REPORTING REQUIREMENTS FOR INDIVIDUAL CATEGORY 1 SPILL REPORTING

Draft Spill Report

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

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

1. Contact information: Name and telephone number of District contact person to respond to spill-specific questions;
2. Spill location name;
3. Date and time the District was notified of, or self-discovered, the spill;
4. Operator arrival time;
5. Estimated spill start date and time;
6. Date and time the District notified the California Office of Emergency Services, and the assigned control number;
7. Description, photographs, and GPS coordinates of the system location where the spill originated; If a single spill event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the spill appearance point explanation field;
8. Estimated total spill volume exiting the system;
9. Description and photographs of the extent of the spill and spill boundaries;
10. Did the spill reach a drainage conveyance system? If Yes:
    a. Description of the drainage conveyance system transporting the spill;
    b. Photographs of the drainage conveyance system entry location(s);
    c. Estimated spill volume fully recovered from the drainage conveyance system;
    d. Estimated spill volume remaining within the drainage conveyance system;
    e. Description and photographs of all discharge point(s) into the surface water;
    f. Estimated spill volume that discharged to surface waters; and
    g. Estimated total spill volume recovered.

Certified Spill Report

Within 15 calendar days of the spill end date, the District shall submit a Certified Spill Report for Category 1 spills, to the online CIWQS Sanitary Sewer System Database.

Upon completion of the Certified Spill Report, the online CIWQS Sanitary Sewer System Database will issue a final spill event identification number.

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(Category 1 continued)

The Certified Spill Report must, at minimum, include the following mandatory information in addition to all information in the Draft Spill Report:

1. Description of the spill event destination(s), including GPS coordinates if available, that represent the full spread and reach of the spill;
2. Spill end date and time;
3. Description of how the spill volume estimations were calculated, including at a minimum:
    a. The methodology, assumptions and type of data relied upon, such as supervisory control and data acquisition (SCADA) records, flow monitoring or other telemetry information used to estimate the volume of the spill discharged, and the volume of the spill recovered (if any volume of the spill was recovered), and
    b. The methodology(ies), assumptions and type of data relied upon for estimations of the spill start time and the spill end time;
4. Spill cause(s) (for example, root intrusion, grease deposition, etc.);
5. System failure location (for example, main, lateral, pump station, etc.);
6. Description of the pipe material, and estimated age of the pipe material, at the failure location;
7. Description of the impact of the spill;
8. Whether or not the spill was associated with a storm event;
9. Description of spill response activities including description of immediate spill containment and cleanup efforts;
10. Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the spill, and a schedule of major milestones for those steps;
11. Spill response completion date;
12. Detailed narrative of investigation and investigation findings of cause of spill;
13. Reasons for an ongoing investigation (as applicable) and the expected date of completion;
14. Name and type of receiving water body(ies);
15. Description of the water body(ies), including but not limited to:
    a. Observed impacts on aquatic life,
    b. Public closure, restricted public access, temporary restricted use, and/or posted health warnings due to spill,
    c. Responsible entity for closing/restricting use of water body, and
    d. Number of days closed/restricted as a result of the spill.
16. Whether or not the spill was located within 1,000 feet of a municipal surface water intake; and
17. If water quality samples were collected, identify sample locations and the parameters the water quality samples were analyzed for. If no samples were taken, Not Applicable shall be selected.

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(Category 1 continued)

Amended Certified Spill Reports

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

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

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REPORTING REQUIREMENTS FOR INDIVIDUAL CATEGORY 2 SPILL REPORTING

Draft Spill Report

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

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

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

Certified Spill Report

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

The Certified Spill Report must, at minimum, include the following mandatory information in addition to all information in the Draft Spill Report:

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1. Description of the spill event destination(s), including GPS coordinates if available, that represent the full spread and reach of the spill;

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(Category 2 continued)

2. Spill end date and time;
3. Description of how the spill volume estimations were calculated, including at a minimum:

- The methodology, assumptions and type of data relied upon, such as records, flow monitoring or other telemetry information used to estimate the volume of the spill discharged, and the volume of the spill recovered (if any volume of the spill was recovered), and
- The methodology(ies), assumptions and type of data relied upon for estimations of the spill start time and the spill end time;

4. Spill cause(s) (for example, root intrusion, grease deposition, etc.);
5. System failure location (for example, main, pump station, etc.);
6. Description of the pipe/infrastructure material, and estimated age of the pipe material, at the failure location;
7. Description of the impact of the spill;
8. Whether or not the spill was associated with a storm event;
9. Description of spill response activities including description of immediate spill containment and cleanup efforts;
10. Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the spill, and a schedule of major milestones for those steps;
11. Spill response completion date;
12. Detailed narrative of investigation and investigation findings of cause of spill;
13. Reasons for an ongoing investigation (as applicable) and the expected date of completion; and
14. Whether or not the spill was located within 1,000 feet of a municipal surface water intake.

Amended Certified Spill Reports

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

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

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REPORTING REQUIREMENTS FOR INDIVIDUAL CATEGORY 3 SPILL REPORTING

Monthly Certified Spill Reporting

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

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

1. Contact information: Name and telephone number of District contact person to respond to spill-specific questions;
2. Spill location name;
3. Date and time the District was notified of, or self-discovered, the spill;
4. Operator arrival time;
5. Estimated spill start date and time;
6. Description, photographs, and GPS coordinates where the spill originated. If a single spill event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the spill appearance point explanation field;
7. Estimated total spill volume exiting the system;
8. Description and photographs of the extent of the spill and spill boundaries;
9. Did the spill reach a drainage conveyance system? If Yes:
    a. Description of the drainage conveyance system transporting the spill;
    b. Photographs of the drainage conveyance system entry locations(s);
    c. Estimated spill volume fully recovered from the drainage conveyance system; and
    d. Estimated spill volume discharged to a groundwater infiltration basin or facility, if applicable.
10. Estimated total spill volume recovered;
11. Description of the spill event destination(s), including GPS coordinates, if available, that represent the full spread and reaches of the spill;
12. Spill end date and time;
13. Description of how the spill volume estimations were calculated, including, at minimum:
    a. The methodology and type of data relied upon, including records, flow monitoring or other telemetry information used to estimate the volume of the spill discharged, and the volume of the spill recovered (if any volume of the spill was recovered), and
    b. The methodology and type of data relied upon to estimate the spill start time, on-going spill rate at time of arrival (if applicable), and the spill end time;

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14. Spill cause(s) (for example, root intrusion, grease deposition, etc.);

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(Category 3 Continued)

15. System failure location (for example, main, pump station, etc.);

16. Description of the pipe/infrastructure material, and estimated age of the pipe/infrastructure material, at the failure location;

17. Description of the impact of the spill;

18. Whether or not the spill was associated with a storm event;

19. Description of spill response activities including description of immediate spill containment and cleanup efforts;

20. Description of spill corrective actions, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the spill, and a schedule of the major milestones for those steps; including, at minimum:

    a. Local regulatory enforcement action taken against an illicit discharge in response to this spill, as applicable, and

    b. Identifiable system modifications, and operation and maintenance program modifications needed to prevent repeated spill occurrences at the same spill event location, including:

        - Adjusted schedule/method of preventive maintenance,
        - Planned rehabilitation or replacement of sanitary sewer asset,
        - Inspected, repaired asset(s), or replaced defective asset(s),
        - Capital improvements,
        - Documentation verifying immediately implemented system modifications and operating/maintenance modifications,
        - Description of spill response activities,
        - Spill response completion date, and
        - Ongoing investigation efforts, and expected completion date of investigation to determine the full cause of spill;

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

Amended Certified Spill Reports

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

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

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REPORTING REQUIREMENTS FOR INDIVIDUAL CATEGORY 4 SPILL REPORTING

Monthly Certified Spill Reporting

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

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

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

- Maintain records per section 4.4. of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of the SSS WDR. The District shall provide records upon request by State Water Board or Regional Water Board staff.
- Annually upload and certify a report, in an appropriate digital format, of all recordkeeping of spills to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occurred.

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

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

If either (1) no spills occur during a calendar month or (2) only Category 4, and/or District-owned and/or operated lateral spills (that do not discharge to a surface water) occur during a calendar month, the District shall certify, within 30 calendar days after the end of each calendar month, either a "No-Spill" certification statement, or a "Category 4 Spills" and/or "Non-Category 1 Lateral Spills" certification statement, in the online CIWQS Sanitary Sewer System Database, certifying that there were either no spills, or Category 4 and/or Non-Category 1 Lateral Spills that will be reported annually (per section 3.6 of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements of the SSS WDR) for the designated month.

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

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

If the Districts has spills from its owned and/or operated laterals during a calendar month, the District shall not certify "no spills" for that calendar month.

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APPENDIX B:

Collection System Service Call/ Overflow Field Report

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SERVICE CALL / COMPLAINT FORM

CALL RECEIVED:	
Received by (name):	
Date:	Time:
CALLER'S INFORMATION	
Name:	Phone:
Address:	
NATURE OF CALL (COMPLAINT)	
Date and time caller first noticed the spill:	
LOCATION OF POTENTIAL PROBLEM	
CALLER'S OBSERVATION *(e.g., odor, duration, location on property, known impacts, indication if surface water impacted, appearance at cleanout or manhole)*	
In case of spill, estimated start time:	
ADDITIONAL COMMENTS/INFORMATION	

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RESPONSE ACTION TAKEN/FINAL RESOLUTION

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APPENDIX C:

Door Hanger

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Delta Diablo

On (date) _____

at (location) _____

we responded to a reported blockage of the sanitary sewer service to your property.

We discovered a blockage in:

- ☐ The sanitary sewer main and cleared the line
- ☐ Your sanitary sewer lateral, which is your responsibility to maintain.

If you require assistance to clear your portion of the lateral you can search the internet for “Sewer Contractors” or “Plumbing Drains & Sewer Cleaning.” If you plan to hire a contractor, we recommend getting estimates from more than one company.

District representative notes:_____

_____

_____

District representative name:

_____

For questions or comments, please call

Delta Diablo

(925) 756-1900

Delta Diablo

On (date) _____

at (location) _____

we responded to a reported blockage of the sanitary sewer service to your property.

We discovered a blockage in:

- ☐ The sanitary sewer main and cleared the line
- ☐ Your sanitary sewer lateral, which is your responsibility to maintain.

If you require assistance to clear your portion of the lateral you can search the internet for “Sewer Contractors” or “Plumbing Drains & Sewer Cleaning.” If you plan to hire a contractor, we recommend getting estimates from more than one company.

District representative notes:_____

_____

_____

District representative name:

_____

For questions or comments, please call

Delta Diablo

(925) 756-1900

APPENDIX D:

Sewer Spill Response Instructions for Contractors

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Delta Diablo

Spill Emergency Response Plan

Sewer Spill Response Instructions for Contractors

For contractors working on the sanitary sewer system the District expects them to have, at all worksites, spill response materials necessary to block drainage conveyance system entry points near the work area and surface waters.

Additionally, contractor must be trained on spill response materials and equipment.

The following procedures are to be followed in the event that a contractor/plumber causes or witnesses a sanitary sewer spill. If the contractor/plumber causes or witnesses a spill they should:

1

Immediately notify the District at (925) 756-1900 and provide the following information if available:

- Date, time contractor first noticed the spill
- Description of the contractor's observation, including any information regarding whether the spill has reached surface waters or a drainage conveyance system
- Contractor's contact information

â

2

Protect storm drains.

â

3

Protect the public.

â

4

Direct ALL media and public relations requests to the Resource Recovery Services Director at (925) 756-1900.

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APPENDIX E:

Sewer Spill/Backup Response Workbook

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Sanitary Sewer Spill/Backup Response Workbook

See the following page for contact information as needed.

☐ Make immediate notifications:

- If this spill is discharging or threatening to discharge greater than or equal to 1,000 gallons to waters of the State, immediately contact CalOES at (800) 852-7550 within 2 hours and obtain a control number. Record this number on the following pages: A-4, B-2, and D-1 Page 1.
- If there is a backup into a residence/business that may be due to a problem in the District's sewer, notify the Maintenance Manager at (925) 382-4943 and/or Maintenance Supervisor at (925) 303-8500.
- For media inquiries/requests contact the Resource Recovery Services Director at (925) 756-1900.

☐ Refer to the Regulatory Reporting Guide in this Workbook for additional reporting requirements.

COLLECTIONS SYSTEM CREW:	CHAIN OF CUSTODY
☐ Refer to the Spill Event Checklist (A-4), follow the instructions on the Spill/Backup Response Flowchart (C-1), and complete forms in this Workbook as indicated. ☐ Complete the chain of custody record (to the right) and deliver this workbook to the Maintenance Manager and/or Maintenance Supervisor.	Print Name: Initial: Date:

MAINTENANCE MANAGER AND/OR MAINTENANCE SUPERVISOR:	CHAIN OF CUSTODY
☐ Review the Spill Event Checklist (A-4) and the forms in this Workbook. Contact the Collections System Crew for additional information if necessary. ☐ Confirm that all required regulatory notifications have been made (B-1). ☐ If this was a Sewer Backup, follow instructions on the Backup Forms Checklist (F-1). ☐ Complete the Post Spill Assessment (G-1) and Collection System Failure Analysis Form (G-2). ☐ Complete the Chain of Custody record (right) and forward Workbook to Data Submitter	Print Name: Initial: Date:

DATA SUBMITTER:	CHAIN OF CUSTODY
☐ Refer to Spill Event Checklist (A-4) Data Submitter Responsibilities ☐ Complete the chain of custody record (to the right) and deliver this workbook to a Legally Responsible Official (see A-2 for LROs).	Print Name: Initial: Date:

LEGALLY RESPONSIBLE OFFICIAL:	CHAIN OF CUSTODY
☐ Refer to Spill Event Checklist (A-4) Data Submitter Responsibilities ☐ Complete the chain of custody record (to the right) and file this Workbook with the spill file.	Print Name: Initial: Date:

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Contact Information

Contact	Description	Telephone/Email/Address
CAL/OES	California Office of Emergency Services	(800) 852-7550
Carl Warren & Co./CSRMA	Assistance with sewer backup customers	(855) 763-5898 2300 Clayton Road Concord, CA 94520 csrmaclaims@carlwarren.com
Collection System Crew Maintenance Manager Maintenance Supervisor	CalOES 2-hour notification and other regulatory notifications	 (925) 382-4943 (925) 303-8500
Human Resources and Risk Manager	Assistance with sewer backup customers and insurance claims	(925) 756-1969
Operations Manager Maintenance Manager	Outside Assistance / Mutual Aid	(925) 756-1971 (925) 382-4943
Resource Recovery Services Director	Media inquiries/requests	(925) 756-1972
San Francisco Regional Water Quality Control Board		(510) 622-2300
State Water Resources Control Board	Walter Mobley	(916) 323-0878 Walter.Mobley@waterboards.ca.gov

Authorized Personnel:

The following are authorized to perform regulatory reporting of spills:

Job Title	Telephone	Check if LRO
Maintenance Manager	(925) 382-4943	✓
Maintenance Supervisor	(925) 303-8500	✓
Resource Recovery Service Director	(925) 756-1900	✓
General Manager	(925) 756-1900	✓

The District's Legally Responsible Official (LRO) is authorized to electronically sign and certify spill reports in CIWQS.

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Delta Diablo Collection System Personnel: Monday – Friday 7:00 a.m. to 4:30 p.m.

Name	Title	Contact Number
Taylor Amaro	Collection Systems Worker II	(925) 382-9788
Anthony Dejesus	Collection Systems Worker II	(925) 382-8937
Michael Sprague	Collection Systems Worker I	(925) 260-5306

Wet Weather Emergency Contact List

Name	Title	Contact Number	Email
Dean Eckerson	Resource Recovery Services Director	(925) 260-5322 Cell (925) 756-1972 Desk	deane@deltadiablo.org
Joaquin Gonzalez	Operations Manager	(925) 382-8664 Cell (925) 756-1971 Desk	joaquing@deltadiablo.org
Nick Steiner	Operations Supervisor	(925) 260-5071 Cell (925) 756-1986 Desk	nicks@deltadiablo.org
Dustin Bloomfield	Maintenance Manager	(925) 382-4943 Cell (925) 756-1918 Desk	dustinb@deltadiablo.org
Trevor Simpson	Maintenance Supervisor	(925) 303-8500 Cell	trevors@deltadiablo.org
Eric Wise	Maintenance Lead	(925) 382-7079 Cell	ericw@deltadiablo.org
Anthony Dejesus	Collections Lead	(925) 382-8937 Cell	anthonyd@deltadiablo.org
Taylor Amaro	Collection System Worker II	(925) 382-9788 Cell	taylora@deltadiablo.org
Michael Sprague	Collection System Worker I	(925) 260-5306 Cell	michaels@deltadiablo.org
Alonso Rodriguez	Construction Inspector	(925) 382-7084 Cell	alonsor@deltadiablo.org
Lead Operator	After 4:00 p.m. & Weekends	(925) 382-6960 Cell	leado@deltadiablo.org

City of Antioch

Name	Title	Contact Number
Scott Buenting	(Acting) Public Works Director	(925) 779-6958
Carlos Zepeda	Public Works Deputy Director	(925) 779-6953
Toby Beach	Collections Superintendent	(925) 779-6962 Desk (925) 437-4567 Cell
Junior Ramos	Collections Supervisor	(925) 779-6821 Desk (925) 479-2858 Cell
Phyllis Guillory	Collections Technician	(925) 779-6822 Cell
Kim Fernandez Lopez	Lead Collections Worker	(925) 499-7200 Cell
Tyrone Wilson	Lead Collections Worker	(925) 207-2921 Cell
Chad Truesdell	Lead Collections Worker	(925) 234-1703 Cell
Standby	Collections 24 Hour Standby	(925) 503-7005 Cell

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City of Pittsburg

Name	Title	Contact Number	Area of Responsibility
John Samuelson	Director Public Works	(925) 382-6752	
Hilario Mata	Asst. Director of Public Works	(925) 250-7095	
Robert Joaquin	Lead Public Works Superintendent	(925) 382-7508	
Bryan Ballardo	Public Works Superintendent	(925) 382-5047	Streets, Buildings, Parks, Landscape. Trees and Medians
Chad Joaquin	Public Works Supervisor	(925) 382-5235	Streets and Buildings
Anthony Baldazo	Public Works Supervisor	(925) 382-6750	Parks and Landscape
John Pebley	Public Works Supervisor	(925) 446-2382	Tress and Medians
Jorge Esparza	Public Works Superintendent	(925) 584-5413	Water Distribution, Sewer, Street Sweeping, and Fleet
Wilfredo Rivera	Public Works Supervisor	(925) 382-4154	Water Lines
Ralph Cones	Public Works Supervisor	(925) 584-5649	Sewer
Pedro Ramos	Public Works Supervisor	(925) 584-5710	Water Meters and Street Sweeping
Greg Justice	Equipment Supervisor	(925) 250-6866	Fleet
Jason Moser	Water Plant Superintendent	(925) 383-6337	Water Plant
Michael Silva	Water Plant Supervisor	(925) 584-9101	Water Plant
Water Plant Operator		(925) 382-5706	
Corporation Yard Office		(925) 252-4936	
Environmental Center Office		(925) 252-4000	
Water Plant Office		(925) 252-4026	

In the event Collection System personnel are not readily available:

Primary Contact	Contact Number
City of Pittsburg	(925) 252-4936
	(925) 766-7474
	(925) 930-4498

Secondary Contacts	Contact Number	Additional Contact Number
Absolute Plumbing	(925) 676-1900	(925) 676-1900 (Ask for Rod After Hours Emergency Only)
NorCal Pipeline	(916) 594-3817	Ask for Anthony Miller

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City of Antioch	(925) 779-6950	(925) 778-2441 (Police Dispatcher)
Central Contra Costa Sanitary District	(925) 228-9500 General Number	(925) 766-0160 (24-Hr. Cell) On-Call Crew

Emergency Contacts	Contact Number	Notes
Bay Area Air Quality Management District	(415)771-6000	
Republic Services	(925)685-4711	Grit/Screenings Disposal
Golden State Water	(925)458-2090 (800)999-4033	Bay Point Water Calls
Calif. Dept. of Health Services Operator Cert.	(916)341-5639	
California Highway Patrol	(707)551-4100	Non-Emergencies
California Office of Emergency Services (Cal OES)	(916)845-8911 (800)852-7550	Emergency Services/State Warning Center
Cal/OSHA	(925)602-6517	
California Integrated Water Quality System (CIWQS) www.waterboards.ca.gov/water_issues/programs/sso// User ID/Password: (LROs have Log-In & Password) Waste Discharge ID Number: 2SSO10127 State Water Board: Walter Mobley Walter.Mobley@waterboards.ca.gov	(916)323-0878	
California Regional Water Quality Control Board, Bay Area, Region 2	(510)622-2300 (510)622-2369 (510)622-2460	Main Line Voice Mail Fax
Michael Chee michael.chee@waterboards.ca.gov	(510)622-2333	NPDS Wastewater Division
Kerry O'Connor Kerry.OConnor@waterboards.ca.gov	(510)622-2465	Water Resource Control Engineer
California Regional Water Quality Control Board, Central Valley, Region 5 Mohammad Farhad Mohammad.Farhad@waterboards.ca.gov Jim Marshall	(916)464-1181 (916)464-4772	
Cal Trans	(510)286-6359	24-Hour, Radio Dispatched
Central Contra Costa Sanitary District	(925)933-0990 (925)766-0160	24-Hour (Overflow) After Hours Standby Cell (925) 933-0955
Chemtrec	(800)424-9300	Chemical/Gas Release/Emergencies
City of Antioch Antioch Police Sewer Problems Sewer Problems Water Problems	 (925) 778-2441 (925) 778-2441 (925) 779-6950 (925) 778-3911	 After Hours (Police Dispatch) Normal Business Hours

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		After Hours (Police Dispatch)
Water Treatment Plant	(925) 779-7029 (925) 779-7027	

Contact Information

Emergency Contacts	Contact Number	Notes
City of Bay Point/Shore Acres Sewer Problems Water Problems Water Problems (After Hours)	 (925) 252-4936 (925) 458-2090 (800) 999-4033	 After Duty Hours, Call Pittsburg Answering Service Golden State Water Golden State Water
City of Bethel Island Sewer Problems	(925) 625-2279	Ironhouse Sanitary District
City of Oakley Sewer Problems Water Problems	 (925) 625-2279 (925) 625-2112 (925) 625-3798 (Emergency)	 Ironhouse Sanitary District Diablo Water District 24 Hours
City of Pittsburg Pittsburg Police Sewer Problems Water Problems Comcast	 (925) 646-2441 (925) 252-4936 (925) 252-4936 (800) 945-2288	 Non-Emergencies 24-Hour To Notify If Any Problems
Contra Costa County Environmental Health Dept.	(925) 608-5500 (925) 383-5445	7:00 a.m. – 4:30 p.m. 4:30 p.m. – 7:30 a.m.
Contra Costa County Fire District	911 (925) 941-3330 (925) 933-1313	Emergency Non-Emergency Non-Emergency Station 81 (W. 10th Street, Antioch)
Contra Costa County Flood Control Maintenance	(925) 313-7000 (925) 313-2000	24-Hour Number is the Sheriff
Contra Costa County Sheriff	(925) 646-2441	
Contra Costa County Public Works Department	(925) 646-2441 (925) 646-2441 or 911	24-Hr Flood control, plugged storm drains for Bay Point and Share Acres After Hrs. call the Sheriff's Dept.
Contra Costa Mosquito & Vector Control District	(925) 685-9301	

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Contra Costa County Water District	(925) 688-8095 (Phone Forwarded After Hours)	Between 7:00 a.m. and 3:30 p.m.
California Department of Fish & Wildlife Game	(916) 445-0045	Wildlife Protection (Dispatch)
EBMUD	(866) 403-2683	For Emergency Press #1
National Response Center Pacific Southwest (NRC) Environmental Protection Agency (EPA)	(800) 424-8802 (800) 300-2193	Reporting Oil & Hazardous Discharges Emergency Spill Line

Naval Federal Police	(925) 246-4041	
AT&T - VERIZON	611	
Business Customer Service (AT&T)	(800) 275-0014	
Pacific Gas & Electric Emergency & Customer Service (24 Hr.) Information on Power Outages Account Representative	 (800) 743- 5000 (800) 743-5000 (800) 743-5002	
Police Departments Antioch Police Pittsburg Police Sheriff's Dispatch	 (925) 778-2441 (925) 646-2441 (925) 646-2441	 Non-Emergencies Non-Emergencies Non-Emergencies
Recycled Water Facility (RWF) Delta Energy Center (DEC) Power Plant Los Medanos Energy Center (LMEC) Power Plant	 (925) 252-2060 (925) 252-2005	 Control Room- 24 Hours Control Room- 24 Hours

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NOTE: All references to "SSS WDR" refer to State Water Board Order No. WQ 2022-0103-DWQ.

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

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

- **Category 1 Spill:**

  A Category 1 spill is a spill of any volume of sewage from or caused by a sanitary sewer system regulated under the SSS WDR that results in a discharge to:
  - A surface water, including a surface water body that contains no flow or volume of water; or
  - A drainage conveyance system that discharges to surface waters when the sewage is not fully captured and returned to the sanitary sewer system or disposed of properly.

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

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

- **Category 2 Spill**

  A Category 2 spill is a spill of 1,000 gallons or greater, from or caused by a sanitary sewer system regulated under the SSS WDR that does not discharge to a surface water. A spill of 1,000 gallons or greater that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system, is a Category 2 spill.

- **Category 3 Spill**

  A Category 3 spill is a spill of equal to or greater than 50 gallons and less than 1,000 gallons, from or caused by a sanitary sewer system regulated under the SSS WDR that does not discharge to a surface water. A spill of equal to or greater than 50 gallons and less than 1,000 gallons, that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 3 spill.

- **Category 4 Spill**

  A Category 4 spill is a spill of less than 50 gallons, from or caused by a sanitary sewer system regulated under the SSS WDR that does not discharge to a surface water. A spill of less than 50 gallons that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 4 spill.

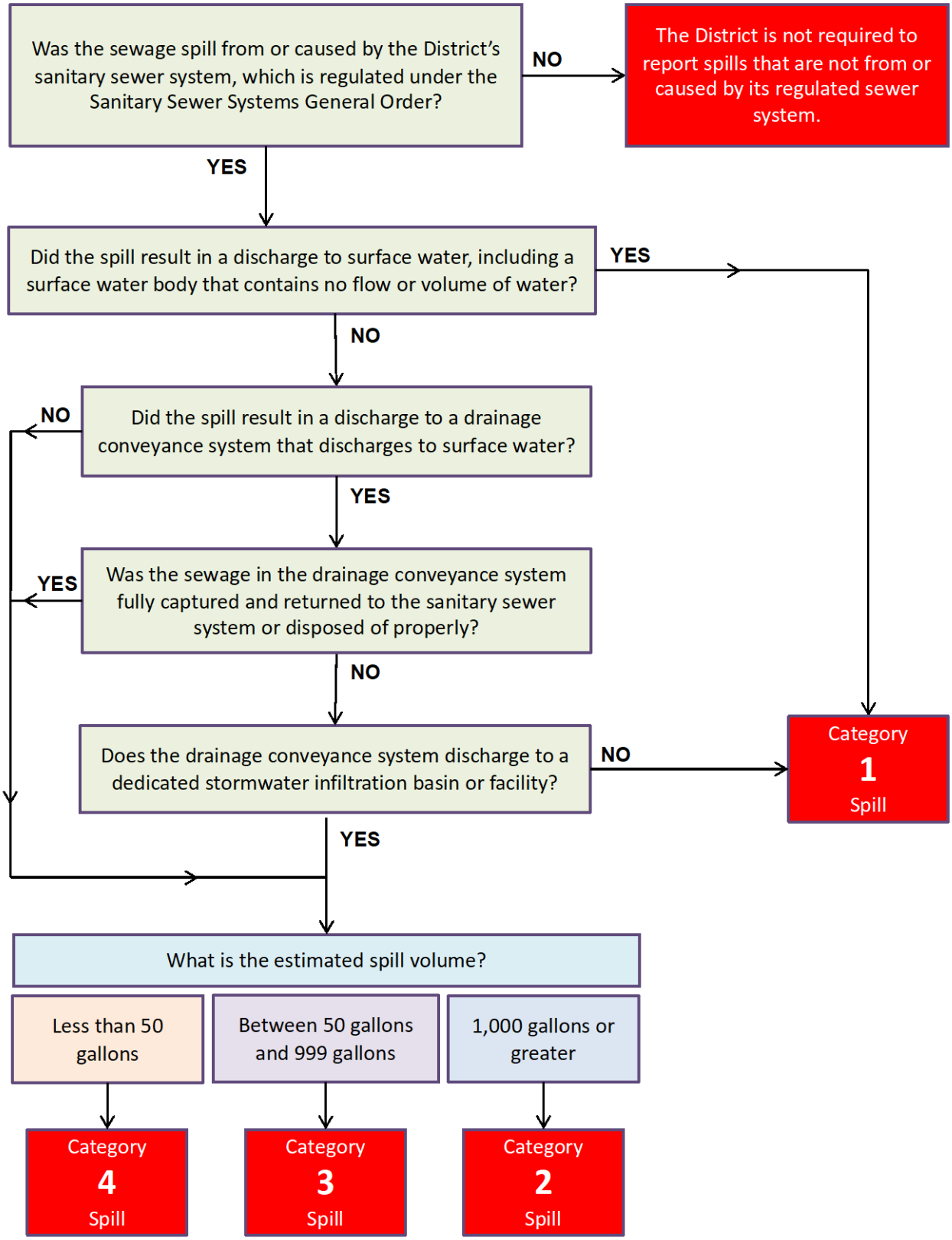
WATERS OF THE STATE: Waters of the State are surface waters or groundwater within boundaries of the state as defined in Water Code section 13050(e), in which the State and Regional Water Boards have authority to protect beneficial uses. Waters of the State include, but are not limited to, groundwater aquifers, surface waters, saline waters, natural washes

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and pools, wetlands, sloughs, and estuaries, regardless of flow or whether water exists during dry conditions. Waters of the State include waters of the United States.

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INSTRUCTIONS: Answer each question in order and stop at the red box once you have determined the category.



Spill Event Checklist

Date of Spill: _____ Spill Location/Name: _____

CIWQS Event ID #: _____ Category? ☐ 1 ☐ 2 ☐3 ☐4 OES#: _____

Property Damage? ☐ Yes ☐ No Service Request #: _____

COLLECTIONS SYSTEM CREW RESPONSIBILITIES

- ☐ Effort made to contain and return a portion/all to the sanitary sewer
- ☐ Pictures/video taken of spill
- ☐ Pictures taken of affected/unaffected area
- ☐ If property damage, was claim process started?
- ☐ Pictures taken of containment efforts
- ☐ If spill is Cat 1 > 1000 gallons or Cat 2 > 1000 gal threatening to discharge to waters of the State: OES Control #_____
- ☐ Were surface waters impacted?
- ☐ Impacted waters identified?
- ☐ Spill location and spread was assessed and documented (including photos)
- ☐ Spill Report Form Completed (includes information for all required fields in CIWQS, and a sketch of spill)
- ☐ Volume Estimation Worksheet(s) done
- ☐ Start Time Determination Form done
- ☐ Water Quality Monitoring and Sampling procedures followed

MAINTENANCE MANAGER AND/OR MAINTENANCE SUPERVISOR RESPONSIBILITIES

- ☐ Sample locations mapped, if applicable
- ☐ For Cat 1 Spills 50,000 gallons or larger, obtain sampling results
- ☐ Ensure Technical Report is written
- ☐ Initial review of forms is complete (ensure consistency of dates, times, volumes, and other data)
- ☐ Review of photos and videos (label/date)
- ☐ Conduct Post Spill Assessment & complete form (G-1)
- ☐ Failure Analysis
  - TV to determine cause
  - Review Asset History
- ☐ Determine next steps to prevent recurrence
- ☐ Document findings and next steps on Spill Report
- ☐ Start folder for all documentation for this spill event. Put everything in it (Spill Report, Field Reports, Worksheets/Forms, follow-up work orders, notes, photos, drawings, CIWQS print outs, emails, etc.)

DATA SUBMITTER RESPONSIBILITIES

- ☐ Submit Draft in CIWQS w/in 3 business days (for Categories 1 and 2 only)
- ☐ Print CIWQS Draft hard copy and email
- ☐ Review CIWQS, spill Report, Worksheets, CMMS, and any other documentation to ensure data is consistent (e.g. dates, times, volumes, cause, follow-up action, etc.)
- ☐ Attach photos, forms, etc. to CIWQS
- ☐ Attach Technical Report to CIWQS, if applicable
- ☐ Submit Ready to Certify in CIWQS (with sufficient time for LRO review)
- ☐ Print CIWQS Ready to Certify and email
- ☐ Hand Workbook to LRO and complete Chain of Custody form

LRO RESPONSIBILITIES

- ☐ LRO review Workbook and CIWQS verify accurate and consistent data
- ☐ Certify in CIWQS (within 15 calendar days for Categories 1 & 2, 30 days after the month for Category 3 & 4)
- ☐ Print Certified CIWQS and email
- ☐ Move completed Workbook and spill folder to spill files
- ☐ If any changes are made to SSMP
  - Update SSMP and link on CIWQS to SSMP
  - Add change to SSMP Change Log
  - Consider need to re-certify SSMP

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- [ ] Any changes? Change in CIWQS and hard copies and explain changes, print out current version

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INSERT TAB:
Tab B: Regulatory Reporting

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Regulatory Reporting Guide

The District's Legally Responsible Officials (LROs) are authorized to electronically sign and certify spill reports in CIWQS. See contact information for LROs on page A-2.

Deadline	Category 1 Spill*	Category 2 Spill++	Category 3 Spill++	Category 4 Spill++
2 hours after awareness of spill	Within two (2) hours of the District's knowledge of a Category 1 spill of 1,000 gallons or greater, discharging or threatening to discharge to Waters of the State, notify CalOES and obtain a notification control number.	Within two (2) hours of the District's knowledge of a Category 2 spill of 1,000 gallons or greater threatening to discharge to Waters of the State, notify CalOES and obtain a notification control number.	-	-
Within 18 hours of awareness of spill	Conduct water quality sampling of the receiving water within 18 hours of initial knowledge of spill of 50,000 gallons or greater to surface waters.	-	-	-
3 Business Days after awareness of spill	Submit Draft Spill Report in the CIWQS database.	Submit Draft Spill Report in the CIWQS database.	-	-
15 Days after the spill end date	Submit Certified Spill Report within 15 calendar days of the spill end date. (Submit Amended Spill Report, as needed, within 90 calendar days after the spill end date.)	Submit Certified Spill Report within 15 calendar days of the spill end date. (Submit Amended Spill Report, as needed, within 90 calendar days after the spill end date.)	-	-
Within **30 calendars days** after the end of the calendar month in which the spill occurs	-	-	Submit monthly Certified Spill Report to the online CIWQS Sanitary Sewer System Database (Submit Amended Spill Report, as needed, within 90 calendar days after the Certified Spill Report due date.)	Certify monthly, the estimated total spill volume exiting the sanitary sewer system, and the total number of all Category 4 spills into the online CIWQS Sanitary Sewer System Database.
45 days after spill end date	Submit Technical Report within 45 calendar days after the spill end date for a Category 1 spill in which 50,000 gallons or greater discharged to surface waters; and	-	-	-
By February 1st after the end of the calendar year in which the spills occur.	-	See + note below.	-	Upload and certify a report, in an acceptable digital format, of all Category 4 spills to the online CIWQS Sanitary Sewer System Database.

* A spill from an Enrollee-owned and/or operated lateral that discharges to a surface water is a Category 1 spill.

++ See following page for notes.

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++ Agency owned lateral spills (Cat 2-4) to be reported by Feb 1 of the following year.

- **Monthly Spill Reporting of Non-Category 1 Lateral Spills:** If either (1) no spills occur during a calendar month or (2) only Category 4, and/or Enrollee-owned and/or operated lateral spills (that do not discharge to a surface water) occur during a calendar month, the Enrollee shall certify, within 30 calendar days after the end of each calendar month, either a "No-Spill" certification statement, or a "Category 4 Spills" and/or "Non-Category 1 Lateral Spills" certification statement, in the online CIWQS Sanitary Sewer System Database, certifying that there were either no spills, or Category 4 and/or Non-Category 1 Lateral Spills that will be reported annually for the designated month.

- **Annual Certified Spill Reporting of Category 4 and/or Lateral Spills:** For all Category 4 spills and spills from its owned and/or operated laterals that are caused by a failure or blockage in the lateral and that do not discharge to a surface water, the Enrollee shall annually upload and certify a report, in an appropriate digital format, of all recordkeeping of spills to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occurred.

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Regulatory Reporting/Notifications Log B-2

Agency/Firm Contacted	Individual Spoken to:	Date	Time	Notes
CalOES				Control Number:

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INSERT TAB:
Tab C: Flowchart

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Spill/Backup Response Flowchart

START HERE

Does the spill/backup appear to be due to a problem in the **District-owned/maintained** sewer line?

NO

This is a Private Spill

1. Photograph the extent of the discharge and the discharge boundaries if possible.
2. Notify the property owner that the blockage is in their lateral and that the District does not have legal authority to maintain or perform work on privately-owned laterals.
3. Give customer the "Your Responsibilities as a Private Property Owner" pages from this Workbook (F-6).
4. Recommend to customer they hire a contractor to clear their line.
5. If customer is not home:
   - Complete Door Hanger and leave on customer's door.
   - Leave a message on the customer's voicemail.
6. If the property owner is unable or unwilling to address the cause of the Spill, immediately contact your supervisor and discuss whether Code Enforcement, the County Department of Environmental Health or Regional Water Quality Control Board should be notified.
7. If you are directed to, break the stoppage and clean up the private spill. Be sure to document District staff time and equipment used for potential billing purposes and take pictures.

1. **Document the service call according to District procedures.**
2. **STOP. Do not continue to PAGE 2**

YES

1. Document arrival time.
2. Consider the need to call out additional staff, contractor or mutual aid assistance.
3. If it is possible that this is a Category 1 spill greater than or equal to 1,000 gallons or a Category 2 spill that is threatening to discharge to waters of the State, immediately make the 2-hour notification to Cal-OES and obtain a control number. Record this number on the following pages: A-4, B-2, and D-1 Page 1.

1. Record manhole number or cleanout location of the spill appearance point closest to the failure point, and describe each additional appearance point on the Spill Report (D-1).
2. Take photographs of all spill appearance points, the extent of the spill, and spill boundaries.

Go to PAGE 2

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Continue from PAGE 1

BEGIN DIVERSION AND CONTAINMENT, AS NECESSARY

1. **DIVERT AWAY FROM SENSITIVE AREAS:**

   a. Cover unplugged storm drains w/mats, or use dirt/other material to divert sewage away from sensitive areas (e.g., schools, playgrounds, intersections, etc.)

   b. ENSURE PUBLIC CONTACT DOES NOT OCCUR. Use cones/barricades to isolate area.

2. **CONTAIN SPILL & RETURN TO SYSTEM, IF POSSIBLE:**

   a. As practical, plug or block drainage conveyance system entry locations or use rubber mats to cover basin inlet and divert flow to a downstream sanitary sewer manhole (*barricade manhole if left open and monitor after barricade)* or area suitable to capture the spill for later collection.

      If any amount has already reached the drainage conveyance system, trace it downstream to a dry manhole and block it from entering surface waters. i.e., plugs, sandbags, or vacuum truck.

   b. If you are confident that you can capture the spill in the drainage conveyance system, trace it downstream to a dry manhole and then divert the spill to the drainage conveyance system for later recovery and return to the sanitary sewer.

   c. Use bypass pumps to pump around blockage until it can be removed.

   d. Divert to low area of ground where it can be collected later.

3. **PHOTOGRAPH each drainage conveyance system entry location.**

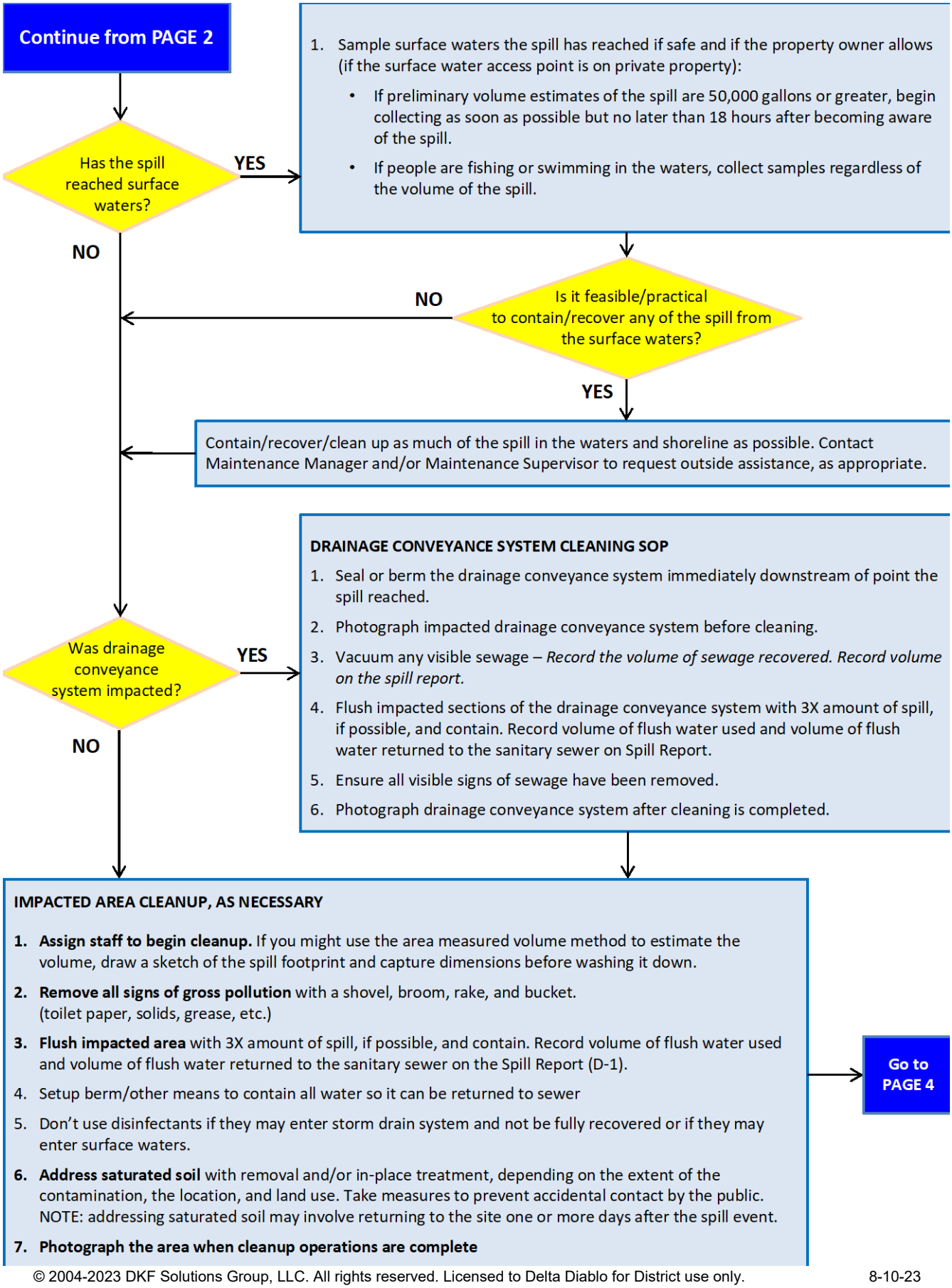
ADDRESS CAUSE OF SPILL/BACKUP ASAP

1. For spill/backups not related to a pump station, relieve the stoppage. Note the distance of the obstruction from the manhole and catch/remove debris that could cause another stoppage. After flow has returned to normal, clean the pipe thoroughly. Consider televising (CCTV) the affected line.
2. For pump station related spill/backups refer to that station's Emergency Response Plan.
3. Photograph staff activities while clearing the blockage.

Go to PAGE 3

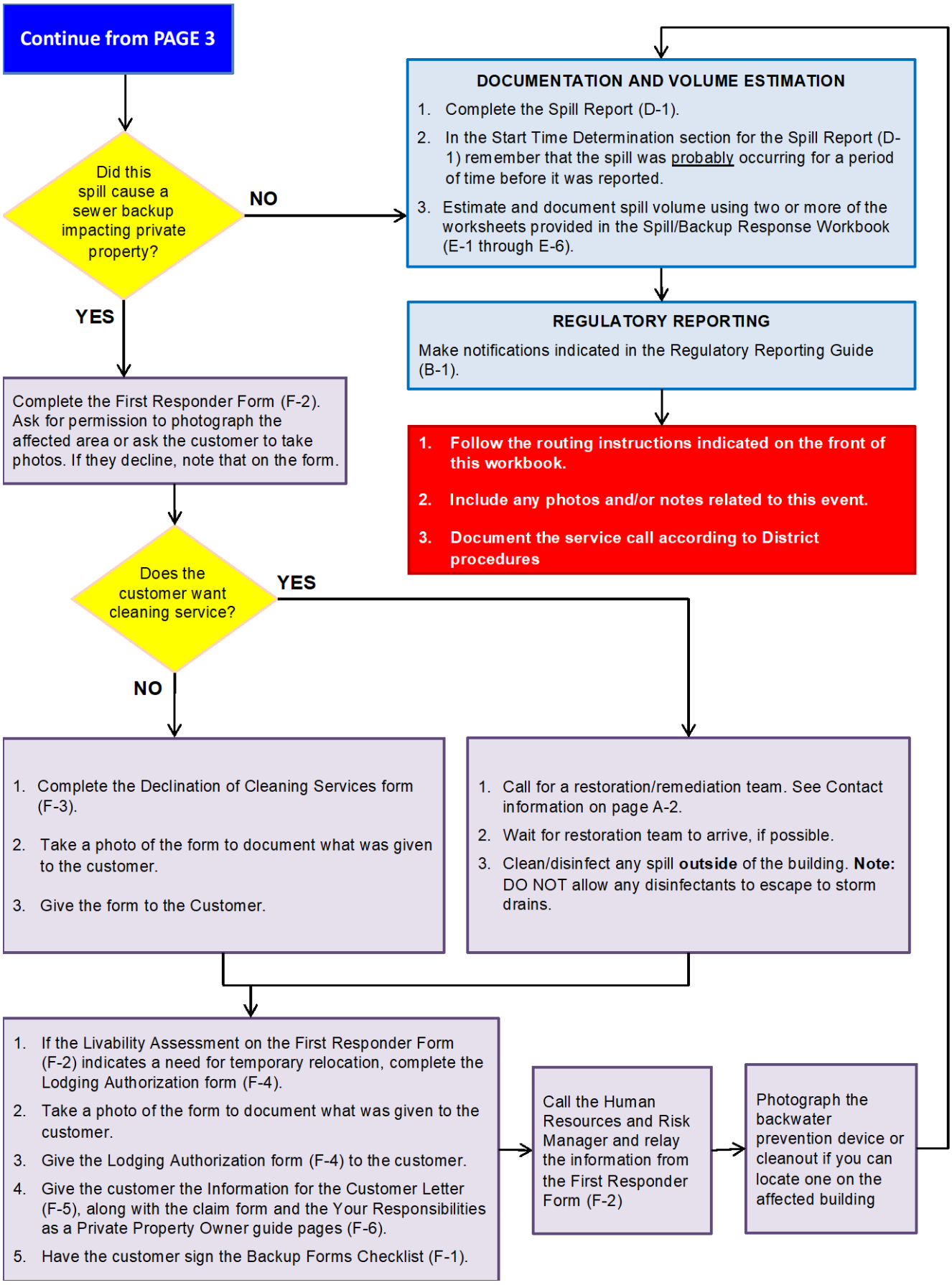
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Spill/Backup Response Flowchart



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Spill/Backup Response Flowchart



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INSERT TAB:
Tab D: Spill Report

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Sanitary Sewer Spill Field Report

Check spill category (see A-3 for definitions): ☐CATEGORY 1 ☐CATEGORY 2 ☐CATEGORY 3 ☐CATEGORY 4

CalOES NOTIFICATION*		
Date:	Time:	Assigned Control Number:

Names of the Persons Completing this Report	Contact Information

PHYSICAL LOCATION DETAILS	
Spill location name:	
Location description:	
Address of spill:	
City:	Cross Street:
Regional Water Quality Control Board: **San Francisco**	County: **Contra Costa**

DATE/TIME
Date and time the District was notified of, or self-discovered, the spill: _____
Operator arrival time: _____

PHOTOGRAPHS
Photos must be taken during the spill event. At a minimum, the following photos must be taken:

- ○ Appearance point closest to the failure point
- ○ Extent of the spill and spill boundaries
- ○ Entry location of each drainage conveyance system the sewage entered
- ○ All discharge points into surface waters
- ○ Location(s) of clean up

* Within two (2) hours of the District's knowledge of a Category 1 or Category 2 spill of 1,000 gallons or greater, discharging or threatening to discharge to waters of the State, notify CalOES and obtain a notification control number.

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Where are photographs stored?

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SPILL ORIGINATION	
Description and GPS coordinates of the system location where the spill originated*: *Include manhole number or cleanout location of the spill appearance point closest to the failure point as applicable.*	
Latitude:	Longitude:
Number of additional appearance points:	
Spill appearance points: (Check all that apply) ☐ Backflow Prevention Device ☐ Combined Sewer Drain Inlet (Combined Collection System Only) ☐ Force Main ☐ Gravity Mainline ☐ Inside Building/Structure ☐ Lateral Clean Out (Private) ☐ Lateral Clean Out (Public) ☐ Lower Lateral (Private) ☐ Lower Lateral (Public) ☐ Manhole ☐ Other Sewer System Structure ☐ Pump Station ☐ Upper Lateral (Private) ☐ Upper Lateral (Public) ☐ Other, describe:	
Describe each spill appearance point:	
Check to confirm photos were taken of all appearance points: ☐	

* Note: If a single spill event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the "Describe each spill appearance point" description

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section above. Take photos of spill appearance point(s).

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SPILL DESTINATION (Check all that apply)	
Final spill destination(s): ☐ Drainage Conveyance System That Discharges to Surface Water ☐ Surface Water ☐ Building or Structure ☐ Drainage Conveyance System ☐ Groundwater Infiltration Basic or Facility ☐ Paved Surface ☐ Street/Curb and Gutter ☐ Unpaved Surface ☐ Other, describe:	
Description of the spill event destination(s) including GPS coordinates if available that represent the full spread and reach of the spill.	
Latitude:	Longitude:
Latitude (if needed):	Longitude (if needed):
Latitude (if needed):	Longitude (if needed):
Latitude (if needed):	Longitude (if needed):
Check to confirm photos were taken of spill destination/boundaries: ☐	

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SPILL VOLUME
Estimated total spill volume exiting the system: _____ gallons
Did the spill reach a drainage conveyance system? ☐ YES ☐ NO If yes: • Estimated time the spill reached the drainage conveyance system: _____ • Distance from drainage conveyance system to entry point to surface waters: _____ feet • Method to determine travel time from point of entry to drainage conveyance system to receiving waters: _____ • Describe the drainage conveyance system transporting the spill: _____ Estimated spill volume fully recovered from the drainage conveyance system: _____ gallons Estimated spill volume remaining within the drainage conveyance system: _____ gallons
Check to confirm photos taken of entry location of drainage conveyance system the sewage entered: ☐
Did the spill reach surface water? ☐ YES ☐ NO If yes: • Estimated time the spill entered the surface water: _____ • Distance from spill appearance point to entry point to surface water: _____ feet • Method to determine travel time to receiving waters: _____ • Describe all discharge points: _____ Estimated spill volume that discharged to surface waters: _____ gallons Estimated total spill volume recovered: _____ gallons
Check to confirm photos were taken of the following, as applicable: all discharge points into surface waters, waterbody bank erosion, floating matter, water surface sheen, discoloration of receiving water, any notable impacts to the receiving water: ☐
Did the spill discharge to a groundwater infiltration basin or facility? ☐ YES ☐ NO If yes, • Estimated time the spill entered the groundwater infiltration basin or facility: _____ • Estimated spill volume discharged to the groundwater infiltration basin or facility: _____ gallons
Estimated spill volume that did NOT reach drainage conveyance system, surface water, or groundwater infiltration basin or facility: _____ gallons

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Estimated Total Spill Volume Recovered: _____ gallons

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SPILL VOLUME (continued)
Method and explanation of volume estimation methods used: (Check all that apply) ☐ Eyeball Estimate (worksheet included in Spill/Backup Response Workbook) ☐ Counting Upstream Connections (worksheet included in Spill/Backup Response Workbook) ☐ Duration and Flow Rate (worksheet included in Spill/Backup Response Workbook) ☐ Measured Volume (worksheet included in Spill/Backup Response Workbook) ☐ Other (provide worksheet/calculations)
Description of how the spill volume estimations were calculated, including at a minimum, the methodology, assumptions and types of data relied upon, such as supervisory control and data acquisition (SCADA) records, flow monitoring or other telemetry information, used to estimate the volume of the spill discharged, and the volume of the spill recovered (if any volume of the spill was recovered):

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SPILL START TIME and END TIME DETERMINATION	
Were there witnesses to the spill? ☐ YES ☐ NO If yes, provide Spill Witness Statements below:	
Witness 1 Name:	Witness 1 Contact Information:
Where did they see sewage spill from? ☐ Manhole ☐ Inside Building ☐ Vent/Clean Out ☐ Catch Basin ☐ Wet Well/Lift Station ☐ Other (describe):	
When did the witness notice the sewage spilling? _____ AM / PM Date _____ /_____ /_____ Witness description of spill and affected area: Is it currently spilling? ☐ YES ☐ NO When did the witness last observe **NO Spill** occurring? _____ AM / PM Date _____ /_____ /_____	
Did the witness notice if the spill had reached the storm drain or surface waters?	
Comments:	
Witness 2 Name:	Witness 2 Contact Information:
Where did they see sewage spill from? ☐ Manhole ☐ Inside Building ☐ Vent/Clean Out ☐ Catch Basin ☐ Wet Well/Lift Station ☐ Other (describe):	
When did the witness notice the sewage spilling? _____ AM / PM Date _____ /_____ /_____ Witness description of spill and affected area: Is it currently spilling? ☐ YES ☐ NO When did the witness last observe **NO Spill** occurring? _____ AM / PM Date _____ /_____ /_____	
Did the witness notice if the spill had reached the storm drain or surface waters?	
Comments:	
Witness 3 Name:	Witness 3 Contact Information:
Where did they see sewage spill from? ☐ Manhole ☐ Inside Building ☐ Vent/Clean Out ☐ Catch Basin ☐ Wet Well/Lift Station ☐ Other (describe):	
When did the witness notice the sewage spilling? _____ AM / PM Date _____ /_____ /_____ Witness description of spill and affected area: Is it currently spilling? ☐ YES ☐ NO When did the witness last observe **NO Spill** occurring? _____ AM / PM Date _____ /_____ /_____	
Did the witness notice if the spill had reached the storm drain or surface waters?	
Comments:	

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SPILL START TIME and END TIME DETERMINATION (continued)
Are the volume of the spill and rate of flow known? ☐ YES ☐ NO If yes, divide volume by rate of flow to get duration of spill event: _____ Gallons ÷ _____ GPM = _____ Minutes Spill Volume Flow Rate Spill Duration Subtract the duration from the spill end date/time to establish the spill start date/time: _____ — _____ = _____ Spill End Date/Time Duration Spill Start Time Method to determine flow rate:
Solids Present? ☐ None or small amount (indicates recent start) ☐ Significant amount of buildup
Staining? ☐ None (indicates recent start) ☐ Minor ☐ Significant
Distance sewage has traveled from spill point:
Spill Start Time:
Spill End Date and Time:
How was end time determined? ☐ Broke stoppage ☐ Turned pump station back on ☐ Other, explain:

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Description of the methodology(ies), assumptions and type of data relied upon for estimations of the spill start time and the spill end time.

SPILL CAUSE (check all that apply)

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- ☐ Air Relief Valve (ARV)/Blow Off Valve (BOV)/Backwater Valve Failure
- ☐ Construction Diversion Failure
- ☐ Collection System Maintenance Failure (Specify Below)
- ☐ Damage by Others Not Related to CS Construction/Maintenance (Specify Below)
- ☐ Debris from Construction
- ☐ Debris from Lateral
- ☐ Debris-General
- ☐ Debris-Rags
- ☐ Debris-wipes/Non-disposables
- ☐ Flow Exceeded Capacity (Separate CS Only)
- ☐ Fats, Oils and Grease (FOG)
- ☐ Inappropriate Discharge to CS
- ☐ Natural Disaster (Specify Below)
- ☐ Operator Error (Specify Below)
- ☐ Pipe Structural Problem/Failure – Installation
- ☐ Pipe Structural Problem/Failure – Controls
- ☐ Pump Station Failure – Power
- ☐ Pump Station Failure – Mechanical
- ☐ Pump Station Failure – Controls
- ☐ Rainfall Exceeded Design, I and I (Separate CS Only)
- ☐ Root Intrusion
- ☐ Siphon Failure
- ☐ Surcharged Pipe (Combines CS Only)
- ☐ Vandalism (Specify Below)
- ☐ Other, specify:

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SYSTEM FAILURE LOCATION	
System failure location: ☐ Air Relief Valve (ARV)/Blow Off Valve (BOV) Failure ☐ Force Main ☐ Gravity Mainline ☐ Lower Lateral ☐ Manhole ☐ Pump Station Failure – Controls ☐ Pump Station Failure – Mechanical ☐ Pump Station Failure – Power ☐ Siphon ☐ Upper Lateral (Specify Below) ☐ Other, specify:	
Description of the pipe material at the failure location: ☐ Copper ☐ Galvanized Steel ☐ Polyvinyl Chloride (PVC) ☐ Acrylonitrile Butadiene Styrene (ABS) ☐ Cross-Linked Polyethylene (PEX) ☐ Cast Iron ☐ Vitrified Clay ☐ Concrete ☐ Ductile Iron ☐ Fiberglass ☐ Other, specify:	
Estimated age of sewer asset at the point of blockage or failure (if applicable):	years
Diameter of sewer pipe at the point of blockage or failure:	inches

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SPILL IMPACT
Description of the impact of the spill:

STORM EVENT
Was spill associated with a storm event? ☐ YES ☐ NO

SPILL RESPONSE ACTIVITIES (check all that apply)
☐ Cleaned Up (Specify Below) ☐ Mitigated Effects of Spill (Specify Below) ☐ Contained All or Portion of Spill ☐ Restored Flow ☐ Returned All Spill to Sanitary Sewer System ☐ Returned Portion of Spill to Sanitary Sewer System ☐ Property Owner Notified ☐ Other Enforcement Agency Notified ☐ Other, specify:
Description of spill response activities including description of immediate spill containment and cleanup efforts:

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SPILL CORRECTIVE ACTION (check all that apply)
☐ Added Sewer to Preventive Maintenance Program ☐ Adjusted Schedule/Method of Preventive Maintenance ☐ Enforcement Action Against FOG Source ☐ Inspected Sewer Using CCTV to Determine Cause ☐ Plan Rehabilitation or Replacement of Sewer ☐ Repaired Facilities or Replaced Defect ☐ Other, specify:
Refer to Collection System Failure Analysis Report for details about: • Spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the spill, and a schedule of major milestones for those steps. • Schedule of major milestones Check to confirm completion of each report: ☐ Post-Spill Assessment ☐ Collection System Failure Analysis
Spill response completion date:

INVESTIGATION
Detailed narrative of investigation and investigation findings of cause of spill:
Is the District conducting an ongoing investigation? ☐ YES ☐ NO If yes, reasons for an ongoing investigation: If yes, expected date of completion of investigation:_____

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SURFACE WATERS (Complete for Category 1 Spills Only)		
Name of receiving water body	Type of receiving water body: Stream, Ocean, Wetland, Slough, Estuary, River, Lake, Reservoir, Vernal Pool, Wash, or Other (specify)	Description of the water body(s), including but not limited to: ○ Observed impacts on aquatic life, ○ Public access impact(s): public closure, restricted public access, temporary restricted use, and/or other (specify below) ○ Responsible entity for closing/restricting use of water body, and ○ Number of days closed/restricted as a result of the spill.

MUNICIPAL INTAKE (Complete for Category 1 and 2 Spills Only)		
Was the spill located within 1,000 feet of a municipal surface water intake?	☐ YES	☐ NO
Describe:		

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WATER SAMPLING
Were water quality samples collected? ☐ YES ☐ NO ☐ N/A If yes, identify sample locations:
Identify parameters the water quality samples were analyzed for: (Check all that apply) ☐ Total Coliform Bacteria ☐ Fecal coliform bacteria ☐ E-coli ☐ Ammonia ☐ Other, specify:

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INSERT TAB:
Tab E: Volume Estimation

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Miscellaneous Computations & Examples

To convert inches to feet (NOTE: for the purposes of this worksheet, the unit of measurement will be in feet for formula examples)	Divide the inches by 12 or use the chart on the right. **Example 1:** 27" ÷ 12 = 2.25' **Example 2:** 1¾" = ?' 1" (0.08') + ¾" (0.06') = 0.14'
Volume of one cubic foot	7.48 gallons of liquid
Area: Two-dimensional measurement represented in square feet (SQ/FT or ft^2)	Square/rectangle: Area = Length x Width Circle: Area = π x r^2 (where π ≈ 3.14 and r = radius = ½ diameter) Triangle: Area = ½ (Base x Height)
Volume: Three-dimensional measurement represented in cubic feet (CU/FT or ft^3)	Rectangle/square footprint: Volume = Length x Width x Depth Circle footprint (cylinder): Volume = π x r^2 x Depth (where π ≈ 3.14 and r = radius = ½ diameter) Triangle footprint: Volume = ½ (Base x Height) x Depth
Depth: Wet Stain on Concrete or asphalt surface	If the depth is not measurable because it is only a wet stain, use the following estimated depths: ○ Depth of a wet stain on concrete surface: 0.0026' (1/32") ○ Depth of a wet stain on asphalt surface: 0.0013' (1/64") These were determined to be a reasonable depth to use on the respective surfaces through a process of trial and error. One gallon of water was poured onto both asphalt and concrete surfaces. Once the area was determined as accurately as possible, different depths were used to determine the volume of the wetted footprint until the formula produced a result that (closely) matched the one gallon spilled. This process was repeated several times.
Depth: Contained or "Ponded" sewage	Measure actual depth of standing sewage whenever possible. When depth varies, measure several representative sample points and determine the average. Use that number in your formula to determine volume.

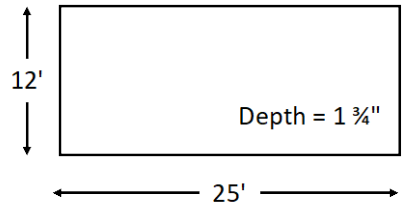
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Miscellaneous Computations & Examples (continued)

Convert Inches to Feet	
Inches	**Feet**
1/8"	0.01'
1/4"	0.02'
3/8"	0.03'
1/2"	0.04'
5/8"	0.05'
3/4"	0.06'
7/8"	0.07'
1"	0.08'
2"	0.17'
3"	0.25'
4"	0.33'
5"	0.42'
6"	0.50'
7"	0.58'
8"	0.67'
9"	0.75'
10"	0.83'
11"	0.92'
12"	1.00'

Area/Volume of a Rectangle or Square

Formula: Length x Width x Depth = Volume in **cubic feet**



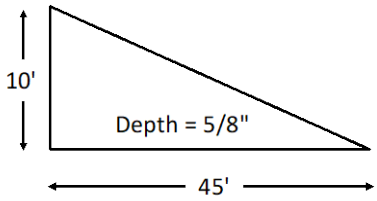
25'	X	12'	X	0.14'	=	**42 Cubic Feet**
Length		Width		Depth		Volume

Multiply the volume by 7.48 gallons to determine the volume in **gallons**:

42 ft³	X	7.48	=	**314.16 gallons**
Volume		gal/ft³		Volume

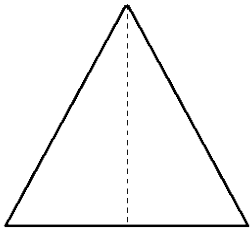
Area/Volume of a Right Triangle

Formula: Base x Height x Depth = Volume in **cubic feet**



0.5	X	45'	X	10'	X	0.05'	x	7.48	=	84.15 gallons
		Base		Height		Depth		gal/ft³		Volume

For isosceles triangles (two sides are equal lengths), break it down into two right triangles and compute area as you would for the right triangle.

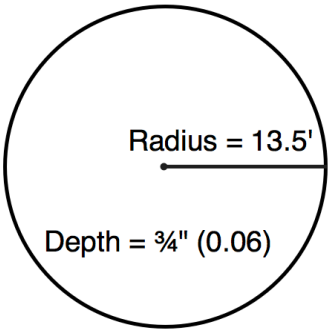


Area/Volume of a Circle

Formula: π x r² x Depth = Volume in **cubic feet**

The radius is ½ the diameter, which is a straight line passing from side to side through the center of a circle.

13.5'	X	13.5'	X	3.14	X	0.06'	x	7.48	=	256.8 gallons
Radius		Radius		π		Depth		gal/ft³		Volume



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Volume Estimation: Eyeball Estimation Method (for ≤100 gallons) E-2

Spill Date: _____ Location: _____

This method is invalid if surface conditions are wet (due to rainfall, irrigation, etc.) DO NOT use this method under these circumstances.

STEP 1: Position yourself so that you have a vantage point where you can see the entire spill.

STEP 2: Imagine one or more buckets or barrels of water tipped over. Depending on the size of the spill, select a bucket or barrel size as a frame of reference. It may be necessary to use more than one bucket/barrel size.

STEP 3: Estimate how many of each size bucket or barrel it would take to make an equivalent spill. Enter those numbers in Column A of the row in the table below that corresponds to the bucket/barrel sizes you are using as a frame of reference.

STEP 4: Multiply the number in Column A by the multiplier in Column B. Enter the result in Column C.

	A	B	C
Size of bucket(s)/barrel(s)	How many of this size?	Multiplier	Estimated Spill Volume
		x 1 gallon	
		x 5 gallons	
		x 32 gallons	
		x 55 gallons	
		x ___ gallons	
		Estimated Total Spill Volume:	

STEP 5: List assumptions made to arrive at the total estimated spill volume:

STEP 6: Take photographs. Where are photographs stored?

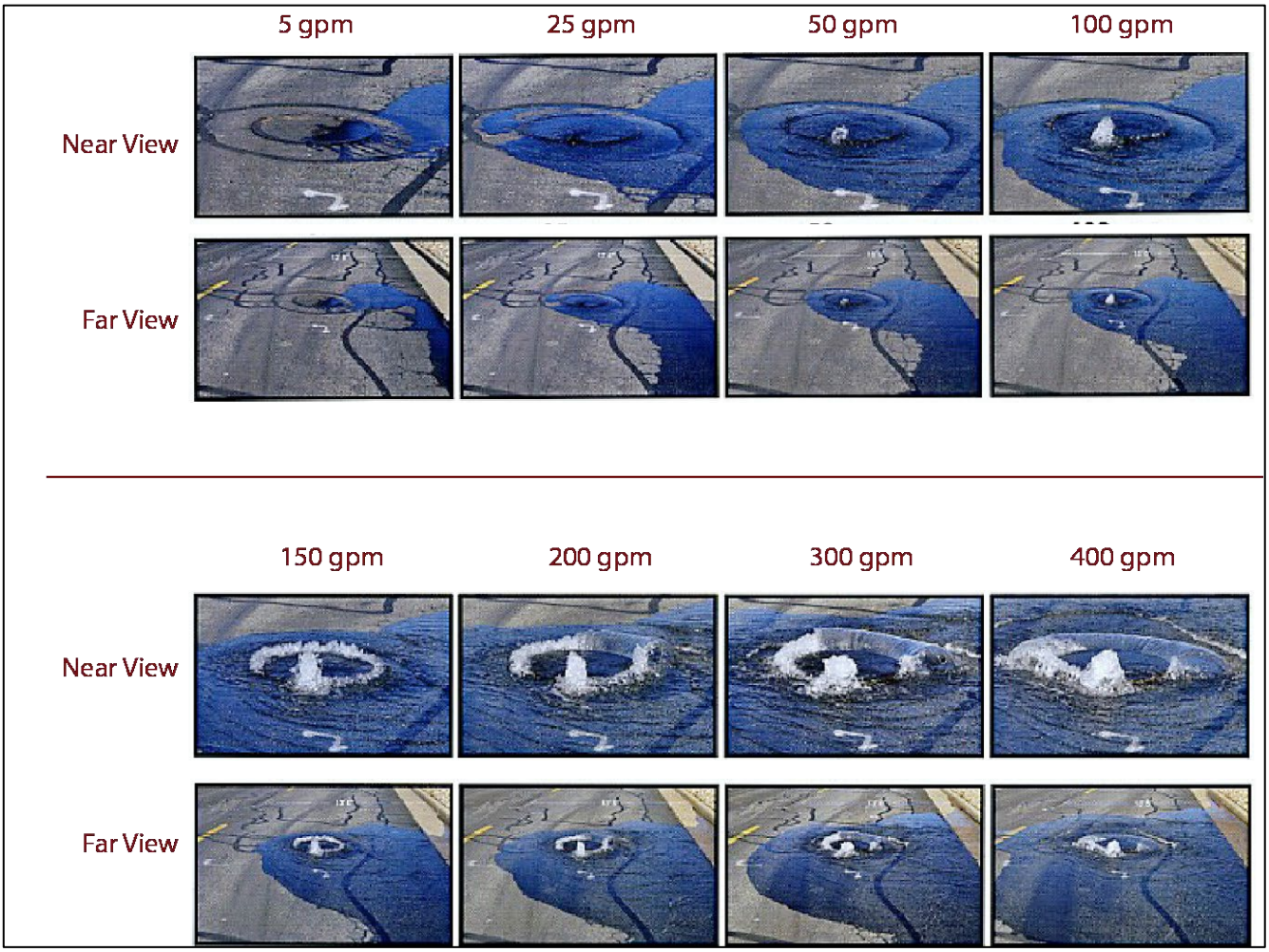
The following photos must be taken: appearance point closest to the failure point, extent of the spill and spill boundaries, the entry location of each drainage conveyance system the sewage entered, all discharge points into surface waters (Category 1 spill only), and location(s) of clean up.

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Volume Estimation: Duration and Flow Rate Comparison Method

Spill Date: _____ Location: _____

Compare the spill to reference images below to estimate flow rate of the current spill. **NOTE: If the manhole cover in your picture has vent holes or more than one pry hole, do not use these pictures for comparison.**



SSCSC Manhole Spill Gauge: CWEA Southern Section Collections Systems Committee. Spill Simulation courtesy of Eastern Municipal Water District.

Describe which reference photo(s) were used and any additional factors that influenced applying the reference photo data to the actual spill:

Flow Rate Based on Photo Comparison: _____ gallons per minute (gpm)

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(Continued on next page)

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Volume Estimation: Duration and Flow Rate Comparison Method

Start Date and Time	1.
End Date and Time	2.
Spill Event Total Time Elapsed (subtract Line 1 from Line 2. Show in minutes.)	3.
Average Flow Rate GPM (Account for diurnal flow pattern)	4.
Total Volume Estimated Using Duration and Flow Method (Line 3 x Line 4)	5.

List assumptions made to arrive at the total estimated spill volume:

Take photographs. Where are photographs stored?

The following photos must be taken: appearance point closest to the failure point, extent of the spill and spill boundaries, the entry location of each drainage conveyance system the sewage entered, all discharge points into surface waters (Category 1 spill only), and location(s) of clean up.

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Volume Estimation: Area/Volume Method

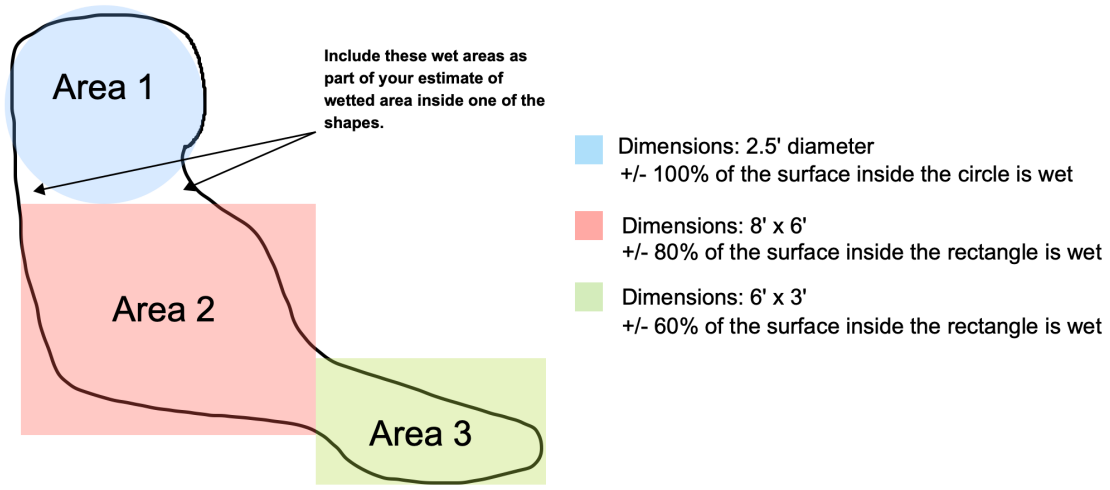
Spill Date: _____ Location: _____

STEP 1: Describe spill area surface: ☐ Asphalt ☐ Concrete ☐ Dirt ☐ Landscape ☐ Inside Building

☐ Other: _____

STEP 2: Draw/sketch the outline (footprint) of the spill. Then break the footprint down into recognizable shapes. Label/identify each sketch outline area (Area 1, Area 2, etc.) See example below.

EXAMPLE:



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STEP 3: Calculate the area of the footprint by completing the table below for each area in Step 2. Measure actual depth of standing sewage whenever possible. When depth varies, measure several representative sample points and determine the average. If the depth is not measurable because it is only a wet stain, use the following estimated depths: Depth of a wet stain on concrete surface: 0.0026' (1/32")
Depth of a wet stain on asphalt surface: 0.0013' (1/64")

Rectangles:

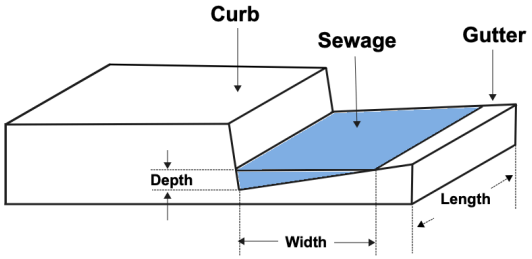
Area # (from labeled drawing)		**Length**	**X**	**Width**	**X**	**% Wet**	**=**	**Area**	**X**	**Depth**	**=**	**Volume**
	→	ft	X	ft	X	%	=	ft^2	X	ft	=	ft^3
	→	ft	X	ft	X	%	=	ft^2	X	ft	=	ft^3
	→	ft	X	ft	X	%	=	ft^2	X	ft	=	ft^3

Circles:

Area # (from labeled drawing)		**π**	**X**	**Radius**	**X**	**Radius**	**X**	**% Wet**	**=**	**Area**	**X**	**Depth**	**=**	**Volume**
	→	3.14	X	ft	X	ft	X	%	=	ft^2	X	ft	=	ft^3
	→	3.14	X	ft	X	ft	X	%	=	ft^2	X	ft	=	ft^3
	→	3.14	X	ft	X	ft	X	%	=	ft^2	X	ft	=	ft^3

STEP 4: If part of the spill is in a gutter, use the formula below to calculate the volume:

_____ X _____ X _____ X 0.5 = _____ ft^3
Length Depth Width **Volume**



STEP 5: Calculate Total Spill Volume (sum of all of the volume calculations above): _____ ft^3

STEP 6: Convert from cubic feet to gallons by multiplying by 7.48.

_____ ft^3 x 7.48 gallons = _____ gallons
spill volume in cubic feet **Total estimated volume**

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STEP 7: List assumptions made to arrive at the total estimated spill volume. Adjust estimation up for moderate to severe cracking and/or roughness of surface (General Rule 20% to 40%):

STEP 8: Take photographs. Where are photographs stored?

The following photos must be taken: appearance point closest to the failure point, extent of the spill and spill boundaries, the entry location of each drainage conveyance system the sewage entered, all discharge points into surface waters (Category 1 spill only), and location(s) of clean up.

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Volume Estimation: Upstream Connections Method E-5

Spill Date: _____ Location: _____

Attach and/or reference system map and identify location of spill and buildings contributing to spill.

STEP 1: Determine the number of Equivalent Dwelling Units (EDUs) for this spill: _____ EDUs
NOTE: A single-family residential home = 1 EDU. For commercial buildings, refer to agency documentation.

STEP 2: This volume estimation method utilizes daily usage data based on flow rate studies of several jurisdictions in California. Column A shows how an average daily usage of 180 gallons per day is distributed during each 6-hour period. Adjust the table as necessary to accurately represent the actual data.

Complete Column E by entering the number of minutes the spill was active during each 6-hour time period. Multiply column D times Column E to calculate the gallons spilled during each time period. Add the numbers in Column F together for the Total Estimated spill Volume per EDU.

	Flow Rate Per EDU				**Spill**	
	A	**B**	**C**	**D**	**E**	**F**
Time Period	Gallons per Period	Hours per period	A÷B = Gallons per Hour	C÷60 = Gallons per Minute	Minutes spill was active during period	D × E = Gallons spilled per period
6am-noon	72	6	12	0.20		
noon-6pm	36	6	6	0.10		
6pm-midnight	54	6	9	0.15		
midnight-6am	18	6	3	0.05		
Total Estimated Spill Volume per EDU:						

STEP 3: Multiply the Estimated spill Volume per EDU from Step 2 by the number of EDUs from Step 1.

_____ gallons X _____ = _____ gallons
Volume per EDU # of EDUs Estimated spill Volume

STEP 4: Adjust spill volume as necessary considering other factors, such as activity that would cause a fluctuating flow rate (doing laundry, taking showers, etc.). Explain rationale below and indicate adjusted spill estimate (attach a separate page if necessary).

Total Estimated spill Volume: _____ gallons

STEP 7: List assumptions made to arrive at the total estimated spill volume:

STEP 8: Take photographs. Where are photographs stored?

The following photos must be taken: appearance point closest to the failure point, extent of the spill and spill boundaries, the entry location of each drainage conveyance system the sewage entered, all

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discharge points into surface waters (Category 1 spill only), and location(s) of clean up.

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INSERT TAB:
Tab F: Backup Forms

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Backup Forms Checklist (Backup Only) F-1

Complete this form only if there is a backup into a residence or business.

Instructions to Collections System Crew:

1. Take photo of each form before giving it to the customer for documentation.
2. Tear forms listed below out of this workbook and hand to customer. *Leave this page (F-1) and the First Responder Form (F-2) in this workbook, do not give to Customer.*
3. Check each item that was provided to the customer.
4. Have customer sign below.

Forms/Documents:

- ☐ Form F-3: Declination of Cleaning Services
- ☐ Form F-4: Lodging Authorization
- ☐ Form F-5: Customer Information Letter
- ☐ Form F-6: Your Responsibilities as a Private Property Owner
- ☐ Form F-7: Claim Form

Forms Provided to:

_____
Customer Name

_____
Customer Signature

_____
Date

Check here if customer declines to sign: ☐

Formularios / Documentos:

- ☐ F-3: Declinación de los Servicios de Limpieza
- ☐ F-4: Autorización de Alojamiento
- ☐ F-5: Carta de Información del Cliente
- ☐ F-6: Sus Responsabilidades Como Propietario de Una Propiedad Privad
- ☐ F-7: Formulario de Reclamación

Formularios Proporcionados a:

_____
Nombre del cliente

_____
Firma del cliente

_____
Fecha

Marque aquí si el cliente se niega a firmar: ☐

Forms Provided by: _____ _____ _____
Employee Name Initial Date

Instructions to Maintenance Manager and/or Operations Manager:

Send photos, including the photos of the documents given to the customer,
and a copy of the First Responder form to the Human Resources and Risk Manager.

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First Responder Form (Backup Only)

Complete this form only if there is a backup into a residence or business.

Fill out this form as completely as possible.
Ask customer if you may enter the home. If so, take photos of all damaged and undamaged areas.

PERSON COMPLETING THIS FORM: Name: _____ Title: _____	PHONE: DATE: TIME:
TIME STAFF ARRIVED ON-SITE:	
DOES THE CUSTOMER WANT THE District TO CALL FOR CLEANING SERVICE? ☐ Yes ☐ No If no, give the customer the Cleaning Declination Form and have them sign here: _____ If customer called a cleaning contractor, provide name and contact number:	
RESIDENT NAME: ☐ Owner ☐ Renter ADDRESS: PHONE:	IF RENT, PROPERTY MANAGER(S): OWNER: ADDRESS: PHONE:
# OF PEOPLE LIVING AT RESIDENCE:	

Approximate Age of Home:	# of Bathrooms:	# of Rooms Affected:
Numbers of Photographs or Videos Taken: ☐ Photographs _____ ☐ Video _____ ☐ Customer did not provide or allow photographs	Where are photos/video stored?	

Is nearest upstream manhole visibly higher than the drain/fixture that spilled? ☐ Yes ☐ No
Does property have a Property Line Cleanout or BPD? ☐ Cleanout ☐ BPD ☐ Neither ☐ Unknown
If yes, was the Property Line Cleanout/BPD operational at the time of the spill? ☐ Yes ☐ No ☐ Unknown
Have there ever been any previous spills at this location? ☐ Yes ☐ No ☐ Unknown
Has the resident had any plumbing work done recently? ☐ Yes ☐ No ☐ Unknown *If YES, please describe:*

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LIVABILITY ASESSMENT

- Is there insufficient non-contaminated living space for residents to stay during cleaning including a functioning and non-contaminated bathroom? ☐ Yes ☐ No
- Are there any residents that are pregnant, are children, have severe allergies/asthma, have respiratory problems, and/or have a compromised immune system? ☐ Yes ☐ No
- Is the area a childcare or extended care facility? ☐ Yes ☐ No
- Is the food preparation area contaminated? ☐ Yes ☐ No
- Is it currently after 8pm, or if it is currently before 8pm will the cleaning and disinfection be completed after 10pm? ☐ Yes ☐ No

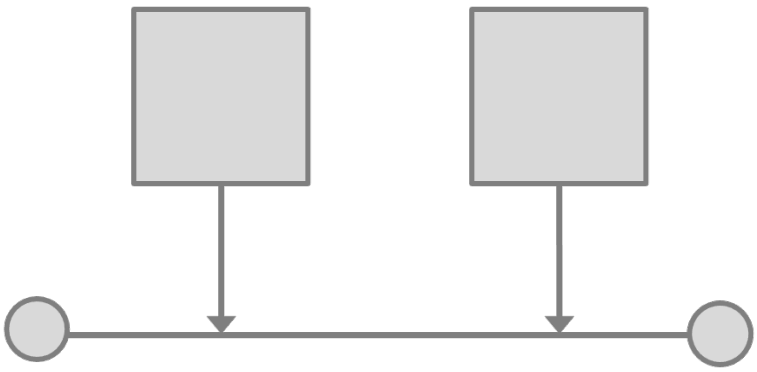
If the answer to any of the questions above is YES, complete the Lodging Authorization form.

If temporary lodging was offered by the District check one: ☐ Accepted ☐ Rejected

SANITARY SEWER LINE BLOCKAGE LOCATION

PLEASE CHECK THE BOXES THAT DESCRIBE YOUR OBSERVATIONS:	
Building Cleanout Was:	Property Line Cleanout was
☐ Non-Existent	☐ Non-Existent
☐ Full	☐ Full
☐ Empty	☐ Empty

On the diagram below, place an X where in the mainline or lateral you believe the problem occurred.



Did sewage go under buildings? ☐ Yes ☐ No ☐ Unsure

Recommended Follow-Up Action(s):

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Declination of Cleaning Services (Backup Only) F-3

Customer Information		
NAME:	ADDRESS:	TELEPHONE:

ON (date)	AT (time)	Approximately (quantity)	GALLONS OF: ☐ Sewage ☐ Grey Water ☐ Toilet Bowl Water ☐ Odor ☐ Other (describe):

Spilled from (or odor emanating from)
☐ Toilet ☐ Shower/Tub ☐ Washer ☐ Other (describe):

The spill affected the following areas *(check one):*
☐ Bathroom ☐ Bedroom ☐ Hallway ☐ Garage
☐ Kitchen ☐ Crawlspace ☐ Other (specify):

The spill affected the following flooring: **and/or additional materials:**
☐ Tile ☐ Wood Flooring ☐ Area Rugs ☐ Towels
☐ Linoleum ☐ Carpet ☐ Clothing ☐ Other (specify):
☐ Other (specify):

This Form Completed By: Name: **Date:**
(Write legibly) Title: **Time:**

CUSTOMER, please read the following and sign below. I/We acknowledge that Delta Diablo (District) has offered to provide professional cleaning and decontamination services to remediate the sewage backup and/or spill described above and that we declined the offer. We further understand and acknowledge that because we have declined, any necessary remediation activities will be conducted without District assistance, and that the District will not accept responsibility for work performed by persons other than those engaged by the District. The District will also not accept responsibility for any charges related to this incident that are not usual and customary. Refer to "Your Responsibilities as a Private Property Owner" (Page F-6) for recommendations regarding spill cleanup.

CLIENTE, por favor lea lo siguiente y firme a continuación. Yo/Nosotros reconocemos que Delta Diablo (distrito) se ha ofrecido a proporcionar servicios profesionales de limpieza y descontaminación para remediar la reserva de aguas residuales y/o derrame descrita anteriormente y que rechazamos la oferta. Además, entendemos y reconocemos que debido a que hemos rechazado, cualquier actividad de remediación necesaria se llevará a cabo sin la asistencia de distrito, y que distrito no aceptará responsabilidad por el trabajo realizado por personas que no sean las contratadas por distrito. La distrito tampoco aceptará responsabilidad por ningún cargo relacionado con este incidente que no sea habitual y habitual. Consulte "Sus Responsabilidades Como Propietario De Una Propiedad Privada" (Página F-6) para obtener recomendaciones sobre la limpieza de derrames.

Customer Signature / Firma del cliente *:		**Date:**
The information above was explained to the customer by the following employee:	**Name:**	**Title:**
	Signature:	**Date:**

**Note to responders: if customer declines to sign this form, then have a co-worker sign here as a witness:*

Name: _____ *Signature:* _____ *Date:* _____

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Lodging Authorization (Backup Only) F-4

INSTRUCTIONS TO EMPLOYEE:

1. Complete this form if the Livability Assessment on the First Responder Form indicates a need for temporary relocation and the customer accepts the offer.
2. Notify the Human Resources and Risk Manager who will make arrangements via telephone and pay for the hotel with a credit card.
3. Complete the voucher as instructed by the Human Resources and Risk Manager.
4. Take a photo of the form for records and then give it to the customer.
5. Indicate if they accept or reject the offer of temporary relocation on the First Responder Form (F-2).

INSTRUCTIONS TO RESIDENT:

Delta Diablo recommends that you temporarily relocate to one of the hotels listed below for your safety and convenience while your residence is being cleaned. Please note that this emergency authorization is granted under the following conditions:

1. This authorization provides for one (1) night's lodging at one of the hotels listed below.
2. The authorization is good for **room and tax ONLY**. Phone, food, mini-bar and other incidental charges will be your responsibility.
3. Additional nights and/or other allowances/incidentals may be discussed by contacting the Human Resources and Risk Manager at (925) 756-1969.

INSTRUCCIONES PARA EL RESIDENTE:

Delta Diablo recomienda que se traslade temporalmente a uno de los hoteles enumerados a continuación por su seguridad y comodidad mientras se limpia su residencia. Tenga en cuenta que esta autorización de emergencia se concede bajo las siguientes condiciones:

1. Esta autorización prevé una (1) noche de alojamiento en uno de los hoteles que se enumeran a continuación.
2. La autorización es válida para habitación e impuestos SOLAMENTE. Teléfono, comida, minibar y otros cargos incidentales serán su responsabilidad.
3. Las noches adicionales y / u otras asignaciones / imprevistos pueden discutirse comunicándose con el Human Resources and Risk Manager al (925) 756-1969.

VOUCHER

Good for one (1) night's stay on (date): _____ Number of Affected Residents: _____

Customer's Name: _____

Field Supervisor's Name: _____ Phone Number: _____

Hampton Inn & Suites Pittsburg
(925) 473-1300
1201 California Ave, Pittsburg, CA 94565

Best Western Plus Delta Inn & Suites
(925) 755-1222
5549 Bridgehead Rd, Oakley, CA 94561

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Customer Information Letter (Backup Only) F-5 (English)

Dear Property Owner:

We recognize that sewer backup incidents can be stressful and require immediate response while all facts concerning how an incident occurred are still unknown. Rest assured that we do all we can to prevent this type of event from occurring in the first place. Nevertheless, occasionally tree roots or other debris in the sewer lines causes a backup into homes immediately upstream of the blockage. At this time the District is investigating the cause of this incident.

If the District is found to be responsible for the incident, we are committed to cleaning and restoring your property, and to protecting the health of those affected during the remediation process

The cleaning contractor provided by the District has been selected because of their adherence to established protocols that are designed to assure to all parties thorough, cost-effective and expeditious cleaning services. You also have the right to select your own cleaning contractor, but the District does not guarantee payment of fees/expenses incurred and reserves the right to dispute fees/expenses deemed not usual and customary.

Depending on the extent of the backup our staff may advise you to consider relocating temporarily while the living area is cleaned. In that case, the District will arrange for lodging for you for one night. Please see the Lodging Authorization form for details.

To discuss this matter, or to submit a claim for damages, contact the Human Resources and Risk Manager at (925) 756-1969.

Sincerely,
Delta Diablo

Customer Information Letter (Backup Only) F-5 (Spanish)

Estimado Propietario:

Reconocemos que los incidentes de la red de alcantarillado pueden ser estresantes y requieren una respuesta inmediata, mientras que todos los hechos relacionados con la forma en que ocurrió el incidente aún son desconocidos. Tenga la seguridad de que haremos todo lo posible para evitar que este tipo de evento ocurra en primer lugar. Sin embargo, ocasionalmente las raíces de los árboles u otros residuos en las líneas de alcantarillado causan una copia de seguridad en los hogares inmediatamente antes del bloqueo. En este momento el distrito está investigando la causa de este incidente.

Si se determina que el distrito es responsable del incidente, nos comprometemos a limpiar y restaurar su propiedad, ya proteger la salud de las personas afectadas durante el proceso de remediación.

El contratista de limpieza proporcionado por el Distrito ha sido seleccionado debido a su adhesión a los protocolos establecidos que están diseñados para garantizar a todas las partes servicios de limpieza exhaustivos, rentables y rápidos. También tiene derecho a seleccionar su propio contratista de limpieza, pero el distrito no garantiza el pago de los honorarios / gastos incurridos y se reserva el derecho de disputar los honorarios / gastos que se consideren no habituales y habituales.

Dependiendo de la extensión de la copia de seguridad, nuestro personal puede aconsejarle que considere reubicarse temporalmente mientras se limpia la sala de estar. En ese caso, el District organizará el alojamiento para usted por una noche. Consulte el formulario de autorización de alojamiento para obtener más detalles.

Para discutir este asunto, o para presentar una reclamación por daños y perjuicios, comuníquese con el Human Resources and Risk Manager al (925) 756-1969.

Sinceramente,
Delta Diablo

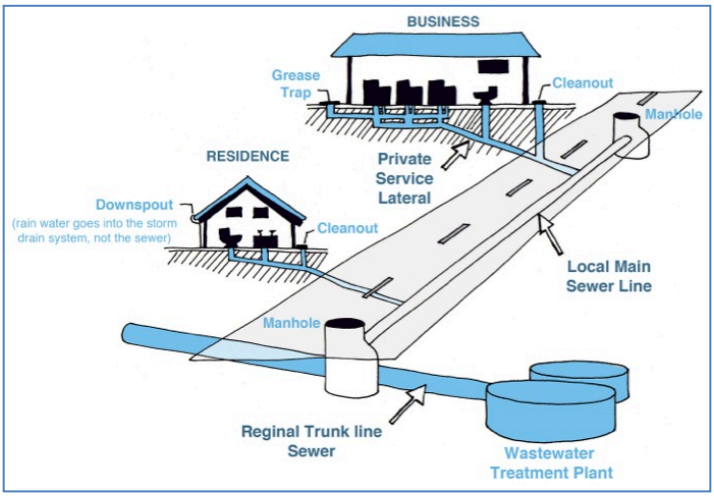
Your Responsibilities as a Private Property Owner (Backup Only) F-6: Page 1

How a Sewer System Works

A property owner's sewer pipes are called ***service laterals*** and are connected to larger local main and regional trunk lines. Service laterals run from the connection at the home to the connection with the public sewer. Depending on your location, a portion of the lateral is the responsibility of the property owner and must be maintained by the property owner.

How do sewage spills happen?

Sewage spills occur when the wastewater in underground pipes spills through a manhole, cleanout, or broken pipe. Most spills are relatively small and can be stopped and cleaned up quickly, but left unattended they can cause health hazards, damage to homes and businesses, and threaten the environment, local waterways, and beaches. Common causes of sewage spills include grease build-up, tree roots, broken/cracked pipes, missing or broken cleanout caps, undersized sewers, and groundwater/rainwater entering the sewer system through pipe defects and illegal connections.



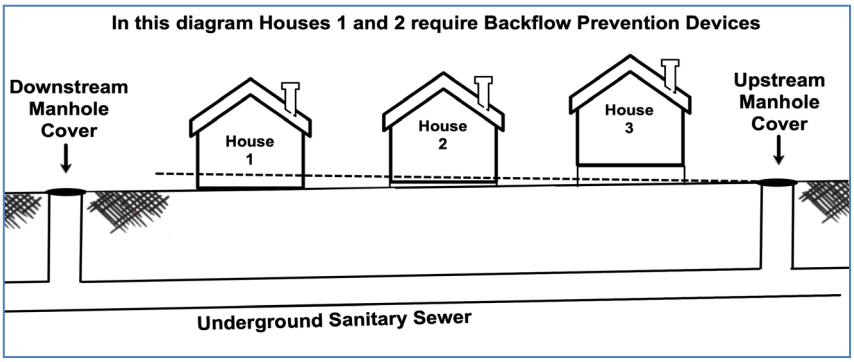
Prevent most sewage backups with a Backflow Prevention Device

This type of device can help prevent sewage backups into homes and businesses. If you don't already have a Backflow Prevention Device, contact a professional plumber or contractor to install one as soon as possible.

Is my home required to have a backflow prevention device?

Section 710.1 of the Uniform Plumbing Code (U.P.C.) states: *"Drainage piping serving fixtures which have flood level rims located below the elevation of the next upstream manhole cover or private sewer serving such drainage piping **shall** be protected from backflow of sewage by installing an approved type of backwater valve."* The intent of Section 710.1 is to protect the building interior from mainline sewer spills or surcharges.

Additionally, U.P.C. 710.6 states:
*"Backwater valves **shall** be located where they will be accessible for inspection and repair at all times and, unless continuously exposed, shall be enclosed in a masonry pit fitted with an adequately sized removable cover."*



Spill cleanup inside the home:

For large clean ups, a professional cleaning firm should be contacted to clean up impacted areas, If you hire a contractor, it is recommended to get estimates from more than one company. Sometimes, homeowner's insurance will pay for the necessary cleaning due to sewer backups. Not all policies have this coverage, so check with your agent.

If you decide to clean up a small spill inside your home, protect yourself from contamination by observing the following safety measures. Those persons whose resistance to infection is compromised should not attempt this type of clean up.

Other Tips:

- Keep children and pets out of the affected area.
- Turn off heating/air conditioning systems
- Wear rubber boots, rubber gloves, and goggles during cleanup.
- Discard items that cannot be washed and disinfected (such as: mattresses, rugs, cosmetics, toys, etc.)
- Remove and discard drywall and insulation that has been contaminated with sewage or flood waters.
- Thoroughly clean all hard surfaces (such as flooring, concrete, molding, wood and metal furniture, countertops, appliances, sinks and other plumbing fixtures) with hot water and laundry or dish detergent.
- Help the drying process with fans, air conditioning units, and dehumidifiers.
- After completing cleanup, wash your hands with soap and water. Use water that has been boiled for 1 minute (allow the water to cool before washing your hands) OR use water that has been disinfected (solution of 1/8 teaspoon of household bleach per 1 gallon of water). Let it stand for 30 min. If water is cloudy, use ¼ teaspoon of household bleach per 1 gallon of water.
- Wash clothes worn during cleanup in hot water & detergent (wash apart from uncontaminated clothes).
- Wash clothes contaminated with sewage in hot water and detergent. Consider using a Laundromat until your onsite wastewater system has been professionally inspected and serviced.

Seek immediate attention if you become injured or ill during or after the cleanup process.

Spill cleanup outside the home:

- Keep children and pets out of the affected area until cleanup has been completed.
- Wear rubber boots, rubber gloves, and goggles during cleanup of affected area.
- Clean up sewage solids (fecal material) and place in properly functioning toilet or double bag and place in garbage container.
- On hard surfaces areas such as asphalt or concrete, it is safe to use a 2% bleach solution, or ½ cup of bleach to 5 gallons of water, but don't allow it to reach a storm drain as the bleach can harm the environment.

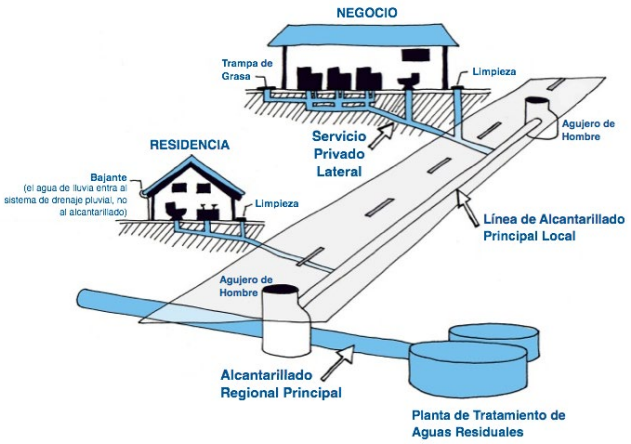
- After cleanup, wash hands with soap and water. Use water that has been boiled for 1 minute (allow to cool before washing your hands) OR use water that has been disinfected (solution of 1/8 teaspoon of household bleach per 1 gallon of water). Let it stand for 30 min. If water is cloudy, use ¼ teaspoon of household bleach per 1 gallon of water.
- Wash clothes worn during cleanup in hot water and detergent (wash apart from uncontaminated clothes).
- Wash clothes contaminated with sewage in hot water and detergent. Consider using a laundromat until your onsite wastewater system has been professionally inspected and serviced.

Cómo funciona un sistema de alcantarillado

Las tuberías de alcantarillado de un propietario se denominan servicios laterales y están conectadas a líneas troncales principales y regionales locales más grandes. Los servicios laterales se ejecutan desde la conexión en el hogar hasta la conexión con el sistema de alcantarillado del Distrito. Estos laterales son responsabilidad del propietario y deben ser mantenidos por el propietario.

¿Cómo ocurren los derrames de aguas residuales?

Los derrames de aguas residuales ocurren cuando las aguas residuales en las tuberías subterráneas se desbordan a través de un pozo de acceso, limpieza o tubería rota. La mayoría de los derrames son relativamente pequeños y se pueden detener y limpiar rápidamente, pero si se los deja desatendidos, pueden causar riesgos para la salud, dañar viviendas y negocios y amenazar el medio ambiente, las vías fluviales locales y las playas. Las causas comunes de derrames de aguas residuales incluyen acumulación de grasa, raíces de árboles, tuberías rotas / agrietadas, tapas de limpieza faltantes o rotas, alcantarillas de tamaño insuficiente y aguas subterráneas / pluviales que ingresan al sistema de alcantarillado a través de defectos en las tuberías y conexiones ilegales.



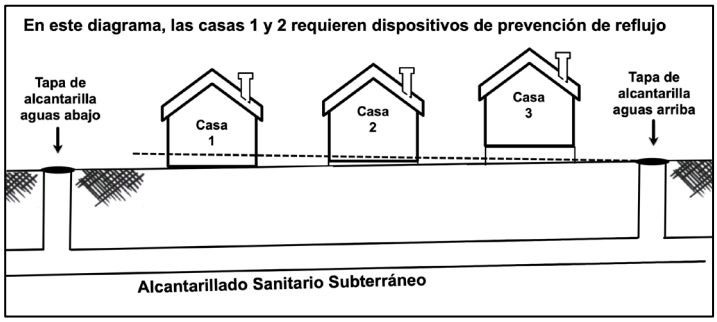
Prevenga la mayoría de las copias de seguridad de aguas residuales con un dispositivo de prevención de reflujo

Este tipo de dispositivo puede ayudar a prevenir las copias de seguridad de aguas residuales en hogares y empresas. Si aún no tiene un dispositivo de prevención de reflujo, comuníquese con un plomero o contratista profesional para instalar uno lo antes posible.

¿Se requiere que mi hogar tenga un dispositivo de prevención de reflujo?

La Sección 710.1 del Código Uniforme de Plomería (UPC) establece: “Los accesorios de tuberías de drenaje que tienen llantas de nivel de inundación ubicadas debajo de la elevación de la siguiente boca de alcantarilla corriente arriba o la alcantarilla privada que atiende dicha tubería de drenaje deben protegerse contra el reflujo de aguas residuales al instalar un tipo de válvula de evacuación ”. La intención de la Sección 710.1 es proteger el interior del edificio de los desagües o sobrecargas de alcantarillado de la línea principal.

Adicionalmente, U.P.C. 710.6 dice: Las válvulas de aguas residuales deben ubicarse donde puedan ser inspeccionadas y reparadas en todo momento y, a menos que estén continuamente expuestas, deben estar encerradas en un pozo de mampostería equipado con una cubierta removible del tamaño adecuado.


En este diagrama, las casas 1 y 2 requieren dispositivos de prevención de reflujo
Tapa de alcantarilla aguas abajo
Casa 1
Casa 2
Casa 3
Tapa de alcantarilla aguas arriba
Alcantarillado Sanitario Subterráneo

Limpieza de derrames dentro de la casa:

Para grandes limpiezas, se debe contactar a una empresa de limpieza profesional para limpiar las áreas afectadas. Si contrata a un contratista, se recomienda obtener estimaciones de más de una compañía. A veces, el seguro del propietario de vivienda pagará la limpieza necesaria debido a las reservas de alcantarillado. No todas las pólizas tienen esta cobertura, así que consulte con su agente.

Si decide limpiar un pequeño derrame dentro de su casa, protéjase de la contaminación observando las siguientes medidas de seguridad. Aquellas personas cuya resistencia a la infección esté comprometida no deben intentar este tipo de limpieza.

Busque atención inmediata si se lesiona o se enferma durante o después del proceso de limpieza.

Otros consejos:

- Mantenga a los niños y mascotas fuera del área afectada.
- Apague los sistemas de calefacción / aire acondicionado
- Use botas de goma, guantes de goma y gafas durante la limpieza.
- Deseche los artículos que no se puedan lavar y desinfectar (como: colchones, alfombras, cosméticos, juguetes, etc.)
- Retire y deseche los paneles de yeso y el aislamiento contaminado con aguas residuales o aguas de inundación.
- Limpie a fondo todas las superficies duras (como pisos, concreto, molduras, muebles de madera y metal, mostradores, electrodomésticos, fregaderos y otros accesorios de plomería) con agua caliente y ropa o detergente para platos.
- Ayude al proceso de secado con ventiladores, unidades de aire acondicionado y deshumidificadores.
- Después de completar la limpieza, lávese las manos con agua y jabón. Use agua que haya sido hervida por 1 minuto (deje que el agua se enfríe antes de lavarse las manos) O use agua que haya sido desinfectada (solución de 1/8 cucharadita de lejía doméstica por 1 galón de agua). Dejar reposar durante 30 min. Si el agua está turbia, use ¼ cucharadita de lejía de uso doméstico por 1 galón de agua.
- Lave la ropa usada durante la limpieza con agua caliente y detergente (lave aparte de la ropa no contaminada).
- Lavar la ropa contaminada con aguas residuales en agua caliente y detergente. Considere usar una lavandería hasta que su sistema de aguas residuales en el sitio haya sido inspeccionado y reparado profesionalmente.

Limpieza de derrames fuera de la casa:

- Mantenga a los niños y las mascotas fuera del área afectada hasta que se haya completado la limpieza.
- Use botas de goma, guantes de goma y gafas protectoras durante la limpieza del área afectada.
- Limpie los sólidos de alcantarillado (material fecal) y colóquelos en un inodoro o bolsa doble que funcione correctamente y colóquelos en un contenedor de basura.
- En áreas de superficies duras como el asfalto o el concreto, es seguro usar una solución de lejía al 2%, o ½ taza de lejía a 5 galones de agua, pero no permita que llegue a un drenaje de tormenta ya que la lejía puede dañar la ambiente.
- Después de la limpieza, lávese las manos con agua y jabón. Use agua que haya sido hervida por 1 minuto (deje enfriar antes de lavarse las manos) O use agua que haya sido desinfectada

(solución de 1/8 cucharadita de cloro por 1 galón de agua). Dejar reposar durante 30 min. Si el agua está turbia, use ¼ cucharadita de lejía de uso doméstico por 1 galón de agua.

- Lave la ropa usada durante la limpieza con agua caliente y detergente (lave aparte de la ropa no contaminada).
- Lavar la ropa contaminada con aguas residuales en agua caliente y detergente. Considere usar una lavandería hasta que su sistema de aguas residuales en el sitio haya sido inspeccionado y reparado profesionalmente.

Claim Form (Backup Only) F-7

INSERT CLAIM FORM

INSERT TAB:
Tab G: POST-SPILL

Post-Spill Assessment

SPILL LOCATION
Spill location name:
Address of spill:

NOTIFICATION AND COMMUNICATION PROCEDURES	
Were notification procedures adhered to?	☐ Yes ☐ No
Were notification procedures effective?	☐ Yes ☐ No
RESPONSE PROCEDURES	
Were response time goals met?	☐ Yes ☐ No
Were safety procedures adhered to?	☐ Yes ☐ No
Were safety procedures effective?	☐ Yes ☐ No
Were initial response procedures adhered to?	☐ Yes ☐ No
Were initial response procedures effective?	☐ Yes ☐ No

Were containment procedures adhered to?	☐ Yes ☐ No

RESPONSE PROCEDURES (continued)	
Were containment procedures effective?	☐ Yes ☐ No
Were clean up and recovery procedures adhered to?	☐ Yes ☐ No
Were clean up and recovery procedures effective?	☐ Yes ☐ No
Were sewer back up procedures adhered to?	☐ Yes ☐ No
Were sewer back up procedures effective?	☐ Yes ☐ No
Were chain of custody procedures adhered to?	☐ Yes ☐ No
Was failure analysis investigation performed and documented?	☐ Yes ☐ No
REPORTING AND NOTIFICATION PROCEDURES	

Were reporting and notification timeline requirements met?	☐ Yes ☐ No

DOCUMENTATION	
Was spill file created?	☐ Yes ☐ No
Was QA/QC performed to ensure field data matched CIWQS data?	☐ Yes ☐ No
RECOMMENDED CHANGES	
☐ N/A	
ATTENDEES	
FACILITATED BY	

	Date:

OFFICE USE ONLY

Incident Report #		Prepared By	
Spill/Backup Information			
Cause			
Summary of Historical Spills/Backups/Service Calls/Other Problems			
Date	Cause	Date Last Cleaned	Crew
Records Reviewed By:		Record Review Date:	
Summary of CCTV Information			
CCTV Inspection Date		File Name/Number	
CCTV File Reviewed By		CCTV Review Date	

Observations

Go to Page 2

Recommendations					
✓	Type	Specific Actions	Who is Responsible?	Completion Deadline	Who Will Verify Completion?
	No Changes or Repairs Required	n/a	n/a	n/a	n/a
	Added sewer to preventive maintenance program				
	Adjusted schedule/method of preventive maintenance				
	Enforcement action against FOG source				
	Plan rehabilitation or replacement of sewer				
	Repaired facilities or replaced defect				
	Change(s) to Spill Response Procedures				
	Training				
	Misc.				

Comments/Notes:	
Reviewed By:	Review Date:

Section 7 Sewer Pipe Control Program

7.1. Introduction

This section presents the Sewer Pipe Control Program for the Antioch, Bay Point, and Pittsburg service areas. This FOG Control Program will be managed, staffed, and administered by Delta Diablo (District).

7.2 Regulatory Requirements for FOG Control Element of SSMP

The summarized requirements for the FOG Control Element of the SSMP are:

7.2.1 RWQCB Requirement

The collection system agency must evaluate its service area to determine whether a Fats, Oils, and Grease (FOG) Control Program is needed. If so, a FOG Control Program shall be developed as part of the SSMP. If the collection system agency determines that a FOG program is unnecessary, proper justification must be provided.

7.2.2 GWDR Requirement

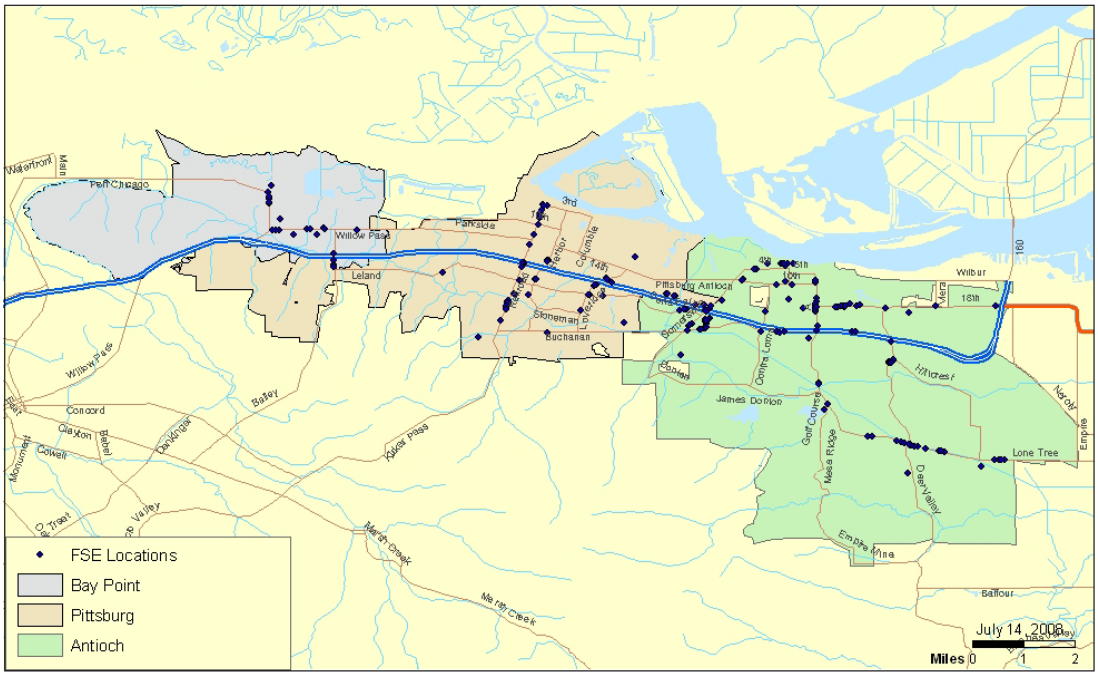
The collection system agency shall evaluate its service area to determine whether a FOG Control Program is needed. If the collection system agency determines that a FOG program is not needed, the collection system agency must provide justification for why it is not needed. If FOG is found to be a problem, the collection system agency must prepare and implement a FOG source control program to reduce the amount of these substances discharged to the sanitary sewer system. The FOG source control program shall include the following as appropriate:

a. An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG.
b. A plan and schedule for the disposal of FOG 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 FOG generated within a sanitary sewer system service area.
c. The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG.
d. Requirements to install grease removal devices (such as traps or interceptors); design standards for the grease removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements.
e. Authority to inspect grease producing facilities, enforcement authorities, and determination of whether the Agency has sufficient staff to inspect and enforce the FOG ordinance.
f. An identification of sewer system sections subject to FOG blockages and the establishment of a cleaning maintenance schedule for each section; and
g. Development and implementation of source control measures, for all sources of FOG discharged to the sewer system, for each sewer system section identified in (f) above.

7.3 Nature and Extent of FOG Problem

Data regarding the nature and extent of the FOG problems in the three sewer systems was analyzed when the original SSMP was developed including the location of FOG-related service calls (which include blockages), SSOs, frequent preventive maintenance, and food service establishments (FSEs). There are approximately 389 FSEs in Antioch, 137 FSEs in Bay Point, and 349 FSEs in Pittsburg as shown in Figure 7-1.

Figure 7-1: Food Service Establishment (FSE) Locations



7.3.1 Summary of FOG Data Analysis

The analysis of the SSO, FSE, and frequent maintenance lines shows that FOG is a factor in each of the three service areas although not excessive. The current FOG Source Control Program and the preventive maintenance programs have been effective at reducing the frequency of SSOs in commercial areas. The ongoing FOG-related problems appear to be associated with high density residential and, to a lesser extent, low density residential sources.

7.4 FOG Source Control Program

The FOG Source Control Program will be continued by the District and the Cities. The responsibilities of each of the three agencies for the elements of the FOG Source Control Program are shown on Table 7-1.

Table 7-1: FOG Control Program Activities and Responsibilities

Focus	Activity	Antioch	Bay Point	Pittsburg	Delta Diablo
Commercial Sources	Focused FSE Program (permits, inspections, education)				X
	Administer FSE permit fees to cover program cost				X
	Inspect GRD maintenance in FSEs located in problem areas				X
	Develop common standards for GRD	X	X	X	X
	Specify GRD size	X	X	X	
	Require installation of GRD	X	X	X	
	Inspect GRD installation	X	X	X	
	Identify FOG disposal sites and distribute to grease haulers				X
	Study feasibility of FOG disposal at Delta Diablo Treatment Plant				X
	Outreach to businesses				X
	Provide information re: FOG problems to District inspector(s)	X	X	X	
	Enforcement action	X	X	X	
High Density Residential Sources	Optimize sewer cleaning	X	X	X	
	Repair/replace problem sewers	X	X	X	
	Prepare outreach materials				X

Focus	Activity	Antioch	Bay Point	Pittsburg	Delta Diablo
High Density Residential Sources	Outreach to upstream property managers	X	X	X	
	Enforcement action	X	X	X	
Low Density Residential Sources	Optimize sewer cleaning	X	X	X	
	Repair/replace problem sewers	X	X	X	
	Prepare outreach materials				X
	Outreach to upstream residents	X	X	X	
Gather Information	Gather information for next SSMP update	X	X	X	

7.5 Public Outreach Program

District and City crews provide information on proper FOG disposal to residents that have experienced a FOG-related blockage or SSO. The District also distributes information related to proper FOG disposal and other contaminants at various community events throughout the year.

The blockages and SSOs that are caused by FOG appear to be from primarily residential sources at this time. The District prepared materials to be used as the basis for a focused public education/outreach program. The District and the Cities provide the public education/outreach materials to commercial and residential sources that are tributary to sewers that experience FOG-related stoppages and SSOs.

7.6 Acceptable FOG Disposal Facilities

A list of facilities in the San Francisco Bay Area that accept grease from liquid waste haulers is included as Appendix 7 A. A list of liquid waste haulers that collect and transport brown grease – FOG from the FSE's grease trap or grease interceptor and yellow grease – Used vegetable cooking oil associated with deep fryers; is included as Appendix 7-B.

There is no indication at this time that additional grease disposal facilities are needed to handle the FOG generated within the District's service area.

7.7 FOG Inspections

7.7.1 FOG Legal Authority

The District's Code and the City Municipal Codes provide the legal basis for the FOG Source Control Program as shown in Section 3 – Legal Authority.

7.7.2 Staffing

The District assessed the staffing required to inspect and enforce the FOG ordinance and has determined that the current staffing levels were adequate.

7.7.3 Facility Inspections

The District will conduct periodic facility inspections of permitted FSEs that are located in identified FOG Hot Spot areas to ensure that Best Management Practices (BMP) are being followed, that GRDs are properly installed, and that operating/maintenance requirements are being followed. The frequency of inspection will be based on the historical performance of the facility. Poor performing facilities will be inspected more frequently.

7.7.4 Investigation and Enforcement

The District and the Cities will work together to identify FSEs that cause FOG-related blockages or SSOs. The District will conduct facility inspections to determine the source of the FOG in these instances.

The District and the Cities will initiate enforcement action against FSEs in their service areas that are determined to be in violation of the requirements of the FOG Control Program. Enforcement actions may include a written warning, administrative orders (which may include fines), and disconnection from the public sewer system.

7.8 FOG Preventative Maintenance

The District's and Cities' Preventive Maintenance (PM) programs are currently focused on the problematic sewer line segments. The ongoing identification of FOG Hot Spots will provide the basis for the FOG Control Program. FOG sources that cause blockages or SSOs will be included in the FOG Control Program. The results of the sewer cleaning operations will be used to revise sewer cleaning frequencies.

The District/City staffs will provide the Delta Diablo FOG Source Control Program Inspectors with timely notice when gravity sewers experience FOG-related blockages or SSOs.

Delta Diablo and the Cities will work together to update the FOG Hot Spot areas periodically. The District and the Cities will provide preventive maintenance for gravity sewers in their service areas that are located in the FOG Hot Spot areas at the frequency that is required to minimize recurring FOG-related blockages and SSOs.

7.9 GRD Requirements

7.9.1 Design Standards, Plan Review, and Inspection

The District adopted the Central Contra Costa Sanitary District (CCCSD) standards for GRDs.

Each of the Cities will be responsible for reviewing proposed development plans to ensure that they address the installation of GRDs.

The Cities will develop processes to ensure the GRDs are properly installed during new construction and remodels as part of their Code Enforcement.

7.9.2 Maintenance Standards and Best Management Practices

The District and the Cities will develop common standards for the proper maintenance of GRDs. The FSEs that discharge significant quantities of grease will be tracked using discharge permits administered by the District.

The District will encourage FSEs to employ Best Management Practices (BMP) as part of their efforts to control the discharge of FOG to the public sewer system. The BMPs that will be encouraged include:

- Posting "No Grease" signs over sinks and dishwasher.
- Collecting and recycling cooking oil.
- "Dry wiping" pots, pans, and kitchen equipment before cleaning.
- Maintaining grease traps on a regular schedule.
- Checking grease interceptor on a regular schedule (grease and solids should not exceed 25% of interceptor depth).
- Using absorbent paper under fryer baskets.
- Using absorbent (such a rice hulls, cat letter) to pick up oil and grease spills; and
- Not using emulsifiers or solvents other than dishwashing detergents.

The District's activities will include the distribution of placards and literature promoting the use of BMPs and observations/comments during facility inspections to encourage the use of BMPs.

7.9.3 Record Keeping and Reporting

The District and the Cities will work together to maintain a current list of FSEs in each service area

Appendix 7-A FOG Disposal Sites

The following locations accept grease from liquid waste haulers in the San Francisco Bay Area as of March 2025:

Business Name	Location	Phone Number	Services
Delta Diablo	Antioch	(925)756-1900	Accepts brown grease
East Bay Municipal Utility District (EBMUD)	Oakland	(510) 287-1632	Accepts brown & yellow grease.
Palo Alto Wastewater Treatment Plant	Palo Alto	(650) 329-2598	Accepts 5,000 to 6,000 gallons per day of brown grease on first come first serve basis.
Sacramento Regional County Sanitation District	Sacramento	(916) 875-FATS	Accepts brown & yellow grease
Sequential (Formerly Salinas Tallow)	Salinas	(800) 621-9000	Will consider accepting grease from other reputable haulers. They purchase yellow grease and process the interceptor brown grease with residue going to landfill.
South Bayside Systems Authority	Redwood City	(650) 591-7121	Accepts yellow grease.

Appendix 7-B Grease Haulers & Tallow Bin Waste Listings

County Served	Brown Grease Haulers* March 2025	Phone #
All Counties	Dar Pro Solutions (San Fran)	(855) 327-7761
All Counties	Liquid Environmental Solutions (Hayward)	(415) 730-7038
All Counties	Roto-Rooter Plumbing/Drain (Concord)	(925) 798-2122
All Counties	Sacramento Rendering Companies (SRC)	(916) 363-4821
Contra Costa	A-1 Septic Tank Service (Hayward)	(510) 886-4455
Contra Costa	Able Septic Service (San Jose)	(408) 377-9990
Contra Costa	All Valley Environmental, Inc.	(559) 498-8378
Contra Costa	Pioneer Liquid Transport	(800) 804-7327
Contra Costa	Sequential (Formerly Salinas Tallow)	(800) 621-9000
Contra Costa	Sweet Septic Systems	(800) 622-8768
Contra Costa	Amer guard Maintenance Services LLC	(559) 497-2925

*Brown Grease – Fats Oil & Grease (FOG) is a free fatty acid content material that is collected in grease traps or grease interceptors.

County Served	Yellow Grease Tallow Companies**	Phone #
All Counties	Golden Gate Environmental	(866) 932-7851
All Counties	Sacramento Rendering Companies (SRC)	(916) 363-4821
All Counties	Dar Pro Solutions (San Fran)	(855) 327-7761
Contra Costa	HP Commodities	(209) 599-7131 Ext. 104
Contra Costa	Restaurant Technologies Inc.	(209) 938-0146
Contra Costa	Liquid Environmental Solutions	(510) 266-0661
Contra Costa	Dixon Grease LLC	(925) 238-6548
Contra Costa	Krause & Nagy Environmental Solutions LLC	(925) 497-6659
Contra Costa	United Rentals	(925) 786-5984
Contra Costa	Sequential (Richmond)	(800) 447-3794

**Yellow Grease – also known as Used Cooking Oil (UCO) Used Vegetable Oil (UVO), Recycled Vegetable Oil (RVO), or Waste Vegetable Oil (WVO) is recovered from FSEs industry that use the oil for cooking. This used oil is typically stored in a tallow bin for pick up and disposal.

Section 8 System Evaluation, Capacity Assurance and Capital Improvements

8.1 Introduction

This section of the SSMP presents the District's programs and activities to provide adequate capacity. 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.

8.2 System Evaluation and Condition Assessment

The summarized requirements for the System Evaluation and Condition Assessment element of the SSMP are:

8.2.1 RWQCB Requirement

a. Each wastewater collection system agency shall establish a process to assess the current and future capacity requirements for the collection system facilities.
b. Each wastewater collection system agency shall prepare and implement a capital improvement plan to provide hydraulic capacity of key sewer system elements under peak flow conditions.

8.2.2 GWDR Requirement

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:

  o Hold a high level of environmental consequences if vulnerable to collapse, failure, blockage, capacity issues, or other system deficiencies;

  o Are located in or within the vicinity of surface waters, steep terrain, high groundwater elevations, and environmentally sensitive areas;

  o Are within the vicinity of a receiving water with a bacterial-related impairment on the most current Clean Water Act section 303(d) List;

• Assess the system conditions using visual observations, video surveillance and/or other comparable system inspection methods;

• Utilize observations/evidence of system conditions that may contribute to exiting of sewage from the system which can reasonably be expected to discharge into a water of the State;

• Maintain documents and recordkeeping of system evaluation and condition assessment inspections and activities; and

• Identify system assets vulnerable to direct and indirect impacts of climate change, including but not limited to: sea level rise; flooding and/or erosion due to increased storm volumes, frequency, and/or intensity; wildfires; and increased power disruptions.

8.3 Capacity Assessment and Design Criteria

8.3.1 Conveyance System

In 2010, the District updated its Conveyance System Master Plan to reflect updated land use plans, account for new infrastructure, and incorporate refinements to wastewater flow estimates based on rainfall and flow monitoring collected during the course of the update. The 2010 update also included development of a dynamic hydraulic model to evaluate future system capacity needs and develop recommendation solutions.

The population for the service area, including the Cities of Antioch and Pittsburg, the unincorporated community of Bay Point and other unincorporated areas was estimated to be 212,000 in 2018. The population is expected to reach 269,000 by 2040 with an average annual growth rate of 0.9%. The majority of growth is projected to occur in the Antioch and Pittsburg service areas[6]

[6] Combined Municipal Service Review and Sphere of Influence Study (2nd Round) for Contra Costa County Water and Wastewater Agencies, Final - Approved May 14, 2014.

8.3.2 Bay Point Collection System

In 2010, the District completed a Master Plan for the Bay Point system that includes assessments of capacity and condition as well as phased capital projects for sewer rehabilitation. In addition, the District converted its hydraulic model from a static hydraulic model to a dynamic hydraulic model of the Bay Point collection system to account for new infrastructure and evaluate future capacity needs. The District received Board approval and purchased a new CUE's CCTV Unit in September 2013 and completed a five-year plan to inspect the entire gravity system. This data is utilized by staff in developing the Capital Improvement Plan conveyance system repair and replacement program.

8.3.3 Design Criteria

The capacity-related design criteria, including base wastewater flow and peaking factors, are included in ***Section 5 Design and Performance Provisions***.

After completing a review and evaluation of the District's programs in 2007, the Contra Costa Local Agency Formation Commission (LAFCO) stated that the District is providing adequate service and no infrastructure needs or deficiencies were noted that are not being addressed in the District's master plans and CIP.

8.4 Capital Improvements

The District has a comprehensive five-year Capital Improvement Program (CIP) that is updated annually. The District's CIP includes capacity enhancement projects.

8.5 Prioritization of Corrective Action

The capital improvement plan must include the following items:

• Project schedules including completion dates for all portions of the capital improvement program;

• Internal and external project funding sources for each project; and

• Joint coordination between operation and maintenance staff, and engineering staff/consultants during planning, design, and construction of capital improvement projects; and Interagency coordination with other impacted utility agencies.

8.6 References

Conveyance System Master Plan Update, HDRRMC Water and Environment, April 2010.

Bay Point Hydraulic Model Technical Memorandum, RMC Water and Environment, April 2010.

Contra Costa LAFCO: Water and Wastewater Municipal Services Review for East Contra Costa County, Final – Approved December 19, 2007.

Delta Diablo Fiscal Year 2007/2007 – 2011/2012 Five Year Capital Improvement Program, July 2007.

Section 9 Monitoring, Measurement, and Program Modifications

9.1 Introduction

This section of the SSMP presents the District's approach to Monitoring, Measurement, and Program Modifications.

9.2 Regulatory Requirements for Monitoring, Measurement, and Program Modifications Element of SSMP

The requirements for the Monitoring, Measurement, and Program Modifications (MMPM) section of the SSMP are:

9.2.1 RWQCB Requirement

Each wastewater collection system agency shall monitor the effectiveness of each SSMP element and update and modify SSMP elements to keep them current, accurate, and available for audit as appropriate.

9.2.2 GWDR Requirement

The Enrollee shall:

a. Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities.
b. Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP.
c. Assess the success of the preventative maintenance program.
d. Update program elements, as appropriate, based on monitoring or performance evaluations and,
e. Identify and illustrate SSO trends including frequency, location, and volume.

9.3 Adaptive Management Approach

The District's commitment to organizational improvement will be carried forward into the Adaptive Management of its collection and conveyance systems by establishing SSO-related performance measures, defining baseline performance metrics, and annually monitoring performance measures and metrics.

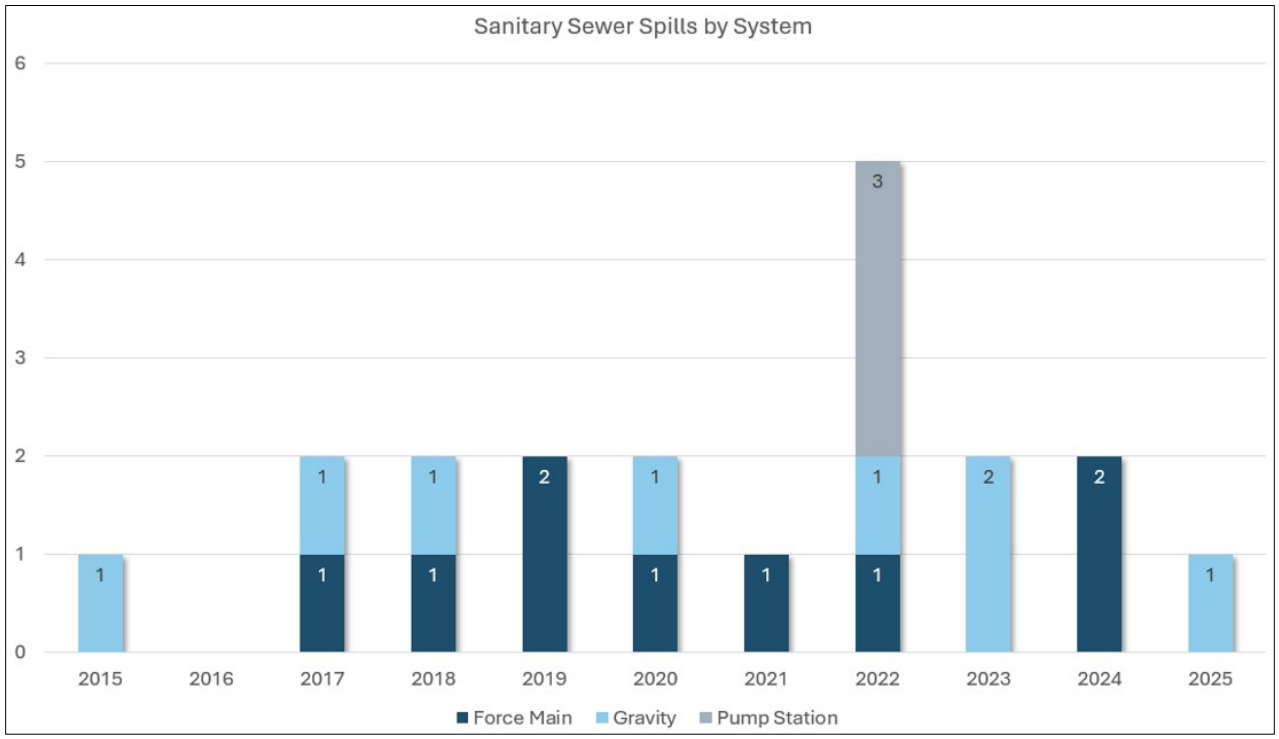
9.4 Performance Measures

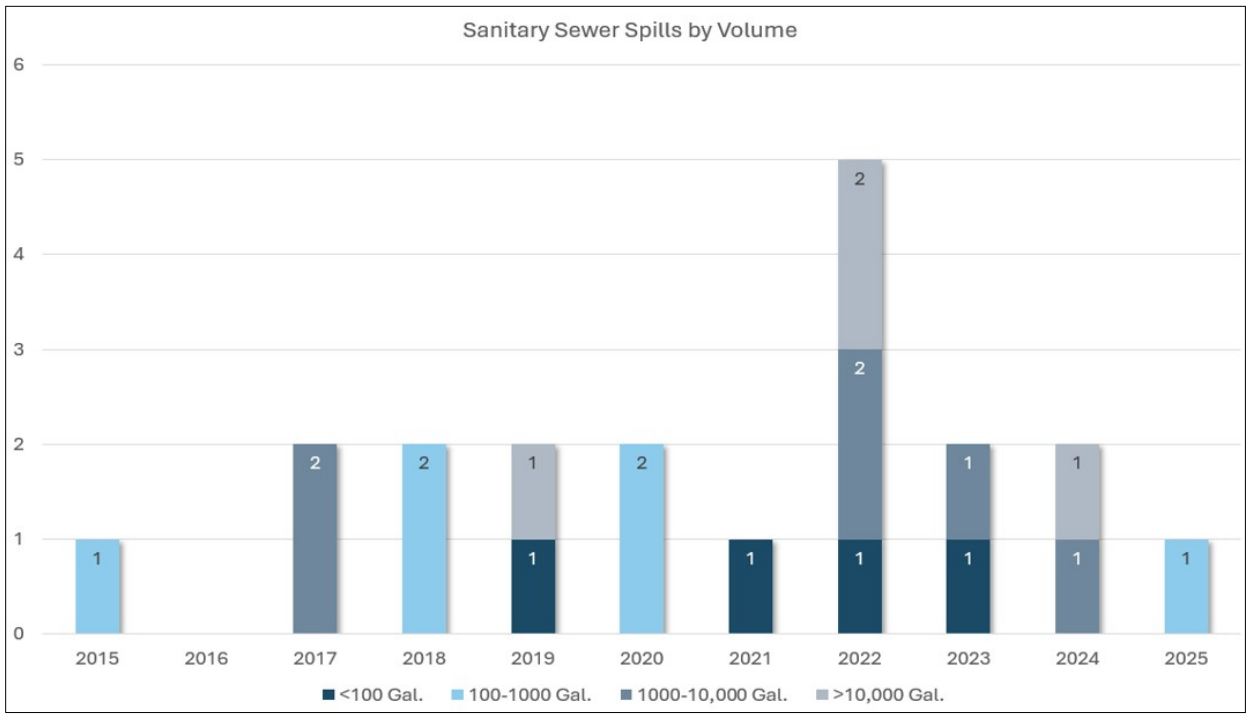
The indicators that the District will use to measure the performance of its wastewater collection system and the effectiveness of its SSMP are:

- Total number of SSOs.
- Number of SSOs for each cause (roots, grease, debris, pipe failure, capacity, pump station failures, and other).
- Portion of sewage contained compared to total volume spilled.
- Volume of spilled sewage reaching surface water; and, recovered.

9.5 Baseline Performance

Performance of the District's wastewater collection system will be monitored annually similar to the charts below:





9.6 Performance Monitoring and Program Changes

The District will evaluate the performance of its wastewater collection system at least annually using the performance measures identified in Section 9.4 Performance Measures above. The District will update the data and analysis of performance measures at the time of the evaluation.

The District may use other performance measures in its evaluation. The District will prioritize its actions and initiate changes to the related programs based on the results of the evaluation.

Section 10 SSMP Program Audits

10.1 Introduction

This section of the SSMP presents the process that the District will follow to audit its SSMP program.

10.2 Regulatory Requirements for SSMP Program Audits

The summarized regulatory requirements for the SSMP are:

10.2.1 RWQCB Requirement

The San Francisco Bay Region RWQCB and Central Valley RWQCB do not require anything above the GWDR Requirement.

10.2.2 GWDR Requirement

As part of the SSMP, the Enrollee shall conduct periodic internal audits, appropriate to the size of the system and the number of SSOs. At a minimum, these audits must occur every three years and a report must be prepared and kept on file. This audit shall focus on evaluating the effectiveness of the SSMP and the District's compliance with the SSMP requirements identified in this subsection (D.13 of the GWDR), including identification of any deficiencies in the SSMP and steps to correct them.

10.3 SSMP Audits

The District will audit its SSMP every third year. The audit will determine whether the SSMP meets the current requirements of the DR, whether the SSMP reflects the District's current practices, and whether the District is following the SSMP.

The audits are conducted by a team consisting of District Staff, and may also include members from outside agencies, and/or contractors.

The scope of the audits will cover each of the sections of the SSMP. The SSMP Audit Checklist, is included in Appendix 10-A.

The results of each audit will be included in the SSMP Audit Reports. The SSMP Audit Report focuses on the effectiveness of the SSMP program, compliance with the GWDR requirements, and identification of any deficiencies in the SSMP. The SSMP Audit Report identifies if revisions are needed for a more effective program. Information collected as part of ***Section 9 Monitoring, Measurement, and Program Modifications*** is used in preparing the audit. Tables and figures or charts are used to summarize information about these indicators. The Audit Report will include:

- How the District implemented SSMP elements during the reporting year,
- The District's effectiveness in implementing the SSMP elements,
- A description of the major additions and improvements made to the sanitary sewer collection system during the reporting year.

The Audit Report will be kept on file. The District will maintain copies of the annual audit reports for six years.

10.4 SSMP Updates

The District will update its SSMP at least every six years. Updates were completed in 2018 and 2023. The next update will be completed no later than 2026 and at least every three years thereafter as noted in Section 10.3.

The District will determine the need to update its SSMP more frequently based on the results of the three-year audit and the performance of its sanitary sewer system using information from the Monitoring and Measurement Program. In the event the District decides that an update is warranted, the process to complete the update will be identified at that time. The District will complete the update within one year following identification of the need for the update.

The District staff will seek approval from the District Board of Directors for any significant changes to the SSMP. The authority for approval of minor changes such as employee names, contact information, or procedural changes is delegated to the general manager.

Appendix 10-A SSMP Audit Checklist

	Element 1 – Goals	Yes	Requires Follow-Up
A	Are the goals stated in the SSMP still appropriate?		
	Element 2 - Organization	**Yes**	**Requires Follow-Up**
A	Is the Key Staff contact information current?		
B	Is the "Organization Chart and SSO Reporting Chain of Command" current?		
C	Is the chain of communication for reporting and responding to SSOs accurate and up-to-date?		
D	Is the designation of the Legally Responsible Official current?		
E	Is responsibility for the implementation and maintenance of the SSMP understood and being followed?		
	Element 3 – Legal Authority	**Yes**	**Requires Follow-Up**
Does the SSMP contain excerpts from the current District/Municipal Code documenting the Agency's legal authority to:			
A	Prevent illicit discharges?		
B	Require proper design and construction of sewers and connections?		
C	Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the District?		
D	Limit discharges of Fats, Oil and Grease (FOG)?		
E	Enforce any violation of its sewer ordinances?		
	Element 4 – Operations and Maintenance	**Yes**	**Requires Follow-Up**
Collection System Maps			
A	Does the SSMP reference the current process and procedures for maintaining the District's wastewater collection system maps?		
B	Are the District's wastewater collection system maps complete, current, and sufficiently detailed?		

Resources and Budget		Yes	Requires Follow-Up
C	Does the District allocate sufficient funds for the effective operation, maintenance, and repair of the wastewater collection system? Is the current budget structure documented in the SSMP?		
D	Is the current budget structure documented in the SSMP?		
Prioritized Preventive Maintenance			
E	Does the SSMP describe current preventive maintenance activities and the system for prioritizing the cleaning of sewer lines?		
F	Based upon information in the Annual SSO Report, are the District's preventive maintenance activities sufficient and effective in minimizing SSOs and blockages?		
Scheduled Inspections and Condition Assessments			
G	Is there an ongoing condition assessment program sufficient to develop a Capital Improvement Program addressing the proper management and protection of infrastructure assets?		
H	Are the current components of this program documented in the SSMP?		
Contingency Equipment and Replacement Inventory			
I	Does the SSMP list the major equipment currently used in the operation and maintenance of the wastewater collection system and document the procedures for inventory management?		
J	Are contingency equipment and replacement parts sufficient to respond to emergencies and properly conduct regular maintenance?		
Training			
K	Is the training calendar current?		
L	Does the SSMP document current training expectations and programs for the Agency's wastewater collection system staff?		
Outreach to Plumbers and Building Contractors			
M	Does the SSMP document current outreach efforts to plumbers and building contractors?		

	Element 5 – Design and Performance Standards	Yes	Requires Follow-Up
A	Does the SSMP contain current design and construction standards for the installation of new sanitary sewer systems, pump stations, and other appurtenances, and for the rehabilitation and repair of existing sanitary sewer systems?		
B	Does the SSMP document current procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances, and the rehabilitation and repair of existing sewer lines?		
	Element 6 – Overflow and Emergency Response Plan	**Yes**	**Requires Follow-Up**
A	Does the Sanitary Sewer Overflow and Backup Response Plan establish procedures for the emergency response, notification, and reporting of Sanitary Sewer Overflows (SSOs)?		
B	Are Agency staff and contractor personnel appropriately trained on the procedures of the Sanitary Sewer Overflow and Backup Response Plan?		
C	Considering performance indicator data developed for the SSMP, is the Sanitary Sewer Overflow and Backup Response Plan effective in handling SSOs in order to safeguard public health and the environment?		
	Element 7 – Fats, Oils, and Grease (FOG) Control Program	**Yes**	**Requires Follow-Up**
A	Do the Fats, Oils, and Grease (FOG) Control Program include efforts to educate the public on the proper handling and disposal of FOG?		
B	Does the FOG Control Program identify sections of the wastewater collection system subject to FOG blockages, establish a cleaning schedule and address source control measures to minimize these blockages?		
C	Are requirements for grease removal devices, Best Management practices (BMP), record keeping, and reporting established in the FOG Control Program?		
D	Does the Agency have sufficient legal authority to implement and enforce the FOG Control Program?		
E	Is the current FOG Control Program effective in minimizing blockages of sewer lines resulting from discharges of FOG to the system?		

	Element 8 – System Evaluation and Capacity Assurance Plan (SECAP)	Yes	Requires Follow-Up
A	Does the SECAP evaluate hydraulic deficiencies in the system, establish sufficient design criteria and recommend both short-term and long-term capacity enhancement, and improvement projects?		
B	Does the Agency's Capital Improvement Program (CIP) establish a schedule of approximate completion dates for both short-term and long-term improvements, and is the schedule reviewed and updated to reflect current budgetary capabilities and activity accomplishment?		
	Element 9 – Monitoring, Measurement, and Program Modifications	**Yes**	**Requires Follow-Up**
A	Does the SSMP accurately portray the methods of tracking and reporting selected performance indicators?		
B	Is the Agency able to sufficiently evaluate the effectiveness of SSMP elements based on relevant information?		
	Element 10 – SSMP Audits	**Yes**	**Requires Follow-Up**
A	Will the SSMP Biannual Audit be completed and kept on file by Water Board established deadlines?		
	Element 11 – Communication Program	**Yes**	**Requires Follow-Up**
A	Does the Agency effectively communicate with the public and other agencies about the development and implementation of the SSMP and continue to address any feedback?		

Section 11 Communication Program

11.1 Introduction

This section of the SSMP outlines the process that was followed in communicating with interested members of the public regarding the development and implementation of this plan. It also includes the process for communicating in the future regarding the performance of this plan. This Communication Program also addresses communication between the Cities of Antioch and Pittsburg, the community of Bay Point, and Delta Diablo (the District).

11.2 Regulatory Requirements for the Communications Program

The requirements for the Communication Program section of the SSMP are:

11.2.1 RWQCB Requirement

The RWQCB does not require a Communication Program.

11.2.2 GWDR Requirement

The Agency shall:

a. Communicate on a regular basis with the public on the development, implementation, and performance of its SSMP. The communication system shall provide the public the opportunity to provide input to the Agency as the program is developed and implemented.
b. Create a plan of communication with systems that are tributary and/or satellite to the Agency's sanitary sewer system.

11.3 Communication during SSMP Development and Implementation

The District posted a notice on its website to inform interested members of the public it developed a Sewer System Management Plan (SSMP). The notice is:

In 2008, Delta Diablo (District) implemented a Sewer System Management Plan (SSMP) pursuant to State Water Resources Control Board Order 2006-0003, Statewide General Discharge Requirements of Sanitary Sewer Systems. The goal of the SSMP is to minimize the frequency and severity of sanitary sewer overflows. The SSMP covers the management, planning, design, operation and maintenance of the District's sanitary sewer system. The District's Board adopted the SSMP Development Plan and Schedule at its meeting on July 11, 2007, approved the final SSMP on April 8, 2009, and approved the updated SSMP as revised by Order No. 2013-0058-EXEC on December 11, 2013.

The SSMP is available for review at the District Offices, 2500 Pittsburg-Antioch Highway, during normal business hours or Sewer System Management Plan (pdf). Interested parties can contact Dustin Bloomfield at (925) 756-1918 or dustinb@deltadiablo.org for additional information. The district reports SSOs electronically to the California Integrated Water Quality System (CIWQS). The electronic SSO data are available by agency or region at: http://www.waterboards.ca.gov/ciwqs/publicreports.html

11.4 Communicating Sanitary Sewer System Performance

The District reports SSOs electronically to the California Integrated Water Quality System (CIWQS). The electronic SSO data are available by agency or region at:

http://www.waterboards.ca.gov/ciwqs/publicreports.html

The District's website has a notice that the sanitary sewer performance information is available at the CIWQS public access website.

11.5 Communication with Tributary/Satellite Sanitary Sewer Systems

The District, the City of Antioch, and the City of Pittsburg worked together to develop and implement their SSMPs. The primary means of communication during the SSMP development and implementation phase was through the SSMP Coordination Committee which meets regularly. Each of the three agencies was represented on the committee.

The three agencies continue to communicate regularly on items such as FOG Hot Spots, advice is given regarding sewer system maintenance and inspection techniques, and the agencies also combine training and provide mutual aid as needed for any major SSO event.

The points of contact at each of the three agencies to communicate any SSMP-related issues are:

City of Antioch	**Toby Beach**	**(925) 779-6962**	**tbeach@antiochca.gov**
City of Pittsburg	**Jorge Esparza**	**(925) 584-5413**	**jesparza@ci.pittsburg.ca.us**
Delta Diablo	**Dustin Bloomfield**	**(925) 756-1918**	**dustinb@deltadiablo.org**