# SEWER SYSTEM MANAGEMENT PLAN

## *Ironhouse Sanitary District*

*WDID: 5SSO10970*

Updated August 2025

Prepared by

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## LIST OF ACRONYMS

| | |
|---|---|
| BMP | Best Management Practice |
| Cal OES | Office of Emergency Services |
| CCTV | Closed Circuit Television (Inspection) |
| CIP | Capital Improvement Project |
| CIWQS | California Integrated Water Quality System |
| CMMS | Computerized Maintenance Management System |
| EHS | Environmental Health Services |
| FOG | Fats, Oils and Grease |
| FSE | Food Service Establishment |
| GIS | Geographical Information System |
| GPM | Gallons per Minute |
| I&I | Inflow & Infiltration |
| ISD | Ironhouse Sanitary District |
| LRO | Legally Responsible Official |
| MRP | Monitoring and Reporting Program |
| NPDES | National Pollution Discharge Elimination System |
| OES | Office of Emergency Services (formerly California Emergency Management Agency) |
| RWQCB | Regional Water Quality Control Board |
| SERP | Spill Emergency Response Plan |
| SSMP | Sewer System Management Plan |
| SWRCB | State Water Resources Control Board |
| WDID | Waste Discharger Identification Number |
| WDR | General Waste Discharge Requirements |
| WRP | Water Reclamation Plant |

## LIST OF TERMS

Blockage – An object that partially or fully hinders flow through a sewer pipeline. The blockage can be caused by debris in the sewer, grease buildup, root intrusion, or a partial or full collapse of the pipeline. Also known as a stoppage.

California Integrated Water Quality System (CIWQS) – A computer system used by the State Water Resources Control Board to track information about spills, among other information. CIWQS is the tool used for online submittal of spill details, which are then made available to the public. Website: https://www.waterboards.ca.gov/ciwqs/

Enrollee – The legal public entity that owns a sanitary sewer system, as defined by the Statewide WDR . Also known as a sewer system agency or wastewater collection system agency.

FOG Control Program –Program implemented at the discretion of the agency, based on the identified causes of sewer spills, to reduce the discharge of fats, oils and grease into the sewer system.

Geographical Information System (GIS) – A database linked with mapping that records sewer system information. The GIS database could include sewer features such as pipe location, diameter, material, condition, or last date cleaned or repaired. GIS maps also typically contain base information such as streets and parcels.

Infiltration – The seepage of groundwater into a sewer system, including service connections. Seepage frequently occurs through defective or cracked pipes, pipe joints, connections or manhole walls and joints.

Inflow – Water discharged into a sewer system from such sources as roof leaders, cellars, yard and area drains, foundation drains, through holes in manhole covers, cross connections from the storm system or street wash waters. Inflow differs from infiltration in that it is a direct discharge into the sewer rather than a leak through defects in the sewer.

Lateral or Private Lateral – The privately-owned sewer pipeline that conveys wastewater from the premises of a user to the District's sewer system. The upper lateral extends from the building to property line (or easement line). The lower lateral extends from the property or easement line to the connection to the pipe.

Monitoring and Reporting Program - The program used by the District to monitor, maintain records, report issues and complete needed public notifications.

Preventive Maintenance (PM) – Regularly scheduled servicing of machinery, infrastructure or other equipment using appropriate tools, tests, and lubricants.

Rehabilitation and Replacement Plan (also referred to as a Capital Improvement Plan) – Identifies and prioritizes system deficiencies and implements short-term and long-term rehabilitation actions to address each deficiency.

San Francisco Bay Regional Water Quality Control Board – Also known as Region 2 or RWQCB. This regulatory agency preserves, enhances and restores the quality of California's water resources, and ensures their proper allocation and efficient use for the benefit of present and future generations. Website: https://www.waterboards.ca.gov/sanfranciscobay

Sanitary Sewer Spill (Spill) – Any release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system, including releases that reach waters of the United States, spills or releases that *do not* reach water of the United States, and backups into buildings and/or private property caused by conditions within the publicly owned portion of the sewer system.

Sanitary Sewer System – Any system of pipes, pump stations, sewer lines, or other conveyances, upstream of a wastewater treatment plant head works used to collect and convey wastewater to the wastewater treatment plant.

Sewer System Management Plan (SSMP) – A series of written programs that address how a collection system owner/operator conducts daily business. Each SSMP is unique for an individual discharger. The plan includes provisions to provide proper and efficient management, operation, and maintenance of sanitary sewer systems, while taking into consideration risk management and cost benefit.

Spill Emergency Response Plan (SERP) – This document identifies measures that are needed to respond to sanitary sewer spills in a way that maximizes the protection of public health and the environment.

State Water Resources Control Board – Also called the State Board. This agency developed and passed the Statewide Waste Discharge Requirements for collection systems and maintains the spill reporting web site.

System Evaluation and Capacity Assurance Plan – A required component of an agency's SSMP that provides hydraulic capacity of key sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design storm or wet weather event.

Statewide Waste Discharge Requirements – The Statewide General Waste Discharge Requirements for Sanitary Sewer Systems was adopted by the SWCRB in 2023 (Order No. 2022-0103-DWQ).

Wastewater Collection System – See Sanitary Sewer System.

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# ELEMENT 1 – GOALS AND INTRODUCTION

## 1.1 INTRODUCTION

This element of the Ironhouse Sanitary District (ISD or District) Sewer System Management Plan (SSMP) describes the SSMP's purpose, organization, and the regulatory requirements that it satisfies.

## 1.2 SSMP PURPOSE

The purpose of the District's Sewer System Management Plan is to document activities that the District utilizes to manage its wastewater collection system. In order to effectively manage the system, the District focuses on the following activities:

- Minimizing the number and impact of sanitary sewer spills.
- Providing adequate sewer capacity to convey peak flows from the District's design storm.
- Maintaining and improving the condition of the collection system infrastructure in order to provide reliable service into the future.

## 1.3 DISTRICT GOALS

ISD's Mission Statement is as follows:

Ironhouse protects public health, resources, and the environment through dependable, efficient, and innovative collection, treatment, and multi-benefit reuse of our community's wastewater for a resilient future.

To this end, the stated goals of the District to be achieved via the SSMP are as follows:

- Plan and schedule activities to properly manage, operate, and maintain all parts of the Ironhouse Sanitary District sanitary sewer system.
- Provide adequate capacity to convey peak wastewater flows.
- Minimize the frequency of sanitary sewer spills.
- Mitigate the impacts that are associated with any spills that may occur.
- Meet all applicable regulatory notification and reporting requirements.

The District updated its five-year (plus) Strategic Plan in September 2021. This plan is revised from time to time by the General Manager, and contains the following five goals:

- Goal 1: Environmental and resource stewardship

- Goal 2: Services and Assets
- Goal 3: Customer and community engagement
- Goal 4: Strategic partnership and advocacy
- Goal 5: Enduring organization

The Strategic Plan outlines the Mission and Vision Statements along with the Core Values of the District. The Strategic Plan is available at the District office.

A copy of the certified SSMP is available to personnel operating and maintaining the ISD sanitary sewer system and the general public at ISD's main office, and on the ISD website at www.ironhousesanitarydistrict.com. Copies of the SWRCB Orders are included in Appendix A.

## 1.4 REGULATORY CONTEXT

### 1.4.1 STATE WATER RESOURCE CONTROL BOARD ORDER NO. 2022-0103-DWQ

The District's SSMP has been updated in compliance with the State Water Resource Control Board (SWRCB) pursuant to Order No. 2022-0103-DWQ, "Statewide Waste Discharge Requirements General Order for Sanitary Sewer Systems" (WDR) and is maintained on the District's website and is available to the public upon request. The WDR requires all public entities that own or operate a wastewater collection system greater than one mile in length to comply with the elements of the WDR. Noncompliance with the Order constitutes a violation of the California Water Code and is grounds for enforcement action. Generally, the WDR requires that:

- In the event of a spill, all feasible steps shall be taken to control the released volume and prevent untreated wastewater from entering storm drains and water bodies.
- If a spill occurs, it must be reported to the SWRCB using California Integrated Water Quality System (CIWQS), the online reporting system developed by the SWRCB.
- An SSMP with all mandatory elements be developed and approved by the governing body that owns or is responsible for the operation of the wastewater collection system. The SSMP must include provisions to provide proper and efficient management, operation and maintenance of the sanitary sewer system.

A copy of this Order can be found through the State Water Resources Control Board's website:

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

### 1.4.2 ADDITIONAL REGULATORY REQUIREMENTS

The following regulatory requirements also establish the need for the District to maintain and implement a comprehensive SSMP, follow procedures to minimize the potential of spills and

demonstrate the proper and efficient management, operation and maintenance of its wastewater collection systems.

**California Water Code Section 13271, California Code of Regulations:** Section 13271 of the California Water Code, Title 23 of the California Code of Regulations, prohibits the discharge of sewage and hazardous material into the waters of the State and requires the proper notification of authorized agencies in the event of a spill. Entities which do not properly follow the requirements of this section may be found guilty of a misdemeanor and punished by fine, imprisonment, or both.

**Clean Water Act, Section 1251 of Chapter 33 of the United States Code:** In 1972, the federal Congress enacted the Federal Water Pollution Control Act, commonly known as the Clean Water Act (CWA). The CWA prohibits the discharge of pollutants, including sewage, into public waters of the United States. The federal government has the authority to enforce compliance with the CWA via specific permits, such as National Pollutant Discharge Elimination System (NPDES) permits, as well as court action such as administrative orders and consent decrees.

The District's SSMP is intended to be updated every six (6) years but is designed to be a living document that is continually revised to reflect current changes in sanitary sewer practices, technology, regulation and the District's collection system.

## 1.5 DOCUMENT ORGANIZATION

This SSMP has been prepared in accordance with the requirements of Order No. 2022-0103-DWQ and includes all eleven mandatory elements identified in the General Order. This document begins with this introduction to the SSMP and an overview of the District and its collection system. The body of the document is organized to discuss the eleven WDR elements in the order that they are presented in SWRCB Order No.2022-0103-DWQ.

SSMP Elements

1. Goals and Introduction
2. Organization
3. Legal Authority
4. Operations and Maintenance Program
5. Design and Performance Provisions
6. Spill Emergency Response Plan
7. Sewer Pipe Blockage Control Program
8. System Evaluation, Capacity Assurance Plan, and CIP
9. Monitoring, Measurement and Plan Modifications

10. SSMP Program Audits

11. Communication Plan

## 1.6 SSMP CERTIFICATION, AVAILABILITY AND DECLARATION

In accordance with agency practice, the District's updated SSMP will be presented to the ISD Board of Directors for approval at a public meeting on August 19, 2025. Per Section 5.3 of the Order, the District's Collections Superintendent, as the Legally Responsible Official, will certify the updated SSMP electronically in the online CIWQS Sanitary Sewer System Database. Copies of the certified SSMP will be provided to the District's sanitary sewer system operating and maintenance personnel, pursuant to Section E of said Order.

## 1.7 SCHEDULE FOR SSMP UPDATES AND AUDITS

Table 1-1 presents a schedule for Plan updates, including the schedule for conducting internal audits. The schedule includes milestones for incorporation of activities addressing prevention of sewer spills.

**Table 1-1. Required Elements and Dates of Original Submittal/Adopted SSMP Update**

| UPDATE | REQUIRED DATE OF SUBMITTAL | ACTUAL COMPLETION DATE |
|---|---|---|
| 3-Year SSMP Audit ending August 2, 2024 | February 2, 2025 | February 2, 2025 |
| 2025 SSMP Update including audit findings | August 2, 2025 | August 2, 2025 (adopted August 19, 2025) |
| 3-Year SSMP Audit ending August 2, 2027 | February 2, 2028 | |
| 3-Year SSMP Audit ending August 2, 2030 | February 2, 2031 | |
| 2031 SSMP Update including audit findings | August 2, 2031 | |
| 3-Year SSMP Audit ending August 2, 2033 | February 2, 2034 | |
| 3-Year SSMP Audit ending August 2, 2036 | February 2, 2037 | |
| 2037 SSMP Update including audit findings | August 2, 2037 | |

## 1.8 DISTRICT SERVICE AREA AND COLLECTION SYSTEM

Ironhouse Sanitary District is located in eastern Contra Costa County near the intersection of Highway 160 and Highway 4. Ironhouse Sanitary District is situated with the San Joaquin River

to the north, City of Brentwood to the south, and City of Antioch to the west. The District's service area and sewer system are shown in Figures 1-1 and 1-2.

Ironhouse Sanitary District at a Glance

- The District was formed in 1945
- The District serves approximately 48,000 residents in Oakley and Bethel Island
- The current wastewater treatment plant (WWTP) has been operating since 2011
- Historically, a majority of the District's recycled water was used on Jersey Island to grow hay, which was in turn used to feed ISD-owned cattle. The ISD cattle operation ceased in 2022. Currently, the recycled water is discharged into the Sacramento-San Joaquin River Delta.
- The District comprises a mix of residential, commercial, and agricultural land uses.
- Temperatures vary from average lows in the high 30s (in degrees Fahrenheit) in January to average highs in the low 90s in July.
- The District's service area has a mean annual rainfall of 13.3 inches.

ISD provides stewardship of City of Oakley and Bethel Island's sanitary sewer assets. The District owns and operates a 4.3 MGD Wastewater Treatment Plant (WWTP). As reported in CIWQS, the District has 119 miles of collection system pipelines and 20 miles of forcemain pipelines. Over half of the system was constructed after 1980. The system includes approximately 2,660 manholes and 30 sewer lift stations.

**Figure 1-1. Service Area Map**

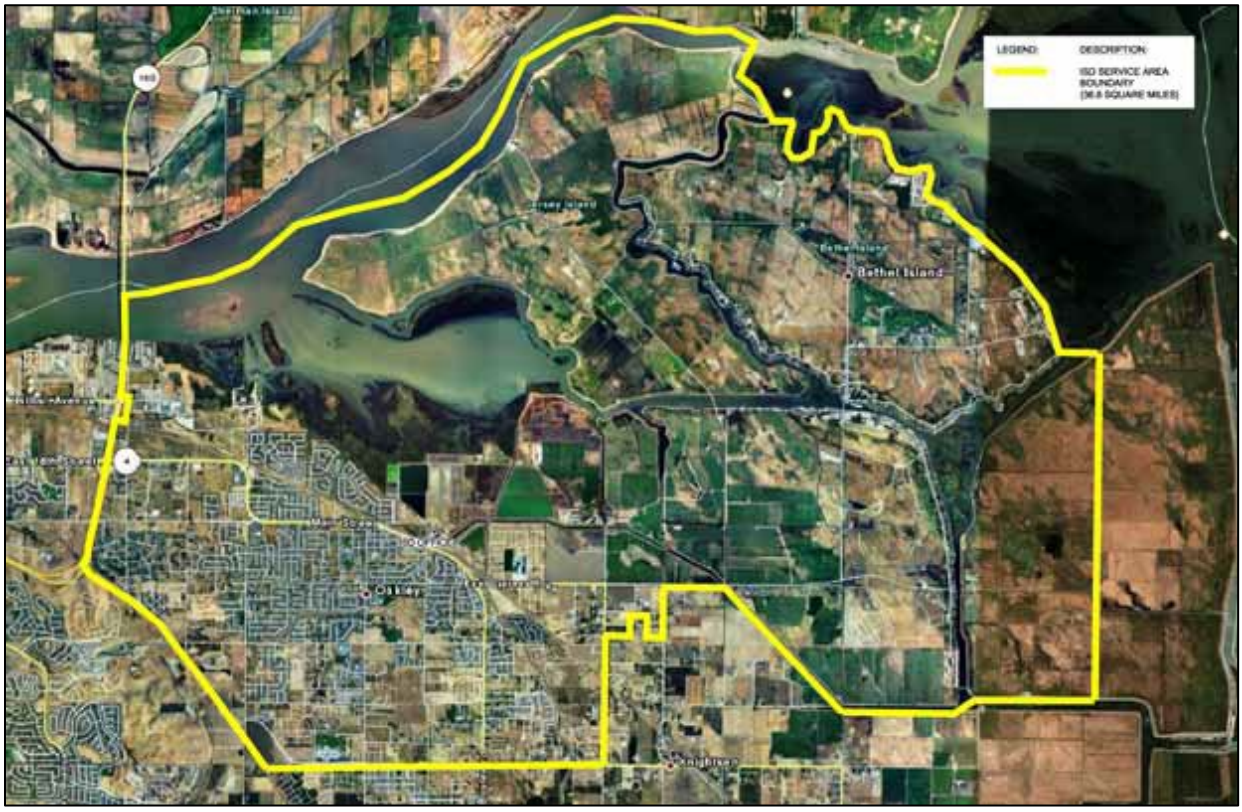


**Figure 1-2. Sewer Collection System**

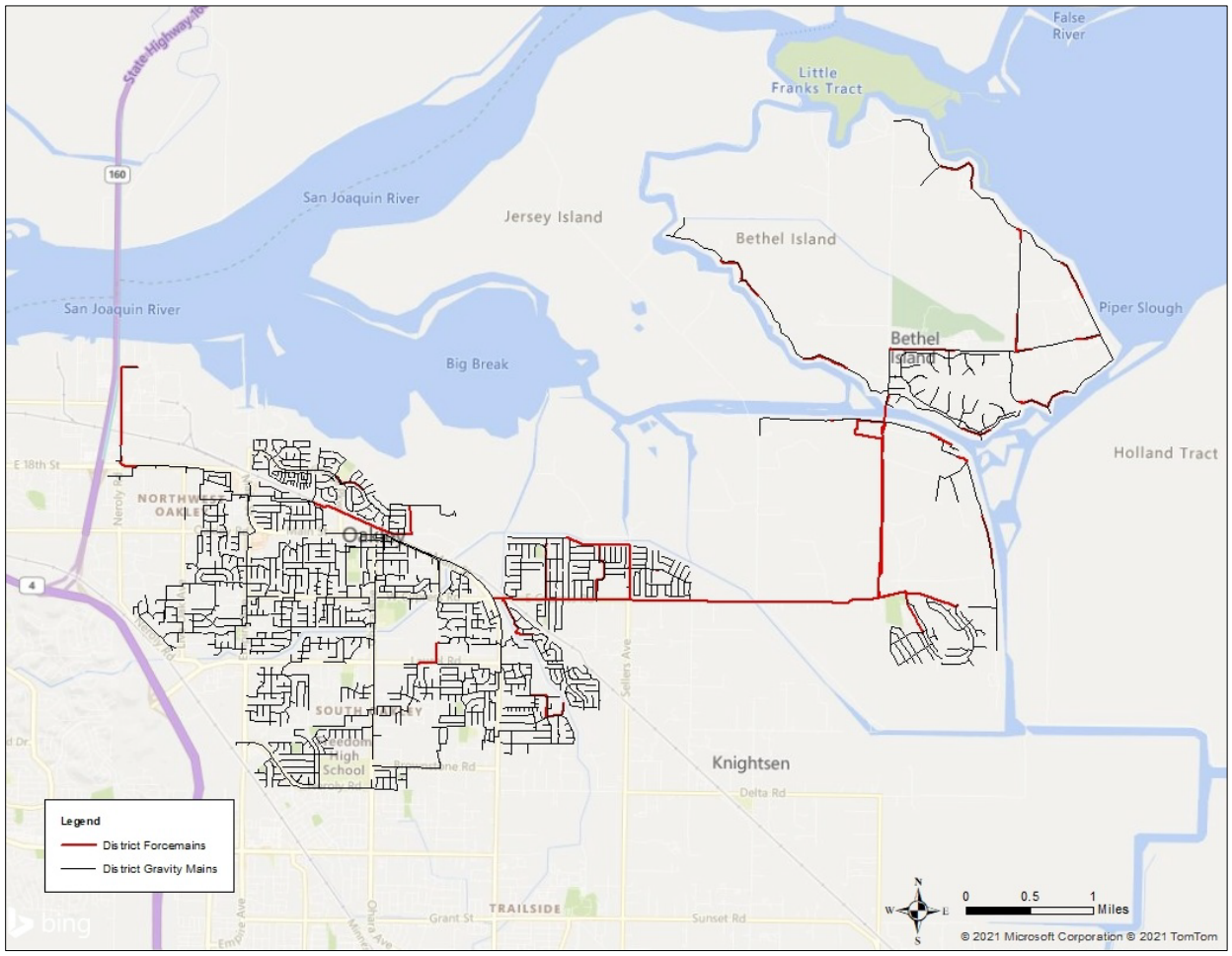



Table 1-2 on the following page provides information about the District's sewer collection system linear assets, as stored in the most current GIS map.

**Table 1-2. Size and Distribution of Active Sewers**

| Pipe Size | Gravity Sewer Length (ft) | Forcemain Length (ft) | Total Length (ft) | Total Length (mi) | % of Total |
|---|---|---|---|---|---|
| 4 | 56 | 10,347 | 10,403 | 2.0 | 1.2% |
| 6 | 75,799 | 23,296 | 99,095 | 18.8 | 11.9% |
| 8 | 511,335 | 22,454 | 533,789 | 101.1 | 63.9% |
| 10 | 44,382 | 5,559 | 49,941 | 9.5 | 6.0% |
| 12 | 41,557 | 337 | 41,895 | 7.9 | 5.0% |
| 14 | 153 | 35,616 | 35,769 | 6.8 | 4.3% |
| 15 | 36,459 | 77 | 36,536 | 6.9 | 4.4% |
| 18 | 15,642 | 262 | 15,903 | 3.0 | 1.9% |
| 21 | 4,022 | -- | 4,022 | 0.8 | 0.5% |
| 24 | 2,715 | -- | 2,715 | 0.5 | 0.3% |
| 30 | 3,192 | -- | 3,192 | 0.6 | 0.4% |
| 36 | 130 | -- | 130 | 0.0 | 0.0% |
| Unknown | 2,434 | -- | 2,434 | 0.5 | 0.3% |
| Total | 737,876 | 97,948 | 835,824 | 158.3 | 100.0% |

ISD also owns and maintains 32 pumping stations. The pumping stations lift localized flows into the gravity collection system, with some stations sending flow to a downstream station for re-pumping. The District's pump stations and their connectivity, if applicable, are listed on Table 1-3.

**Table 1-3 ISD Pump Stations**

| Pump Station Name | Firm Capacity[1] (gpm) | Where Does Flow Discharge |
|---|---|---|
| Bridgehead | 180 | Main Street, Oakley → Ironwood PS |
| Cypress Grove | 355 | E. Cypress Boulevard |
| Dutch Slough | 150 | Dutch Slough Road |
| Emerson Ranch | 450 | E. Cypress Boulevard |
| Gateway 1, 2, 3 | 836/184/158 | Gateway Road. Gateway 3 → Gateway 2 → Gateway 1 |
| Gilbert Ranch 1 | 249 | E. Cypress Boulevard |
| Ironwood | 1,000 | Main Street |
| Lauritzen | 75 | Bridgehead Road → Bridgehead PS |
| Laurel Heights | 110 | Clearwood Drive |
| Marsh Creek | 329 | Creekside Way |
| Main (MPS) | 1,400 | Bethel Island Road |
| Piper 1 | 277 | Gateway Road → MPS |
| Quail Valley | 600 | Main Street, Oakley |
| Stone 1 | 240 | Stone Road → MPS |
| Stone 2 | 200 | Windsweep Road → MPS |
| Summerlakes 1 | 1,925 | E. Cypress Boulevard |
| Summerlakes 2, 3 | 350/250 | Summerlakes 1 PS |
| Sandmound 1 | 150 | Sandmound Blvd → Sandmound 2 PS |
| Sandmound 2 | 190 | Mariner Road → WEB PS |
| Taylor 1 | 270 | Taylor Road → Main PS |
| Taylor 2, 3 | 190/310 | Taylor Road. Taylor 3 → Taylor 2 → Taylor 1 |
| Vintage Parkway | 600 | Walnut Meadows Drive |
| Willow 1 | 150 | Willow Road → MPS |
| Willow 2, 3 | 106, 200 | Willow Road. Willow 3 → Willow 2 → Piper 1 PS |
| WEB | 796 | Main Street, Oakley |
| Willow Park Marina | 300 | Wells Road → WEB PS |
| Bethel Island Pond | -- | Emergency Basin Return Pumps |

[1] Firm Capacity is measured as the station capacity with the largest pump out of service

## 1.9 APPENDIX A - SUPPORTING DOCUMENTS FOR ELEMENT 1

- SWRCB Order No. 2006-0003-DWQ and Order No. 2013-0058-EXEC

# ELEMENT 2 – ORGANIZATION

SWRCB Waste Discharge Requirement:

The Sewer System Management Plan (SSMP) must identify:

- The name of the Legally Responsible Official as required in Section 5.1 of the Statewide WDR;
- The position titles, telephone numbers, and email addresses for management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP elements;
- Organizational lines of authority through an organization chart or similar narrative document; and
- The chain of communication for reporting spills, from receipt of a complaint or other information, including the person responsible for reporting spills to the State and Regional Water Board and other agencies if applicable (such as County Health Officer, County Environmental Health Agency, and/or State Office of Emergency Services (OES)).

## 2.1 AUTHORIZED REPRESENTATIVE OF IRONHOUSE SANITARY DISTRICT

The ISD Collections Superintendent (Louis Solana) is the authorized representative or Legally Responsible Official (LRO). In addition to the Collections Superintendent, the Collections Supervisor (Frank Casey) is authorized to enter data into the online sanitary sewer spill database, California Integrated Water Quality System (CIWQS). In 2025, the District plans to add the Collections Supervisor to CIWQS as the alternate LRO. ISD Organizational Chart is shown on Figure 2-1.

## 2.2 MANAGEMENT POSITIONS RESPONSIBLE FOR ELEMENTS OF THE SSMP

A listing of management, administrative, and maintenance positions responsible for elements of the SSMP, including phone numbers and narrative explanation of duties, is included below. Table 2-1 lists responsible positions, names, and e-mail addresses for the person responsible for each element of this SSMP. Each person may be contacted by phone at their direct line shown in Table 2-1, or at the main number for the District office, which is 925-625-2279.

**Figure 2-1 Ironhouse Sanitary District Organizational Structure**

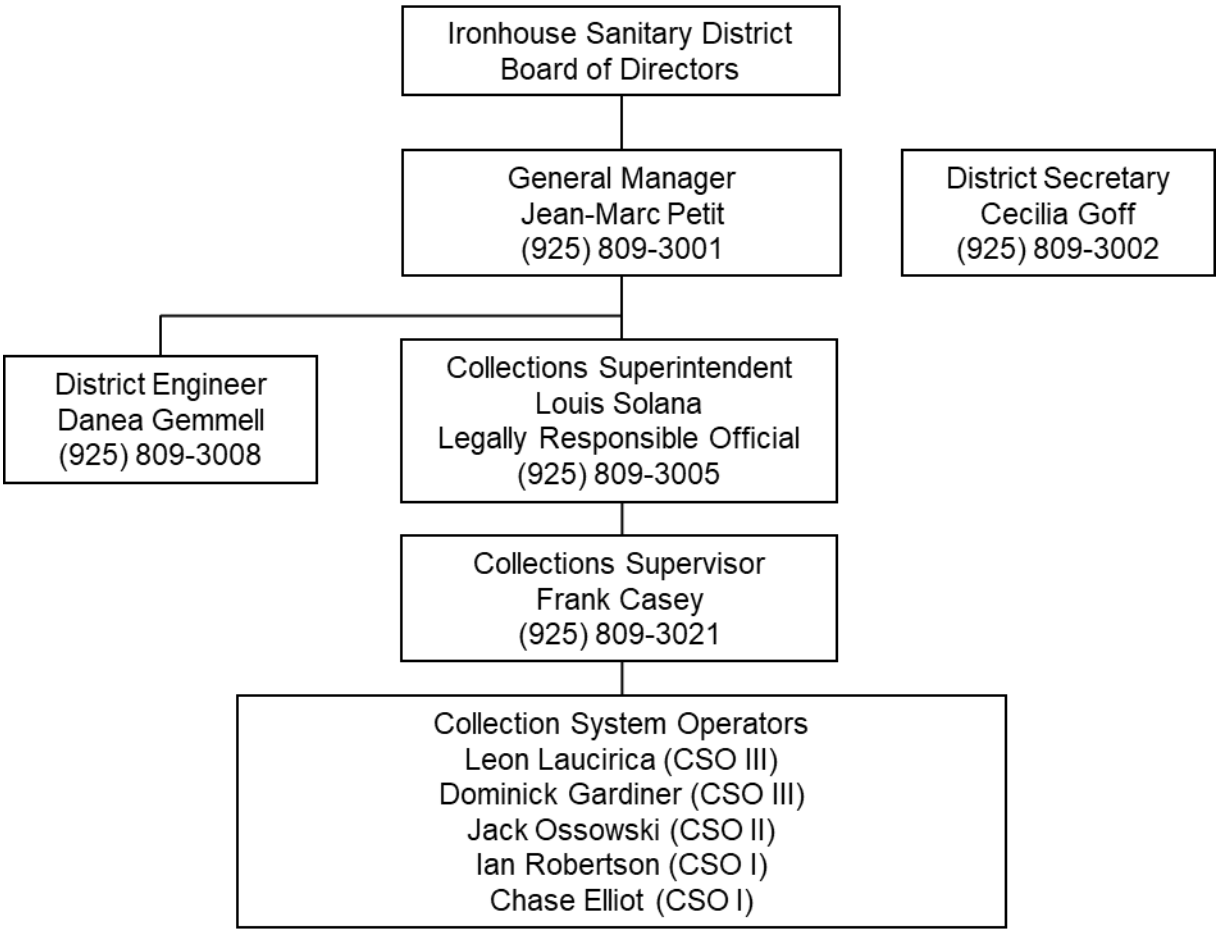


**Table 2-1. Contacts Responsible for SSMP Elements**

| SSMP Element | Responsible Party Position | Name | E-mail |
|---|---|---|---|
| Introduction | General Manager | Jean-Marc Petit | petit@isd.us.com |
| 1 – Goals | General Manager | Jean-Marc Petit | petit@isd.us.com |
| 2 - Organization | General Manager | Jean-Marc Petit | petit@isd.us.com |
| 3 - Legal Authority | General Manager | Jean-Marc Petit | petit@isd.us.com |
| 4 - O & M Program | Collections Superintendent | Louis Solana | solana@isd.us.com |
| 5 - Design & Performance Provisions | District Engineer | Danea Gemmell | danea@isd.us.com |
| 6 - Spill Emergency Response Program | Collections Superintendent | Louis Solana | solana@isd.us.com |
| 7 - FOG Control Program | Collections Superintendent | Louis Solana | solana@isd.us.com |
| 8 – SECAP | District Engineer | Danea Gemmell | danea@isd.us.com |
| 9 - Monitoring, Measurement, and Program Modifications | Collections Superintendent | Louis Solana | solana@isd.us.com |
| 10 - SSMP Audits | District Engineer | Danea Gemmell | danea@isd.us.com |
| 11 – Communication Plan | General Manager | Jean-Marc Petit | petit@isd.us.com |

## 2.3 IRONHOUSE SANITARY DISTRICT PERSONNEL AND RESPONSIBILITY

The following descriptions define the roles of District staff as related to the SSMP.

BOARD OF DIRECTORS

Establishes policy and approves funding. Approves organizational changes.

GENERAL MANAGER

Enforces policy, plans strategy, leads staff in implementation of **Goals**, recommends changes to the **Organization** and allocates resources, delegates responsibility, authorizes outside contractors to perform services, enforces the District's **Legal Authority**, serves as the legally responsible official (LRO), and is responsible for the entire SSMP content and approval by the Board of Directors. The General Manager also manages the **Communication Plan**, and is the District's public information officer.

DISTRICT ENGINEER

Prepares wastewater collection system planning documents; documents new and rehabilitated assets; works as needed on applicable permits, laws, and regulations; provides support to operation and maintenance; and oversees activities related to **Design and Performance Provisions**, **System Evaluation and Capacity Assurance**, and the District's Capital Improvement Program. Coordinates bi-annual **SSMP Audit**.

COLLECTIONS SUPERINTENDENT

Responsible for the maintenance of all District assets. Provides support in enforcing the District's **Legal Authority**. Implements activities required for **Operations and Maintenance**, **Spill Emergency Response**, and **FOG Control** activities. Submits CIWQS data, coordinates maintenance activities with other District staff as needed, prepares contingency plans, ensures proper notification of spills to regulatory agencies and faxes notification to the RWQCB and Contra Costa County Health Department. Responsible for **Monitoring, Measurement, and Modifications**. Contributes to the entire content, audit, and revision of the SSMP.

COLLECTIONS SUPERVISOR

Manages field operations, maintenance activities, authorized to submit CIWQS data, communicates and takes direction from the Collections Superintendent, implements contingency plans, leads spill emergency response, investigates and is responsible for phone notification of spills to regulatory agencies within two hours of a spill, trains Collection System Operator III (CSO III) in proper spill response and SSMP duties, and provides input to updating the SSMP.

COLLECTION SYSTEM OPERATOR (CSO)

Provide support to the Collection Supervisor, coordinate spill emergency response activities, provide spill data to the Collections Supervisor, complete trouble spot cleaning, train Maintenance Workers in proper spill response and SSMP responsibilities, provide input for updating the SSMP.

MAINTENANCE WORKERS

Conduct inspections, preventive, and maintenance activities on District assets, follow SOP/EOP, mobilize and respond to notification of stoppages and spills, operate sewer cleaning equipment, bypass pumping equipment, portable generators, and other spill response equipment during spill response.

## 2.4 CHAIN OF COMMUNICATION FOR SPILL REPORTING

The District has established processes for reporting spills that are discussed further in Element 6, Spill Emergency Response Plan. One process is implemented during business hours and the other outside of business hours. During business hours, spill-related calls received at the main number or by a District employee are transferred to the Collections Supervisor, who contacts the Collections Superintendent and Maintenance Workers and implements the SERP.

Outside of normal business hours, spill calls are received by a 24-hour answering service and routed to the on-call Maintenance Worker. The on-call Maintenance Worker is responsible for notifying the Collections Supervisor and Collections Superintendent, and to initiate activities required by the SERP. Table 2-2 lists contact information as of the date of this SSMP revision. Please check the District's website to confirm that this information has not changed.

**Table 2-2. Emergency Response Crew Contact Information**

General Phone # (925) 625-2279

| Group | Staff | Position | Work # |
|---|---|---|---|
| Management | Jean-Marc Petit | General Manager | 925-809-3001 |
| Administration | Cecilia Goff | District Secretary | 925-809-3002 |
| Sewer Collections | Louis Solana | Collections Superintendent | 925-809-3005 |
| Sewer Collections | Frank Casey | Collections Supervisor | 925-809-3021 |
| Engineering | Danea Gemmell | District Engineer | 925-809-3008 |

Figures 2-2 and 2-3 on the following page, taken from Element 6, shows the Chain of Communication for spill reporting during and outside of normal business hours.

## 2.5 APPENDIX B - SUPPORTING DOCUMENTS FOR ELEMENT 2

There are no Appendix documents to accompany Section 2. However, this Appendix B is included as a placeholder for future documents.

**Figure 2-2**

**Chain of Communication for Spill Reporting During Business Hours**

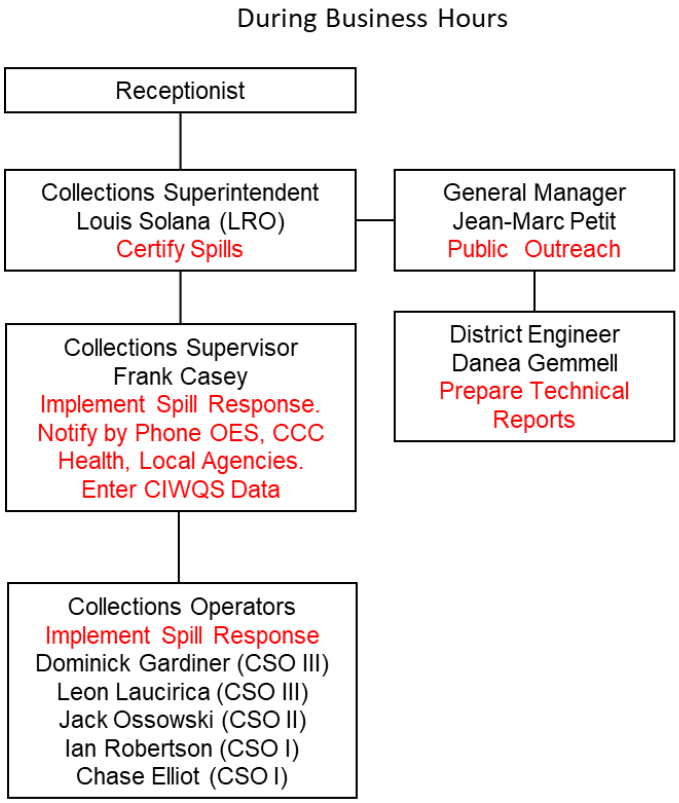
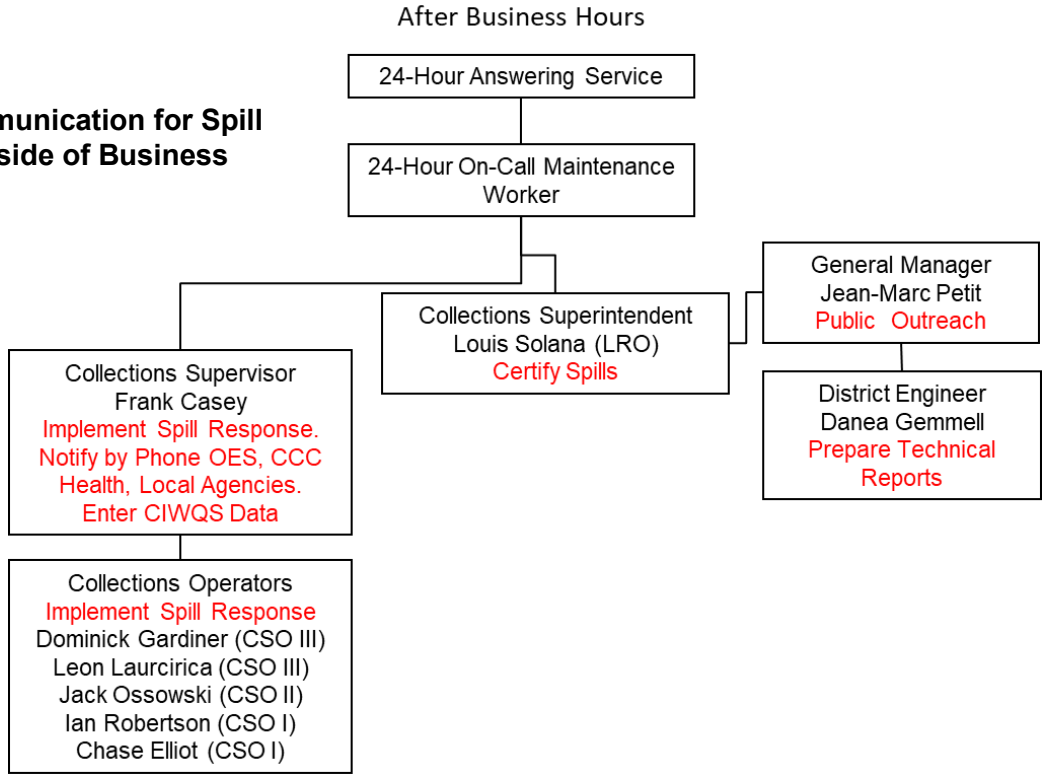



**Figure 2-3**

**Chain of Communication for Spill Reporting Outside of Business Hours**



# ELEMENT 3 – LEGAL AUTHORITY

SWRCB Waste Discharge Requirement:

Each Enrollee must demonstrate, through sanitary sewer system use ordinances, service agreements, or other legally binding procedures, that it possesses the necessary legal authority to:

- Prevent illicit discharges into its sanitary sewer system from inflow and infiltration (I&I); unauthorized stormwater; chemical dumping; unauthorized debris; roots; fats, oils, and grease; and trash, including rags and other debris that may cause blockages;
- Collaborate with storm sewer agencies to coordinate emergency spill responses, ensure access to storm sewer systems during spill events, and prevent unintentional cross connections of sanitary sewer infrastructure to storm sewer infrastructure;
- Require that sewers and connections be properly designed and constructed;
- Ensure access for maintenance, inspection, or repairs for portions of the service lateral owned or maintained by the Public Agency;
- Enforce any violation of its sewer ordinances, service agreements, or other legally binding procedures; and
- Obtain easement accessibility agreements for locations requiring sewer system operations and maintenance, as applicable.

## 3.1 GENERAL

Ironhouse Sanitary District Ordinance No. 25, Order No. 93-31 pertains to Sanitary Sewer Use. This Ordinance is available through the Ironhouse Sanitary District website and in Appendix C of this SSMP.

Storm sewers are managed by the City of Oakley, and Diablo Water District (DWD) manages the water supply, including groundwater supplies. ISD's administration building shares access with and is adjacent to the DWD corporation yard, which facilitates communication and collaboration. The District works closely with the City and/or DWD during spill response activities, as required to minimize impacts to storm drain infrastructure and avoid any potential impacts to drinking water supplies. The District is in the process of reviewing current written documents and procedures to determine whether this coordination should be documented further in writing.

## 3.2 DISTRICT ORDINANCE

The following sections of the District Ordinance provide requirements related to sewer system management.

### 3.2.1 PREVENT ILLICIT DISCHARGES INTO ITS SANITARY SEWER SYSTEM

Section 12.2 Prohibited Discharges states, “Except as hereinafter provided, no person shall discharge or cause to be discharged any of the following described waters or wastes to any public sewer.” Sub-sections A through O describe all prohibited discharges into ISD’s sanitary sewer system, and includes water of a source other than wastewater, petrochemicals, various solids, and garbage. The Ordinance describes, among other limitations, temperature and pH limitations, and unusual wastewater characteristics that preclude discharge.

More specifically, Section 12.2 G. limits water or waste containing floating grease, oil or fat of animal or vegetable origin discharged into the District’s sanitary sewer system. In addition, Ordinance No. 38, Order No. 09-24 establishes a Fat, Oils, and Grease (FOG) Control Ordinance. Ordinance No. 38 is included in Appendix G. See Element 7 for a more detailed discussion of the District’s FOG program.

### 3.2.2 REQUIRE THAT SEWERS ARE PROPERLY DESIGNED, CONSTRUCTED AND MAINTAINED

Section 6.1 through 6.21 contains details of design and construction standards and requirements for lateral connections to the District’s sanitary sewer system. Section 8.1 establishes the Central Contra Costa Sanitary District standards as the adopted District standards for design and construction of wastewater collection system facilities. See Element 5 of the SSMP for more information regarding the District’s design standards.

### 3.2.3 ACCESS & EASEMENTS FOR MAINTENANCE, INSPECTION, OR REPAIRS

Section 6.12 requires a 10-foot easement for access to sewers that are installed on private property. Section 12.12 authorizes the District Engineer and other duly authorized employees and agents to enter private property for various sewer inspection purposes.

### 3.2.4 ENFORCE VIOLATIONS OF THE SEWER ORDINANCE AND COLLECT PENALTIES

Ordinance 25 Section 9 - Enforcement Measures describes the District’s authority for enforcement of any violation of the District’s sewer ordinances including: Liability for Violation, Discontinuance of Service, Enforcement, Violation-Nonpayment of Bills, Public Nuisance-Abatement, Emergency Disconnection, Correction of Violations, Reconnection after Violation, and Reconnection after Nonpayment of Bills.

## 3.3 APPENDIX C - SUPPORTING DOCUMENTS FOR ELEMENT 3

- District Ordinance No. 25 (Sewer Code)
- District Ordinance No. 38 (FOG Control Ordinance)

# ELEMENT 4 – OPERATIONS AND MAINTENANCE PROGRAM

This section describes the District's activities and commitments related to mapping, maintenance, inspections, training, and equipment management, as required by the Statewide General Waste Discharge Requirements (Statewide WDR or WDR), Order No. 2022-0103-DWQ.

SWRCB Waste Discharge Requirement:

The Sewer System Management Plan (SSMP) must include those elements listed below that are appropriate and applicable to the Enrollee's system:

- 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 stormwater conveyance facilities;
- Scheduling and data collection system for preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular inspections and maintenance of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas including tree root areas;
- Regular visual and closed-circuit television (CCTV) inspections of manholes and sewer pipes;
- Internal and external training on a regular basis for staff and contractors in sanitary sewer system operations and maintenance; and
- Inventory of equipment and replacement parts, including identification of critical replacement parts.

## 4.1 SANITARY SEWER SYSTEM MAPPING

The District maintains a Geographic Information System (GIS) that is used in conjunction with the District's CalCAD Computer Maintenance Management System (CMMS). The GIS includes District assets including gravity pipelines, manholes and other structures, forcemain pipelines, and pump station locations. The CMMS is updated when CCTV reports reveal new information about the system, and when new housing developments connect to the system. The ISD Collections Superintendent ensures that the CMMS is updated with relevant information, including information from developer CAD drawings.

Digital software hosted by CalCAD is distributed to emergency on-call personnel and collection system maintenance personnel. The Collections Superintendent is responsible for updating maps. Storm drain maps of the City of Oakley have been added to GIS files and are available to staff through a website hosted by CalCAD. Additionally, maps are located in the on-call vehicles for reference. These maps are updated by the City of Oakley, and provided upon request to the District.

## 4.2 PREVENTIVE MAINTENANCE PLANNING

The District has been using CalCAD Asset Management software since December 2019. The web-based program is hosted by CalCAD at their Modesto office. The District is licensed for unlimited concurrent online users.

The CMMS Maintenance and Resource modules consist of work orders, preventive maintenance (PM), scheduler, and labor. The system generates work orders based on the schedule or inspections of the sewer system and facilities. Preventive maintenance on the collection system is driven by the scheduled annual, semi-annual, quarterly, six-week, or monthly cleanings.

Prior to implementing the CMMS, the District relied on a written schedule of PM activities, along with hard copies of tasks completed. The schedule was driven by past history, inspections of the system, daily monitoring of the 30 lift stations, and manufacturers' recommendations. Copies of the historical and current PM schedules are available upon request from the Collections Superintendent.

Updating the PM schedule is the responsibility of the Collections Superintendent and the Collections Supervisor. Completed work orders, inspections, and repair/replacement (R/R) records are located in the maintenance office.

## 4.3 CLEANING

The District cleans hot spot locations by hydroflushing, and also addresses service calls as received. In 2017, the District began cleaning pipelines on a system-wide basis, with a target of cleaning all pipes constructed of vitrified clay pipe, and over 30 years old (i.e., constructed in 1986 or prior), every five years. Prior to 2017, the District was not required to conduct scheduled maintenance due the relatively young age of the system. The cleaning plan is refined as needed using CCTV inspection.

## 4.4 FACILITY INSPECTIONS

### 4.4.1 GRAVITY PIPELINE INSPECTIONS

The CCTV crew consists of two collection workers that are trained and certified in interpreting and recording data using the National Association of Sewer Service Companies (NASSCO) Pipeline Assessment Condition Program (PACP) evaluation guidelines. ISD owns and operates one CCTV van equipped with a main line camera system that includes a separate lateral launch camera and a hand operated push camera with recording capability. Each of these units has the capability of attaching a sonde for line location requirements.

Prior to 2017, the District conducted CCTV inspection on an as-needed basis, in response to spills and service calls. In 2016, CCTV inspection was completed for pipes on the District's current trouble spots. Beginning in 2017, CCTV inspection has been scheduled to coordinate with the preventive cleaning program. The initial locations to be cleaned comprised areas with known maintenance issues, primarily focused in the oldest sections of the City of Oakley. The CCTV data that was collected through this process was used to develop the City's high priority

Old Town Pipeline Rehabilitation Project, which was completed in 2021. The District is launching the next phase of the rehabilitation and repair program in 2025/2026. The District utilized a risk-based assessment to develop the repair program. This approach and the resulting repair recommendations are discussed later in this section and also in the District's 2025 Master Plan, which will be available for review in late 2025.

Following the requirements of the updated WDR, the District will review the existing CCTV results to determine whether adjustments are needed to more closely track and document areas of the collection system that are prone to root intrusion or other recurring issues that could contribute to system backups or structural failure. For example, identified high-risk areas could be prioritized for more frequent video and visual inspections, with inspection frequency adjusted based on risk assessment and maintenance needs.

In addition, the District is reviewing the need for additional condition assessment of system areas that: 1) hold a high level of environmental consequence; 2) are located in or within the vicinity of surface waters, steep terrain, high groundwater elevations, environmentally sensitive areas, are within the vicinity of a receiving water with a bacterial-related impairment on the most current Clean Water Act section 303(d); and/or 3) might be vulnerable to direct and indirect impacts of climate change.

### 4.4.2 LIFT STATION YEARLY INSPECTIONS

The District operates and maintains 32 sewer lift stations with two pumps per station. Some lift stations require weekly inspections due to ragging and energy use. Other lift stations are operational all year without issues. All lift stations are placed on a regular inspection schedule, as shown in Appendix D. During each inspection, the wet wells are drained, cleaned, and inspected. The inspections also include a review of overhead lighting, high level float testing, and weed abatement if required.

Two lift stations have natural gas emergency engines and three have diesel-powered emergency generators. All sites are visited monthly, during which the crew performs a run test and inspection of each facility. Total run hours are checked to provide input to the schedule for routine maintenance on air filters, oil filters, batteries, and other components.

### 4.4.3 BETHEL ISLAND EMERGENCY PONDS INSPECTION

The Bethel Island Emergency Ponds are inspected weekly. The levees are inspected for signs of erosion, rodent infestation, and vegetation overgrowth. The Ponds are inspected for standing rainwater, liner integrity, lift station de-watering pump status, and vegetation overgrowth. The fences and gates are checked for vandalism and serviceability. The District contracts with JME Farms for weed abatement.

### 4.4.4 MONTHLY EMERGENCY PORTABLE PUMP AND GENERATOR RUN TEST/INSPECTIONS

ISD operates and maintains one 10-inch Jersey Island river pump, two 6-inch, one 4-inch, one 3-inch, and five 2-inch emergency portable pumps, and five emergency portable generators. All of these assets are run-tested and inspected on a monthly basis. Total run hours are checked to provide input to the schedule for routine maintenance.

## 4.5 REHABILITATION AND REPLACEMENT PROGRAM

Prior to 2016, the District's rehabilitation and replacement plans (RRP) were developed using qualitative methods based on documentation gained through service calls, pump station maintenance activities, and limited closed circuit television (CCTV) inspection of the gravity sewer pipelines. In 2016, the District developed a computerized risk management tool that assesses risk based on a pipe segment's likelihood and consequence of failure. Two of the factors that are used to determine Likelihood of Failure are the NASSCO PACP structural and operations/maintenance data collected through the District's CCTV program, as discussed above. This tool was refreshed and updated in 2025 as part of the Wastewater Collection System Master Plan.

In 2021, the District completed construction of the Old Town Pipeline Replacement project, which replaced or repaired most of the lines within central Oakley with known Structural Grade 5 defects (Grade 5 is the most severe defect on a scale of 1 to 5). In 2024, the District completed construction of the Bethel Island I&I Reduction Project, which used grout to seal known locations of infiltration and inflow on pipelines located on Bethel Island. Beginning in 2025/26, the District will initiate the second and following phases of the Old Town Pipeline Replacement project, thereby addressing all known Structural Grade 5 defects in the oldest part of the wastewater collection system.

## 4.6 TRAINING PROGRAM

Formal training for District staff is provided by the Collections Superintendent and outside contractors as needed. Most of the topics that are covered are required by Cal/OSHA regulations. Additional training is also provided on the SSMP, spill emergency response, and related topics. The Collections Superintendent is responsible for the yearly training plan and its implementation.

Training topics include, but are not limited to, CPR, Emergency Action Plan, Violence in the Workplace, Spill response, SSMP instruction, traffic flagging, SOPs, emergency equipment use, confined space requirements, confined space rescue, fall protection, and PPE. Tailgate safety training is scheduled for every ten working days.

In addition, collections maintenance staff are required to hold applicable CWEA certificates and complete the proper continuing education bi-annual requirements. Outside contractors working on the District's sewer system assets are required to produce appropriate documented training records. All hard copy and CMMS training documents are maintained by the Collections Superintendent.

## 4.7 EQUIPMENT AND PARTS INVENTORY

The CMMS contains an inventory of spare parts and required equipment for all District assets. The collection system parts are identified according to critical need. Parts are tied to work orders and when used the system notifies staff to reorder replacements.

## 4.8 APPENDIX D – SUPPORTING DOCUMENTS FOR ELEMENT 4

- Pump Station Inspection Schedule

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# ELEMENT 5 – DESIGN AND PERFORMANCE PROVISIONS

SWRCB Waste Discharge Requirement:

The Plan must include the following items as appropriate and applicable to the Enrollee's system:

- Updated Design Criteria and Construction Standards and Specifications:

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

- Procedures and Standards:

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

## 5.1 DISTRICT STANDARDS

Section 8.1 of Ordinance No. 25 states that the District has adopted the latest Standard Specifications of the Central Contra Costa Sanitary District, Martinez, California, and subsequent revisions and amendments thereto as the Standard Specifications of the District.

The Standard Specifications also include all the procedures and standards of inspection and testing for new, repaired, and rehabilitated sewers, manholes, and other appurtenances. The District enforces these standards through inspections by staff or outside contractors. Pump station and forcemain design standards vary based on project needs, and are developed in conjunction with the individual design documents.

Section 8.2 of Ordinance No. 25 states that under special conditions, the District Engineer may approve modifications and/or require additions to the Standard Specifications. As Central Contra Costa Sanitary District Standards are modified and published, ISD obtains copies and distributes them to staff as appropriate. Copies of the standard specifications are available at the District's office. The standard specifications and District special amendments are also available at the District's website:

https://www.ironhousesanitarydistrict.com/160/Sewer-Collection-System

In addition, the District has developed standards for capacity assessments that are discussed in Element 8. These standards include definition of the design storm as having a 10-year, 24-hour recurrence interval, guidelines for when pipes should be upsized to meet capacity needs, and guidelines for sizing new pipes to address projected dry and wet weather flows.

## APPENDIX E – SUPPORTING DOCUMENTS FOR ELEMENT 5

- Table of Contents from Central Contra Costa Sanitary District Standards

# ELEMENT 6 – SPILL EMERGENCY RESPONSE PLAN

The District's Spill Emergency Response Plan (SERP) is included in this Section, and is designed to be used in conjunction with the materials in Appendix F.

The Spill Emergency Response Plan shall include measures to protect public health and the environment. The District shall respond to spills from its system 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 toxic discharges to Waters of the State.

More specifically (also continued on the next page):

The Spill Emergency Response Plan shall 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:

A. Notify primary responders, appropriate local officials, and appropriate regulatory agencies of a spill in a timely manner;

B. 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;

C. Comply with the notification, monitoring and reporting requirements of this General Order, State law and regulations, and applicable Regional Water Board Orders;

D. Ensure that appropriate staff and contractors implement the Spill Emergency Response Plan and are appropriately trained;

E. Address emergency system operations, traffic control, and other necessary response activities;

F. Contain a spill and prevent/minimize discharge to Waters of the State or any drainage conveyance system;

G. Minimize and remediate public health impacts and adverse impacts on beneficial uses of Waters of the State;

H. Remove sewage from the drainage conveyance system;

I. Clean the spill area and drainage conveyance system in a manner that does not inadvertently impact beneficial uses in the receiving waters;

J. Implement technologies, practices, equipment, and interagency coordination to expedite spill containment and recovery;

K. Implement pre-planned coordination and collaboration with storm drain agencies and other utility agencies/departments prior, during, and after a spill event;

L. Conduct post-spill assessments of spill response activities;

M. Document and report spill events as required in the Statewide WDR; and

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

# Ironhouse Sanitary District

# SPILL EMERGENCY RESPONSE PLAN (SERP)

for
Outside Sanitary Sewer Spills
(Includes Contact Information for Inside Spills)

Updated August 2025

IRONHOUSE SANITARY DISTRICT
450 Walnut Meadows Drive, Oakley, CA 94561

Telephone (925) 625-2279  Fax (925) 625-0169

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# ELEMENT 6 – SPILL EMERGENCY RESPONSE PLAN

The District's Spill Emergency Response Plan (SERP) is current as of August 2, 2025 and incorporates the requirements of State Water Resources Control Board Order No. 2022-0103-DWQ (Statewide WDR or WDR).

## 6.1 INTRODUCTION

### 6.1.1 PURPOSE

The purpose of the Spill Emergency Response Plan is to outline the District's sanitary sewer system spill response activities, in order to minimize the impact of untreated or partially treated wastewater to the public and the environment. The Spill ERP serves as a guideline for Ironhouse Sanitary District personnel in cleaning and mitigating the effects of sanitary sewer spills, as well as in following proper sampling and reporting procedures.

On May 2, 2006, the State Water Resources Control Board (SWRCB) issued a directive through Order No. 2006-0003-DWQ to require all public wastewater collection system agencies in California with greater than one mile of sewers to be regulated under the Statewide WDR. Portions of this Order related to monitoring and reporting were amended by Order No. 2013-0058-EXEC, dated July 30, 2013. All of the previous SWRCB Orders were superseded by Order No. 2022-0103-DWQ, effective June 5, 2023, which is referenced in this document as the Statewide WDR.

### 6.1.2 STATEWIDE WASTE DISCHARGE REQUIREMENTS

SWRCB Waste Discharge Requirement:

Each Enrollee shall develop and implement a Spill Emergency Response Plan that identifies measures to protect public health and the environment. At a minimum, this plan must include procedures to:

- Notify primary responders, appropriate local officials, and appropriate regulatory agencies of all spills 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 the waters of the State;
- Comply with the notification, monitoring, and reporting requirements of the SWRCB WDR, the California Water Code, other State Law, and other applicable Regional Water Board WDRs or NPDES permit requirements;
- Ensure that appropriate staff and contractor personnel are appropriately trained and implement the SERP;
- Address emergency system operations, such as traffic and crowd 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/department prior to, during, and after a spill event;
- Conduct post-spill assessments of spill response activities;
- Document and report spill events; and
- Annually review and assess effectiveness of the Spill ERP and update it as needed.

### 6.1.3 SPILL CATEGORIES

***Definition of a Spill*:** The SWRCB defines a spill as a discharge of sewage from any portion of a sanitary sewer system due to a sanitary sewer system spill, operational failure, and/or infrastructure failure. Exfiltration of sewage is not considered to be a spill if the exfiltrated sewage remains in the subsurface and does not reach a surface water of the State.

***Four Categories of Spills:*** The four categories of reportable spills are defined in Table 6-1 on the following page. For reporting purposes, the Statewide WDR also has requirements for a “No Spill” category.

All agencies that own or operate sanitary systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility are required to report all spills, excluding private lateral spills.

**Table 6-1 Statewide WDR Spill Categories**

| | |
|---|---|
| **Category 1** | A spill of **any volume of sewage** from or caused by a sanitary sewer system or publicly owned lateral that results in a discharge to:<br>A **surface water**, including a surface water body that contains no flow or volume of water; or<br>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.<br>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. |
| **Category 2** | A spill from a sewer main of 1,000 gallons or greater that does not discharge to a surface water. |
| **Category 3** | A spill from a sewer main of equal to or greater **than 50 gallons and less than 1,000 gallons** that does not discharge to a surface water. |
| **Category 4** | A spill from a sewer main of **less than 50 gallons** that does not discharge to a surface water. |

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## 6.2 NOTIFICATION PROCEDURES AND FLOWCHARTS

This section includes notification flowcharts for:

- Spills occurring during working hours (8:00 a.m. to 5:00 p.m. Monday to Friday, excluding lunch hour
- Spills occurring after hours and weekends

The individual receiving the call should collect the information listed in Table 6-2 below.

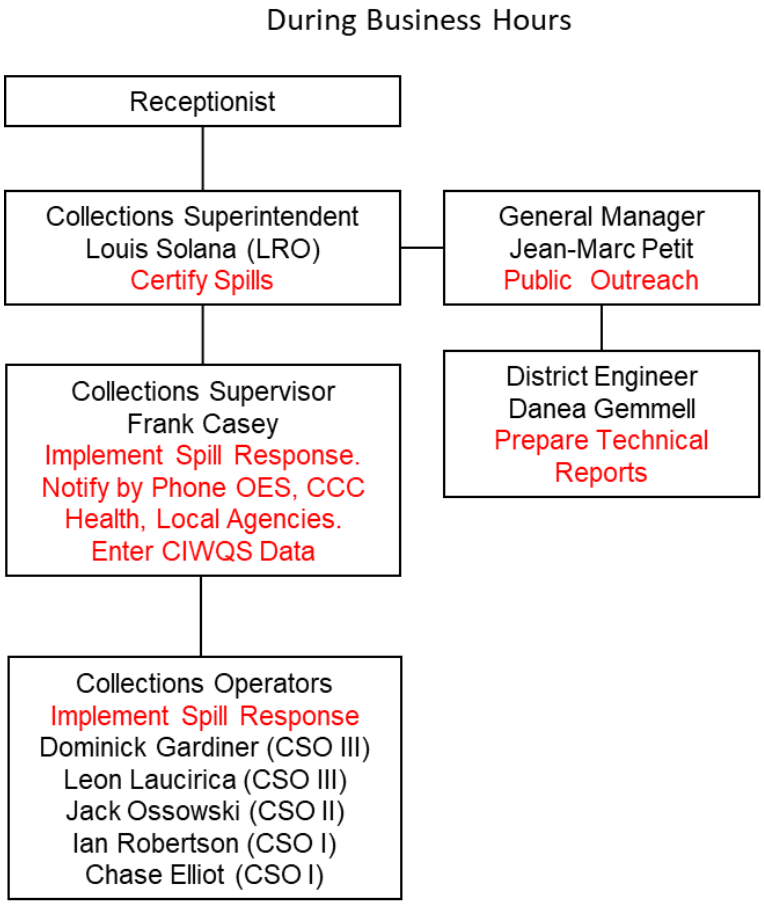
**Table 6-2 Information To Gather From Caller Of Potential Spill**

| Call Notes from Potential Spill – Conversation Checklist |
|---|
| Date and time of call; |
| Date and time the caller first noticed the spill, if available; |
| Specific location of the potential problem; |
| 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; |
| Caller's contact information, if available; and |
| Additional supportive information such as whether the caller smells any odor, or whether the appearance was at a cleanout or manhole would be beneficial. |
| Document on the same record the final resolution of the call. |

### 6.2.1 NOTIFICATION PROCEDURES FOR SPILLS DURING WORKING HOURS

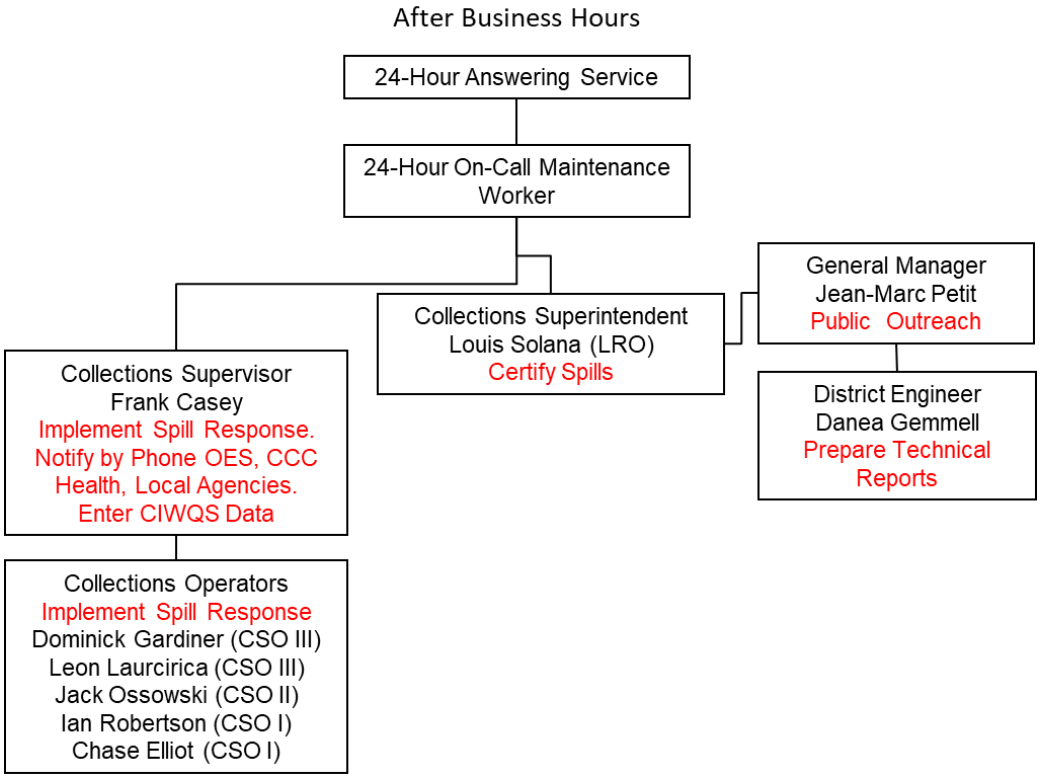
**Figure 6.1. Notification between 8 a.m. to 5 p.m. Monday to Friday**

**(excludes lunch hour)**



### 6.2.2 NOTIFICATION PROCEDURES FOR SPILLS AFTER HOURS & WEEKENDS

**Figure 6.2. Notification After Hours & Weekends**




### 6.2.3 NOTIFICATION FROM PUMP STATION SCADA ALARMS

The District's pump stations are monitored using a Supervisory Control and Data Acquisition (SCADA) system. Alarm conditions and other pump station issues are monitored and response is provided by District staff.

In a non-emergency response situation, a Work Order to address the issue is generated by the District.

### 6.2.4 CONTRACTOR OBSERVATION

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

1. Immediately notify the District
2. Protect storm drains;
3. Protect the public;

4. Provide Information to the District Maintenance Supervisor such as start time, appearance point(s), suspected cause, weather conditions, etc.; and
5. Direct ALL media and public relations requests to the General Manager.

## 6.3 SPILL RESPONSE PROGRAM

### 6.3.1 ROLE OF RESPONDERS

The Spill First Responder is responsible for directing the initial sewer response crew and spill standby crew through the entire spill event from mitigation, cause removal, clean-up, and follow-up CCTV. The Spill First Responder is also responsible for ensuring proper event documentation and photographs, timely reporting to appropriate agencies, and arranging for the collection of water samples as necessary.

The spill responders are required to take the appropriate action to secure the wastewater spill area, 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 to protect the environment. **Every effort must be made to prevent sewage from reaching waters of the State.**

6.3.2 Designated Emergency Responders

The list of staff designated to respond to spills and their contact information is provided in Table 6-3.

**Table 6-3 Spill Emergency Response Crew Contact Numbers**

| Department | Staff | Position | Phone # |
|---|---|---|---|
| Collections Department | Louis Solana | Superintendent | 925-809-3005 |
| | Frank Casey | Supervisor | 925-809-3021 |
| | Dominick Gardiner | Spill Response | 925-809-3020 |
| | Jack Ossowski | Spill Response | 925-809-3019 |
| | Leon Laucirica | Spill Response | 925-809-3022 |
| | Ian Robertson | Spill Response | 925-809-3017 |
| | Chase Elliot | Spill Response | 925-628-6933 |

6.3.3 Spill Response Equipment

The District maintains an inventory of spare parts and required equipment for all District assets. The collection system parts are identified according to critical need. Parts are tied to work orders and when used the system notifies staff to reorder replacements.

### 6.3.4 FIELD PROCEDURES

This section describes activities that are often required in spill response. Actual tasks may require adjustment based on field conditions.

#### 6.3.4.1 External Spill

Upon arrival at the site, the First Responder should complete the following:

- Note arrival time at spill site, and include the time in the Field Form basic incident information on site, and complete the form after finishing the response;
- Verify the existence of the spill;
- Verify the address and nearest cross street, and confirm that the spill is part of the District's sewer/conveyance system;
- Conduct visual monitoring to determine immediate actions, starting with documentation of spill volume using the methods included in this document;
- If the blockage cannot be cleared within a reasonable time, or sewer requires construction repairs to restore flow, then initiate containment and/or bypass pumping;
- Identify and clearly assess the affected area and extent of spill, including possible impacts to surface water. For spills discharging to surface water, conduct receiving water monitoring;
- Post required signs;
- Notify the Sewer Maintenance Superintendent if the spill appears to be large (over 1,000 gallons), in a sensitive area, may imminently and substantially endanger human health, results in fish kills, if there is doubt regarding the extent, impact, or how to proceed, or if additional help is needed for line cleaning or repair, containment, recovery, lab analysis, and/or site cleanup;
- If the spill volume is 50,000 gallons or greater, where safe and feasible, take necessary water quality samples at the point of discharge and at upstream and downstream locations.
    - Use best judgment and consult with the Sewer Maintenance Superintendent if uncertain;
    - Water quality monitoring is not given precedence over stopping the spill or protecting public health. However, if sufficient personnel are available, monitoring is conducted in parallel with these activities or with the cleanup effort;
    - For spills to surface waters greater than or equal to 50,000 gallons, water quality sampling is required **no later than 18 hours** after the initial notification of the spill;
- Comply with all safety precautions (traffic, confined space, etc.);
- Contact caller, if time permits. Identify spill cause and conduct CCTV inspection, as appropriate; and
- Document all activities through photos and written documentation.

The First Responder should provide the completed Field Form to the Sewer Maintenance Superintendent for input into the computerized maintenance management system.

6.3.4.2 Response In/On Private Property

Upon arrival at the location of a spill into a house or a building, the First Responder should evaluate and determine if the spill was caused by a blockage in the lateral or in the District-owned sewer main. If a blockage is found in a property owner's lateral, it should be clearly communicated that response and repair of private laterals is not the District's responsibility.

The homeowner is responsible for clearing any blockage or addressing a failure in the home's plumbing system or private lateral and for any resulting flood damage to the structure.

The First Responder should:

- Photograph and document all evidence that this spill is from private property.
- If the resident is not home, complete a Customer Service door hanger.
- If the resident is home, provide them with the pamphlet – "Sewer Spill Reference Guide" provided by CSRMA.
- If the tenant or property owner is unable to unwilling to address the cause of the spill, immediately contact the Assistant General Manager or Superintendent and discuss whether Code Enforcement, EHS, or RWQCB should be notified.
- The District is not authorized to repair the private lateral at the District's cost.
- If a backup in the main line is found to have caused the spill in a house or building, the first responder should take steps to address the issue as described above.
- The First Responder should be aware of the following guidelines for spills on private property:
    - Keep all family members and pets away from the affected area.
    - Place towels, rags, blankets, etc. between areas that have been affected and areas that have not been affected.
    - Move any uncontaminated property away from the spill area. Do not remove any contaminated items.
    - Turn off the HVAC system.
- The First Responder should assist with cleanup when the property damage is minor in nature and is outside of private building dwellings.
- If the spill was caused by District operations, call out and oversee a water damage restoration contractor to complete cleanup and restoration inside the property.

#### 6.3.4.3 Pump Station Spill

The First Responder to a potential pump station or force main failure should determine whether flow can be restored within a reasonable time. If it appears that flow cannot be restored within a reasonable time or if the conveyance system facility requires construction and/or repairs, then the First Responder should employ a pump station contingency plan covering containment, bypass pumping, and contractual assistance. The District currently does not have a formalized emergency contingency plan for the pump stations, and will develop this plan in the future.

#### 6.3.4.4 Containment and Bypass

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 spilling sewage;
- Plug storm drains using available equipment and materials to contain the spill, where feasible. 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 or vacuum flow from upstream of the blockage and dispose of downstream of the blockage to prevent further spilling; and
- If a spill reaches a water body, follow the requirements below for posting and spill notification signage and conduct water quality sampling.

### 6.3.5 RECOVERY AND CLEANUP

The recovery and cleanup phase begins immediately after the flow has been restored and the spill has been contained to the extent possible. Spilled sewage shall be vacuumed and/or pumped, and to the extent possible, discharged back into the sanitary sewer system.

#### 6.3.5.1 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 a spill event. The procedures described are for dry weather conditions and should be modified as required for wet weather conditions. Clean up should proceed quickly in order to minimize negative impact. Any water that is used in the cleanup process should be de-chlorinated prior to use.

Spills inside houses or buildings should be cleaned by a professional cleaning company. Contact information for professional cleaning companies can be found in the “Water Damage Restoration” section of the Yellow Pages. Claims by homeowners should be forwarded to the District Assistant General Manager.

6.3.5.2 Guidelines for Cleanup

On **hard surface areas**, collect all signs of sewage solids and sewage-related material either by hand or with the use of rakes and brooms. Take reasonable steps to contain and vacuum up the wastewater. Disinfect all areas that were contaminated from the spill. Apply minimal amounts of the disinfectant solution using a hand sprayer. Document the volume and application method of disinfectant that is employed. Allow area to dry. Repeat the process if additional cleaning is required.

On **landscaped or unpaved areas**, collect all signs of sewage solids and sewage-related material either by hand or with the use of rakes and brooms. Allow the area to dry. Repeat the process if additional cleaning is required.

If the spill has reached the **storm drain system**, the combination sewer cleaning truck should be used to vacuum/pump out the catch basin and any other portion of the storm drain that may contain sewage. In the event that a spill occurs at night, the location should be re-inspected as soon as possible the following day. The operator should look for any signs of sewage solids and sewage-related material that may warrant additional cleanup activities.

### 6.3.6 SPILL VOLUME ESTIMATION

Use the methods outlined in Appendix F to estimate the volume of the spilled sewage. Use two methods of estimation where feasible.

Some spills may occur in locations where the wastewater can seep into the ground or flow away from the spill location. In such conditions, consider when the spill was first detected and observations from bystanders in order to determine the total spill volume.

### 6.3.7 IMPACT TO WATERS OF THE STATE

If a spill is confirmed to have entered waters of the State[2], the Sewer Maintenance Superintendent must be notified immediately. The response team should then proceed with the following additional activities:

- Determine the extent of the spill by investigating downstream until there is no evidence of sewage or debris along the creek or water body;
- If the spill is 50,000 gallons or greater, collect water quality samples **within 18 hours** of becoming aware of the spill;
- Post contaminated water sign(s) and protect the water body from public access on all sides;
- Photograph sign placement and evidence of the spill in and around the water body to the

[2] Waters of the State include any surface water or groundwater, including saline waters, within the boundaries of the state as defined in Water Code section 13050(e), and are inclusive of waters of the United States.

farthest point reached by the sewage;

- Determine if the water body is safe to enter. During the winter storm season, cleaning the water body may not be feasible due to high water flows;
- If feasible, block the water body downstream of the affected area in a location that is safe to enter and is accessible to set up a pump or utilize other sewer cleaning equipment;
- To the extent feasible, recover and return contaminated water to the collection system;
- For spills 50,000 gallons or greater, perform follow-up sampling until posted signs can be removed. The Sewer Maintenance Superintendent ultimately determines when this happens and makes any follow up calls to affected agencies.

#### 6.3.7.1 Receiving Water Visual Observations

For all spills discharging to surface waters, visual observations of the receiving water are required by the Statewide WDR. More specifically, the following information should be gathered and documented:

- Estimated spill travel time to the receiving water;
- For spills entering a drainage conveyance system, estimated spill travel time from the point of entry into the drainage conveyance system to the point of discharge into the receiving water;
- Estimated spill volume entering the receiving water; and
- Photography of:
    - Waterbody bank erosion,
    - Floating matter;
    - Water surface sheen;
    - Discoloration of receiving water; and
    - Impact to the receiving water.

#### 6.3.7.2 Water Sampling And Analysis

Water quality sampling and testing are required for sanitary sewer spills that are 50,000 gallons or greater and reach surface water. Sampling and testing may be required for spills less than 50,000 gallons as required by the County Health Officer. The purpose of testing is to determine the extent and impact of the spill. The following guidelines must be followed:

- The First Responder should arrange for collection of samples. Samples should be collected as soon as possible after the discovery of the spill event;
- Sample locations are listed in Table 6-4, below. The County may require additional sample locations;
- Samples must be collected **within 18 hours** of initial knowledge of the spill event; and

- Records of monitoring information should include the date, exact place, and time of sampling or measurements, the individual(s) who performed the sampling or measurements, the date(s) analyses were performed, the individual(s) who performed the analyses, the analytical technique or method used, and the results of such analyses.

The required water quality sampling procedures are as follows:

- If the receiving water has no flow during the duration of the spill, report "No Sampling Due to No Flow" for the receiving water sampling locations.
- Analyze the collected receiving water samples for **Ammonia** and the appropriate other bacterial indicator(s) that include one or more of the following, unless directed otherwise by the Regional Water Board: **Total Coliform Bacteria, Fecal Coliform Bacteria, E-coli, and/or Enterococcus;** and
- Collect and analyze additional samples as required by the applicable Regional Water Board Executive Officer or designee.
- Sample locations are described further in the table below. The distance above and below the sample point should be selected by the District as appropriate for the spill location. Often, samples are taken 100 feet upstream and downstream of the spill location, and also at the spill location.

**Table 6-4 Sampling Locations for Spills 50,000 Gallons or Greater**

| Sampling Location | Description |
|---|---|
| DCS-001 | A point in a drainage conveyance system before the drainage conveyance system flow discharges into a receiving water. |
| RSW-001 Point of Discharge | A point in the receiving water where sewage initially enters the receiving water. |
| 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. |

- 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. A method is considered 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; and
- The analysis of water quality samples required per this General Order 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). Additional sites may require sampling, following the requirements of the County Environmental Health Services (EHS) department.

In addition, recommended procedures from EHS include the following:

- Keep the sterile collection bottle closed until it is to be filled. Do not contaminate inner surface of the lid or bottle rim;
- Collect water sample just below the surface in knee deep water, approximately 3 feet deep (full arm's length), without rinsing. If needed, extend the sampling pole to the fullest length to reach deeper water depth. Minimize contact with bank or beach bed as water fouling may occur;
- Remove cap and hold the bottle near its base and plunge it, neck downward, below the surface;
- Turn bottle until neck points slightly upward and mouth is directed toward the current. Fill bottle leaving about 1 inch of air to allow lab to mix by shaking. Collect a minimum of 100 mL. (If applicable, insert sterile collection bottle into the holder on the sample pole. Extend the sample pole and plunge bottle end into the water, bottle opening downward);
- Immediately place cap securely on bottle to avoid leaks and contamination;
- Dry the bottle;
- Label container with distinctive sample site name, date, and time collected; and
- Complete the laboratory requisition slip with requested information (site, bottle number, collector, date and time of collection, type of sample, test requested, name and phone number of responsible person for reporting purposes, and deliverer name). Note any field observations that may have occurred during the sampling;
- Samples should be stored and shipped by placing the water sample bottle in a cooler with frozen blue ice. Water sample must be kept cool. Ice may be used but care must be taken so water samples are not contaminated or diluted by the ice.

The samples shall then be brought to the Fruit Growers Laboratory in Stockton, as listed in Table 6-4.

**Table 6-4. Laboratory Information**

| Laboratory | Address | Contact Info |
|---|---|---|
| Fruit Growers Laboratory | 2500 Stagecoach Road, Stockton, CA 95215 | 209-942-0182 |

Coordination assistance is available from the following wastewater treatment plant staff:

- John DeFremery, Acting Plant Manager: 925-809-3033

6.3.7.3 Spill Technical Report

If 50,000 gallons or greater spill reaches surface waters, a Spill Technical Report must be prepared and submitted to the CIWQS online spill database within 45 calendar days of the spill end date. A template for the Spill Technical Report is included in Appendix F. The Spill Technical Report must include, at a minimum, the following:

1. Spill causes and circumstances, including at minimum:

    a) Complete and detailed explanation of how and when the spill was discovered;

    b) 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;

    c) Diagram showing the spill failure point, appearance point(s), the spill flow path, and ultimate destinations;

    d) Detailed description of the methodology employed, and available data used to calculate the discharge volume and, if applicable, the recovered spill volume;

    e) Detailed description of the spill cause(s);

    f) Description of the pipe material, and estimated age of the pipe material, at the failure location;

    g) Description of the impact of the spill;

    h) Copy of original field crew records used to document the spill; and

    i) Historical maintenance records for the failure location.

2. The District's response to the spill:

    a) Chronological narrative description of all actions taken by the District to terminate the spill;

    b) Explanation of how the SERP was implemented to respond to and mitigate the spill; and

    c) Final corrective action(s) completed and a schedule for planned corrective actions, including:

        i) Local regulatory enforcement action taken against an illicit discharge in response to this spill, as applicable,

        ii) Identifiable system modifications, and operation and maintenance program modifications needed to prevent repeated spill occurrences, and

        iii) Necessary modifications to the SERP to incorporate lessons learned in responding to and mitigating the spill.

3. Water Quality Monitoring, including at minimum:

    a) Description of all water quality sampling activities conducted;

    b) List of pollutant and parameters monitored, sampled and analyzed;

    c) Laboratory results, including laboratory reports;

    d) Detailed location map illustrating all water quality sampling points; and

    e) Other regulatory agencies receiving sample results (if applicable).

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

The District Engineer is responsible for development and certification of the Spill Technical Report.

## 6.4 INVESTIGATION & DOCUMENTATION

### 6.4.1 INVESTIGATION AND DOCUMENTATION PROCEDURE

The following items provide a guideline for the District's investigation and documentation procedure.

1. Photograph spill site throughout mitigation efforts as appropriate;
    i. upon arrival (close-up to determine volume & further away to show location and affected areas)
    ii. after barricading/posting
    iii. after containment
    iv. after completing disinfection and clean-up
2. Fill out the sewer spill Field Form kept in all sewer vehicles (see Appendix F);
3. Attempt to capture the time of the start of the spill if not already known;
4. Provide accurate flow measurements and duration of spill (see Appendix F);
5. Provide map of problem location [manhole(s) involved] and where the spill discharged to (e.g., storm drain, field, stream, etc.);
6. CCTV mainline as soon as possible and/or feasible; and
7. Ensure all photos, forms, maps and CCTV get logged in spill binder and into CMMS program.

### 6.4.2 POST-SPILL ASSESSMENT

For each spill event that is a Category 1 spill, all participants involved in the response – from the person who received the call to the last person to leave the site – should meet, as soon as feasible, after the event to review and evaluate the incident and the District's response procedures. The objective of the Post-Spill Debrief is to determine actions necessary, if any, to reduce the recurrence and better mitigate the effects of spills.

The failure analysis is intended to determine if additional maintenance, repair/replacement or other follow-up actions or response procedures changes are needed to reduce or eliminate the likelihood of future spills. The procedures for investigating a spill are as follows:

- Review and completing the Sewer Spill Report;
- Review the incident timeline and other documentation regarding the incident;
- Review actions by all persons involved in the response, including the initial recipient of the complaint;
- Review communications with all reporting parties and witnesses;
- Review volume estimate, volume recovered estimate, volume estimation assumptions, and associated drawings;

- Review available photographs;
- Interview staff that responded to the spill;
- Review past maintenance records of all affected manholes and pipe segments;
- Conduct a CCTV inspection to determine the condition of the line segment immediately following the spill and reviewing the video and logs;
- Review any FOG related information or results; and
- Identify any changes or additions needed to the SERP and SSMP following the event.

The product of the failure analysis investigation should be the determination, to the best extent possible, of the root cause of the spill, and identification of corrective actions.

### 6.4.3 DOCUMENTATION

In accordance with the WDR, the District should maintain the following records for each sanitary sewer spill. Records are maintained at the District office.

1. Records should be retained for at least five (5) years
2. Records must be readily available, either electronic or hard copies, for review by Water Board staff during onsite inspections or through an information request
3. Records should be retained for each of the following spill-related events and activities:
    a. Spill event complaints
    b. Category 4 spills
    c. Sewer system telemetry records
    d. Sewer system management plan implementation records
    e. Audit records
    f. Equipment Records
    g. Work orders

## 6.5 RECORDKEEPING

Specific requirements for recordkeeping are listed further in the sections below.

### 6.5.1 RESPONSIBILITIES

The First Responder should complete the Spill Field Form (See Appendix F). The District Maintenance Superintendent maintains spill-related files with the additional information discussed below.

### 6.5.2 SPILL EVENT COMPLAINTS

The District shall maintain records for each of the following spill-related events and activities:

- Spill event complaint, including but 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.
- Records documenting the steps and/or remedial action(s) undertaken by the District;
- Records documenting how estimate(s) of volume(s) and, if applicable, volume(s) of spill recovered were calculated;
- All California Office of Emergency Services notification records, as applicable; and
- Water quality monitoring records.

### 6.5.3 RECORDKEEPING OF CATEGORY 4 SPILLS

The District shall maintain the following records for each individual Category 4 spill:

1. Contact information: Name and telephone number of District contact person to respond to spill-specific questions;
2. Spill location name;
3. Description and GPS coordinates for the system location where the spill originated;
4. Did the spill reach a drainage conveyance system? If Yes:
    a. Description of drainage conveyance system location;
    b. Estimated spill volume fully recovered within the drainage conveyance system;
    c. Estimated spill volume remaining within the drainage conveyance system; and
    d. Estimated total spill volume exiting the sanitary sewer system.
5. Spill date and start time;
6. Spill cause(s) (for example, root intrusion, grease deposition, etc.);
7. System failure location (for example, main, pump station, etc.);
8. Description of spill response activities including description of immediate spill containment and cleanup efforts;
9. Description of how the volume estimation was calculated, including, at minimum:
    a. The methodology and type of data relied upon, including 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 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.

10. Description of implemented system modifications and operating/maintenance modifications.

### 6.5.4 RECORDKEEPING FOR TOTAL ANNUAL SPILL INFORMATION

The District shall keep the following records summarizing annual spills:

1. Estimated total annual spill volume;
2. Description of spill corrective actions, including at minimum:
   a. Local regulatory enforcement action taken against the sewer lateral owner in response to a spill, as applicable; and
   b. System operation, maintenance and program modifications implemented to prevent repeated spill occurrences at the same spill location.

### 6.5.5 SEWER SYSTEM TELEMETRY RECORDS

The District shall maintain the following sewer system telemetry records if used to document compliance with Statewide WDR, as applicable:

1. Supervisory control and data acquisition (SCADA) system(s);
2. Alarm system(s);
3. Flow monitoring device(s) or other instrument(s) used to estimate sewage flow rates, and/or volumes;
4. Computerized maintenance management system records; and
5. Asset management-related records.

### 6.5.6 SEWER SYSTEM MANAGEMENT PLAN IMPLEMENTATION RECORDS

The District shall maintain records documenting the implementation of its Sewer System Management Plan, including documents supporting its Sewer System Management Plan audits, corrections, modifications, and updates to the Sewer System Management Plan.

### 6.5.7 AUDIT RECORDS

The District shall maintain, at minimum, the following records pertaining to its Sewer System Management Plan audits, and other internal audits:

1. Completed audit documents and findings;
2. Name and contact information of staff and/or consultants that conducted or involved in the audit; and

3. Follow-up actions based on audit findings.

### 6.5.8 EQUIPMENT RECORDS

The District shall maintain a log of all owned and leased sewer system cleaning, operational, maintenance, construction, and rehabilitation equipment.

### 6.5.9 WORK ORDERS

The District shall maintain record of work orders for operations and maintenance projects.

### 6.5.10 SPILL SPECIFIC MONITORING (DOCUMENTATION)

Spill-specific monitoring means the gathering of information and data for a specific spill event to be reported or kept as records. The WDR requires the following assessments, as a component of data gathering following a spill.

#### 6.5.10.1 Spill Location and Spread

The District shall visually assess the spill location(s) and spread using photography, global positioning system (GPS), and other best available tools. The District shall document the critical spill locations, including:

- Photography and GPS coordinates for:
  - The system location where spill originated; or
  - For multiple appearance points of a single spill event, the points closest to the spill origin.
- Photography for:
  - Drainage conveyance system entry locations;
  - The location(s) of discharge into surface waters, as applicable;
  - Extent of spill spread; and
  - The location(s) of clean up.

#### 6.5.10.2 Spill Volume Estimation

The District shall estimate the total spill volume using updated volume estimation techniques, calculations, and documentation for electronic reporting. The District shall update its notification and reporting of estimated spill volume (which includes spill volume recovered) as further information is gathered during and after a spill event.

- Initial service call information
- Spill Report Form
- Copies of the certified CIWQS report forms including volume estimate

- CCTV inspection if completed
- Water quality sampling and test results, if applicable
- Spill Technical Report if prepared

### 6.5.11 OTHER RECORDS

In addition to the abovementioned records, the following additional records should also be retained for all spills when available and as applicable:

- All original recordings for continuous monitoring instrumentation
- Service call records and complaint logs of calls received by the District for the previous five years
- Work orders, work completed, and any other maintenance records from the previous five years that are associated with spills
- Documentation of performance and implementation measures for the previous five years

## 6.6 SPILL REPORTING PROCEDURES, REGULATORY NOTIFICATIONS, AND RECORDKEEPING

### 6.6.1 REGULATORY REPORTING

This section describes the requirements that have been established for reporting of spills to the regulatory agencies.

Table 6-5 summarizes key deadlines to be aware of for spill reporting. Table 6-6 summarizes all regulatory reporting requirements, as described further in this section.

**Table 6-5. Key Deadlines for Spill Reporting**

| | |
|---|---|
| **2 HOURS** of being aware of spill | Call Office of Emergency Services & Health Department if Category 1 sewer main spill is 1000 gallons or more |
| **3 BUSINESS DAYS** of being aware of spill | Submit draft reports to CIWQS for Category 1 and sewer main or Category 2 sewer main spills |
| **15 CALENDAR DAYS** from spill end date | Certify Category 1 and Category 2 spills |
| **30 CALENDAR DAYS** from end of month if applicable | Certify Category 3 and/or Category 4 sewer main spills or submit “No Spill” report |
| **45 CALENDAR DAYS** from spill end date | Submit Spill Technical Report for spills 50,000 gallons or larger that reach Waters of the State |
| **90 CALENDAR DAYS** from spill end date (Cat 1 or 2) or certified spill report due date (Cat 3) | Submit amended spill report for Category 1 through 3 spills |
| **FEBRUARY 1 of each year** | Submit Category 4 spill summary report |

**Table 6-6. Regulatory Reporting Deadlines**

| Trigger | Due Date | Action Required | Person Responsible |
|---|---|---|---|
| Initial Notification | 0 hrs | Contact Maintenance Superintendent, Lead Maintenance Worker, Deploy Crews and Equipment as Needed | First Responder |
| 1000 gal or more have reached or are likely to reach waterways | Within 2 hours of beginning of spill | Call OES 1-800-852-7550. Ask for Control Number. | Collections Supervisor |
| Cat 1 or Cat 2 Spill | Within 72 hours of beginning of spill | Enter Spill Report in CIWQS | Collections Supervisor |
| | Within 15 calendar days of spill end date | Certify Spill Report in CIWQS | Collections Superintendent |
| Cat 3 Spill | Within 30 days of end of month in which spill occurred | Certify Spill Report in CIWQS | Collections Superintendent |
| Cat 4 Spill | Within 30 days of end of month in which spill occurred | Certify Spill Report in CIWQS | Collections Superintendent |
| Cat 4 Spill Annual Report | On Feb 1 of the year following the year in which Cat 4 spills occurred | Add Supplemental Information in Electronic Form to CIWQS | Collections Superintendent |
| 50,000 gal or more have been released | Within 18 hours of being aware of Spill | Complete Water Quality Testing according to WQ Monitoring Program | Collections Supervisor |
| | Within 45 calendar days from last day of Spill | Submit Technical Report | District Engineer |

The sections below summarize the regulatory reporting requirements for spill reporting and regulatory notification.

### 6.6.2 MULTIPLE APPEARANCE POINTS – SINGLE SPILL

For reporting purposes, if one spill event of any category results in multiple appearance points in a sewer system, a single spill report is required in CIWQS which includes the GPS coordinates for the location of the spill appearance point closest to the failure point, blockage or location of the flow condition that caused the spill, and descriptions of the locations of all other discharge points associated with the single spill event.

### 6.6.3 2-HOUR NOTIFICATION TO REGULATORY AGENCIES OF SPILLS

Cal OES is to be notified of a Category 1 spill 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. In addition, both the County Health Officer and EHS are to be contacted. During regular business hours, the Main EHS office Health Officer can be reached at **(925) 655-3200**. During evenings/weekends, call the County Sheriff's Office at **(925) 646-2441.**

The First Responder is responsible for reviewing the field conditions as needed to define the level of reporting to regulatory agencies. If it is determined that the criteria for Cal OES notification were met, then the First Responder must notify Cal OES of the event no later than two (2) hours after:

1. The District has knowledge of the spill;
2. Notification is possible; and
3. Notification can be provided without substantially impeding cleanup or other emergency measures.

The Cal OES phone number is **(800) 852-7550**.

The following information should be reported to Cal OES, as applicable:

- Name and phone number of the person notifying the California Office of Emergency Services;
- Estimated spill volume (gallons);
- Estimated spill rate from the system (gallons per minute);
- Estimated discharge rate (gallons per minute) directly into waters of the State or indirectly into a drainage conveyance system;
- Spill incident description, which includes:
    - Brief narrative of the spill event, and
    - Spill incident location (address, city, and zip code) and closest cross streets and/or landmarks;
- Name and phone number of contact person on-scene;

- Date and time the Enrollee was informed of the spill event;
- Name of sanitary sewer system causing the spill;
- Spill cause or suspected cause (if known);
- Amount of spill contained;
- Name of receiving water body receiving or potentially receiving discharge; and
- Description of water body impact and/ or potential impact to beneficial uses.

The First Responder is responsible for obtaining an **OES Control Number**.

Following the initial notification to Cal OES and until the spill report is certified in the SWRCB online Sanitary Sewer Spill Database, the LRO will provide updates (or provide direction for updates to be provided) to Cal OES regarding substantial changes to the following:

- Estimated spill volume (increase or decrease in gallons initially estimated);
- Estimated discharge volume discharged directly into waters of the State or indirectly into a drainage conveyance system (increase or decrease in gallons initially estimated); and
- Additional impact(s) to the receiving water(s) and beneficial uses.

### 6.6.4 DETAILED REPORTING REQUIREMENTS

Table 6-5 provides detail on the District's regulatory reporting process, which is also described below. All reporting must be submitted electronically to the online CIWQS Sanitary Sewer System Database (https://ciwqs.waterboards.ca.gov). Electronic reporting may solely be conducted by a Legally Responsible Official or Data Submitter(s) previously designated by the Legally Responsible Official.

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.

**Category 1 Spills**

6.6.4.1 Spill Reporting for Category 1 Spills – 3 Business Days of Becoming Aware of Spill

Cal OES, EHS, and the County Health Officer shall receive notification of Category 1 spills greater than or equal to 1,000 gallons.

The District's Data Submitter, must then submit the initial draft report to the SWRCB's CIWQS Online Spill Database **within 3 business days of becoming aware of the spill.**

Table 6-6 on the following page lists information that is required in the draft spill report. The data provided in the draft spill must be supplemented further, during the certification process, as discussed further below

**Table 6-6 Category 1 and 2 CIWQS Draft Spill Report – Required Information**

| Required Information for Category 1 and 2 Draft Spill Reports |
|---|
| 1. Contact information: Name and telephone number of contact person to respond to spill-specific questions;<br>2. Spill location name;<br>3. Date and time the District was notified of, or self-discovered, the spill;<br>4. Operator arrival time;<br>5. Estimated spill start date and time;<br>6. Date and time the District notified the California Office of Emergency Services, and the assigned control number;<br>7. Description, photographs, and GPS coordinates of the system location where the spill originated;<br>8. 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;<br>9. Estimated total spill volume exiting the system;<br>10. Description and photographs of the extent of the spill and spill boundaries;<br>11. Did the spill reach a drainage conveyance system? If Yes:<br>12. Description of the drainage conveyance system transporting the spill;<br>13. Photographs of the drainage conveyance system entry location(s);<br>14. Estimated spill volume fully recovered from the drainage conveyance system;<br>15. Estimated spill volume remaining within the drainage conveyance system;<br>16. Description and photographs of all discharge point(s) into the surface water;<br>** Items 12 and 13 are required for Category 1 spills only **<br>17. Estimated spill volume that discharged to surface waters; and<br>18. Estimated total spill volume recovered. |

6.6.4.2 Spill Certification for Category 1 Spills – 15 Calendar Days of the Spill End Date

Within 15 calendar days of the spill end date, the LRO must review and certify the report in the CWIQS Online spill database @ http://ciwqs.waterboards.ca.gov/ciwqs

The Certified Spill Report requires additional information to supplement the data provided in the Draft Spill Report. Table 6-7 on the following page summarizes information that is required during spill certification.

**Table 6-7 Category 1 and 2 CIWQS Spill Certification – Required Information**

| Required Information for Category 1 and 2 Spill Certification |
|---|
| 1. Description of the spill event destination(s), including GPS coordinates if available, that represent the full spread and reach of the spill;<br>2. Spill end date and time;<br>3. Description of how the spill volume estimations were calculated, including at a minimum:<br>4. 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<br>5. The methodology(ies), assumptions and type of data relied upon for estimations of the spill start time and the spill end time;<br>6. Spill cause(s) (for example, root intrusion, grease deposition, etc.);<br>7. System failure location (for example, main, lateral, pump station, etc.);<br>8. Description of the pipe material, and estimated age of the pipe material, at the failure location;<br>9. Description of the impact of the spill;<br>10. Whether or not the spill was associated with a storm event;<br>11. Description of spill response activities including description of immediate spill containment and cleanup efforts;<br>12. 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;<br>13. Spill response completion date;<br>14. Detailed narrative of investigation and investigation findings of cause of spill;<br>15. Reasons for an ongoing investigation (as applicable) and the expected date of completion;<br>** Items 14 through 17 are required for Category 1 spills only **<br>16. Name and type of receiving water body(s);<br>17. Description of the water body(s), including but not limited to:<br>18. Observed impacts on aquatic life;<br>19. Public closure, restricted public access, temporary restricted use, and/or posted health warnings due to spill;<br>20. Responsible entity for closing/restricting use of water body; and<br>21. Number of days closed/restricted as a result of the spill.<br>22. Whether or not the spill was located within 1,000 feet of a municipal surface water intake; and<br>23. 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. |

6.6.4.3 Spill Technical Report

If 50,000 gallons or greater from a spill reaches surface waters, a Spill Technical Report must be prepared and submitted to the CIWQS online spill database within 45 calendar days of the spill end date. The LRO is responsible for submitting the Spill Technical Report. The required contents of the Spill Technical Report are discussed in Section 6.5, above.

6.6.4.4 Spill Amendments for Category 1 Spills – 90 Calendar Days of the Spill End Date

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 Enrollee 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.

**Category 2 Spills**

6.6.4.5 Spill Reporting for Category 2 Spills – 3 Business Days of Becoming Aware of the Spill

Within 3 business days of becoming aware of the spill, the LRO must submit the initial report to the SWRCB's CWIQS Online Spill Database @ http://ciwqs.waterboards.ca.gov/ciwqs. The draft report shall include Items 1 through 11 of the list provided above for the Category 1, 3-day draft report.

6.6.4.6 Spill Certification for Category 2 Spills – 15 Calendar Days of the Spill End Date

Within 15 calendar days of the spill end date, the LRO must review and certify the report in the CWIQS Online Spill Database @ http://ciwqs.waterboards.ca.gov/ciwqs. The Spill Certification must include, in addition to the information provided in the draft report, Items 1 through 13 of the list provided above for the Category 1 Spill Certification. *In addition, the Spill Certification must include a new Item 14 - Whether or not the spill was located within 1,000 feet of a municipal surface water intake.*

6.6.4.7 Amended Certified Spill Reports for Individual Category 2 Spills – 90 Calendar Days of the Spill End Date

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 LRO 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.

**Category 3 and 4 Spills**

6.6.4.8 Monthly Spill Reporting for Category 3 Spills

Within 30 calendar days of the end of the calendar month in which the spill occurred, the LRO must submit and certify a report to the SWRCB's CWIQS Online Spill database @ http://ciwqs.waterboards.ca.gov/ciwqs. For each spill, the report shall include the information shown in Table 6-8.

**Table 6-8 Category 3 CIWQS Spill Certification – Required Information**

| Required Information for Category 3 Spill Certification |
|---|
| 1. Contact information: Name and telephone number of Enrollee contact person to respond to spill-specific questions;<br>2. Spill location name;<br>3. Date and time the Enrollee was notified of, or self-discovered, the spill;<br>4. Operator arrival time;<br>5. Estimated spill start date and time;<br>6. Description, photographs, and GPS coordinates where the spill originated:<br>7. 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;<br>8. Estimated total spill volume exiting the system;<br>9. Description and photographs of the extent of the spill and spill boundaries;<br>10. Did the spill reach a drainage conveyance system? If Yes:<br>a. Description of the drainage conveyance system transporting the spill;<br>b. Photographs of the drainage conveyance system entry locations(s);<br>c. Estimated spill volume fully recovered from the drainage conveyance system; and<br>d. Estimated spill volume discharged to a groundwater infiltration basis or facility, if applicable.<br>11. Estimated total spill volume recovered;<br>12. Description of the spill event destination(s), including GPS coordinates, if available, that represent the full spread and reaches of the spill;<br>13. Spill end date and time;<br>14. Description of how the spill volume estimations were calculated, including, at minimum:<br>a. The methodology and type of data relied upon, including 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 |

**Required Information for Category 3 Spill Certification**

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.

15. Spill cause(s) (for example, root intrusion, grease deposition, etc.);
16. System failure location (for example, main, pump station, etc.);
17. Description of the pipe/infrastructure material, and estimated age of the pipe/infrastructure material, at the failure location;
18. Description of the impact of the spill;
19. Whether or not the spill was associated with a storm event;
20. Description of spill response activities including description of immediate spill containment and cleanup efforts;
21. 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:

i. Adjusted schedule/method of preventive maintenance;

ii. Planned rehabilitation or replacement of sanitary sewer asset;

iii. Inspected, repaired asset(s), or replaced defective asset(s);

iv. Capital improvements;

v. Documentation verifying immediately implemented system modifications and operating/maintenance modifications;

vi. Description of spill response activities;

vii. Spill response completion date; and

viii. Ongoing investigation efforts, and expected completion date of investigation to determine the full cause of spill.

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

### *6.6.4.9 Amended Certified Spill Reports for Individual Category 3 Spills – 90 Calendar Days of the Spill End Date*

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 LRO 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.

6.6.4.10 Monthly Spill Reporting for Category 4 Spills

Within 30 calendar days of the end of the calendar month in which the spill occurred, the LRO must submit and certify the estimated total spill volume exiting the sanitary sewer system and the total number of all Category 4 spills to the SWRCB's CWIQS Online spill database @ http://ciwqs.waterboards.ca.gov/ciwqs.

6.6.4.11 Annual Spill Reporting for Category 4 Spills

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.

### 6.6.5 MONTHLY CERTIFICATION OF "NO-SPILLS" OR "CATEGORY 4 SPILLS"

If either (1) no spills occur during a calendar month or (2) only Category 4 spills occur during a calendar month, the LRO shall certify, within 30 calendar days after the end of each calendar month, either a "No-Spill" certification statement, or a "Category 4 Spills" certification statement, in the online CIWQS Sanitary Sewer System Database, certifying that there were either no spills, or Category 4 spills that will be reported annually 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 LRO 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 LRO shall certify "no-spills" for that calendar month.

### 6.6.6 CIWQS NOT AVAILABLE

In the event that the CIWQS online spill database is not available, the LRO will fax or e-mail all required information to the SWRCB at the following address, in accordance with the time schedules identified above.

Phone: 866-79-CIWQS (24977)
Email: ciwqs@waterboards.ca.gov
Monday through Friday *(excluding State Holidays)*
8:00 a.m. - 5:00 p.m.

In such an event, the District will submit the appropriate reports using the CIWQS online spill database when the database becomes available.

A copy of all documents that certify the submittal in fulfillment of this section shall be retained in the spill document file.

### 6.6.7 AMENDING SPILL REPORTS

The LRO is responsible for amending spill reports. Certified spill reports may be updated by amending the report or adding an attachment to the spill report within 90 calendar days after the

spill end date. After 90 days, the District must contact the State Water Resources Control Board to request to amend a spill report along with a justification for why the additional information was not available prior to the end of the 90 days. The SWRCB contact information is the same as above:

Phone: 866-79-CIWQS (24977)
Email: ciwqs@waterboards.ca.gov
Monday through Friday *(excluding State Holidays)*
8:00 a.m. - 5:00 p.m.

### 6.6.8 CIWQS – ELECTRONIC REPORTING TO STATE WATER BOARD

The California Integrated Water Quality System (CIWQS) is a computer system used by the State Water Resources Control Board to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities. CIWQS also allows online submittal of information by Permittees within certain programs and makes data available to the public through reports.

The District's LRO is responsible for submitting and certifying each spill report in CIWQS. The CWIQS reporting procedure is outlined in the Discharger Workbook available at the State and Regional Water Quality Control Board website and at this link:

http://www.swrcb.ca.gov/water_issues/programs/sso/docs/discharger_workbook.pdf

### 6.6.9 APPENDIX F – SUPPORTING DOCUMENTS FOR ELEMENT 6

- Spill Field Form
- Volume Estimation Tools
- Spill Technical Report Template

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# ELEMENT 7 – SEWER PIPE BLOCKAGE CONTROL PROGRAM

The purpose of this section is to evaluate the extent and nature of spills related to Fats, Oils and Grease (FOG), rags, and debris, to determine the need for a Sewer Pipe Blockage Control Program, and to outline the elements of this program if required.

SWRCB Waste Discharge Requirement:

Each Enrollee shall evaluate its service area to determine whether a sewer pipe blockage control program is needed to control fats, oils, and grease (FOG), rags, and debris. If an Enrollee determines that a sewer pipe blockage control program is not needed, the Enrollee must provide justification for why it is not needed. If the program is needed, it must include:

- An implementation plan and schedule for a public education outreach program that promotes proper disposal of pipe blockage substances;
- 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 substances generated within a sanitary sewer system service area;
- The legal authority to prohibit discharges to the system and identify measures to prevent spills and blockages;
- Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements;
- Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the FOG ordinance;
- An identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section; and
- Implementation of source control measures for all sources of FOG reaching the sanitary sewer system for each section identified above.

This Element provides a description of the District's FOG Control Program, and discussion of a potential future sewer pipe blockage control program. This Program plan is intended to be updated and modified by the District as necessary to more closely reflect operating conditions and changes that may occur in FOG control procedures and in the management of factors that contribute to sewer pipe blockages.

## 7.1 BACKGROUND

SWRCB Order No. 2022-0103-DWQ requires that wastewater collection agencies evaluate their service area to determine whether a sewer pipe blockage control program is needed to address accumulations of fats, oils, grease, rags, wipes, and debris, as discussed further in Element 4.

The  District has not required or developed a formal Sewer Pipe Blockage Control Program. However, the District implements a range of operational practices that address common causes of sewer blockages, including fats, oils, grease (FOG), rags, wipes, and debris. If needed in the future, these foundational efforts will serve as the basis for a more structured program.

The District has reported 13 spills between January 1, 2020 and the current date (five full calendar years). Of these spills, three are attributed to FOG. Two of the spills occurred during Thanksgiving 2020 from a single residence. This issue has not recurred. The third FOG-related spill occurred in 2022 from a single family residence and was addressed. The remaining spills were the result of contractor activity, structural failure, or were caused by residents who illegally discharged stormwater to the District's sewer system. There were no further spills related to rags, wipes, debris, or roots.

Based on this information, a pipe blockage control program is not required. However, this section describes the District's activities related to the control of fats, oils, and grease, including information on District Ordinance No.38, Order No.09-24, which established a Fats, Oils, and Greases Control Ordinance for ISD's food service establishments.

## 7.2 PUBLIC EDUCATION OUTREACH

ISD's quarterly newsletter "The Ironhouse Insider" has included a section called "FOG Checkup with Dr. Ironhouse". This section targeted specific neighborhoods that are on the hot spot list, and included information on how to reduce FOG in the sewer system. ISD also operates a booth at local festivals that distributes giveaways (pens, funnels, bags, etc. with ISD logo) and information about the proper disposal of FOG.

## 7.3 FOG DISPOSAL

ISD has a residential FOG collection site at the main office that is open from 8:00 a.m. to 5:00 p.m. Monday through Friday. FOG can be dropped off by placing containers in the yellow tote inside the FOG Shed. In conjunction with the ISD Board of Director's Outreach Committee, ISD has operated a FOG turkey fryer oil drop-off event after three major holidays: Thanksgiving, Christmas, and Easter. During weekends following these holidays, ISD staff receives FOG from residents at no charge.

## 7.4 LEGAL AUTHORITY

The legal authority to prohibit discharges into the system is described in ORDINANCE No.25 ORDER No. 93-31 section 12.2 Prohibited Discharges sub-section G:

"Any water of waste containing (1) floatable grease, oil, or fat of animal or vegetable origin in excess of 25 milligrams per liter, or (2) floatable grease, oil or fat mineral origin in excess of 10 milligrams per liter, or (3) dispersed grease, oil, or fat in excess of 200 milligrams per liter."

## 7.5 GREASE REMOVAL DEVICE REQUIREMENTS

ORDINANCE No.38 ORDER No.09-24 Established a Fats, Oils, and Greases Control Ordinance for ISD's food service establishments. The Ordinance was established in July 2009, and describes the following:

8. Purpose
9. Definitions
10. Grease Discharge Permit
11. Grease Removal Device Standards and Design Specifications
12. Grease Trap Inspection, Cleaning, and Maintenance
13. Grease Interceptor Inspection, Maintenance, Cleaning
14. Recordkeeping
15. Abandoned Devices
16. Notices, Reports, Forms, and Instructions

## 7.6 BEST MANAGEMENT PRACTICES (BMPs)

The District addresses known FOG location through trouble spot cleaning and monitoring. In addition, the District's FOG Control Program places emphasis on seven BMPs that should be implemented by food service facilities and other FOG generators within the service area. These BMPs are summarized as follows:

- Ensure that FOG does not reach the storm drain or sanitary sewer.
- Ensure that no food or liquid food, including dairy products, syrups, salad dressing, and gravy are put down the sink or floor drain
- Recycle oil and grease. Use tallow bins or sealed containers.
- Make an effort to scrape FOG from trays, pots, cooking utensils, grills, and cooking surfaces into an oil-grease container before putting them into the sink or dishwasher
- Never clean equipment, filters, screens, and frying racks outdoors or in any area where wash water may flow into the storm drain, gutter, parking lot, or street. Wastewater needs to be discharged through a grease trap or grease interceptor.
- Regularly inspect your dumpster and tallow bin. Check for leaks.
- Keep your dumpster, oil-grease container, and other waste containers closed to keep rain water out

- Empty containers before they are full to avoid spills
- If a spill occurs, stop it at its source. Clean up the spill with absorbent material, rags, or kitty litter, then sweep up and dispose of in the trash if no hazardous waste is involved. Do not hose down the spills.
- Provide regular employee training on spill cleanup procedures and washing practices
- Identify activities with potential to pollute water and identify solutions (BMPs)
- Incorporate employee feedback and BMPs experiences into training
- Promote employee awareness of pollution prevention (e.g. Reduce, Reuse, and Recycle
- Post TIPS poster, TIPS brochure, and FOG, grease trap/interceptor cleaning fact sheets where employees can see them
- Designate a person responsible for effective implementation of Best Management Practices
- Stencil storm drains to discourage illegal dumping and to remind employees to protect them

The District uses an all-inclusive FOG program called FOG BMP, which handles all discharge permits. Posters describing Best Management Practices (BMPs) are delivered to the FSE at the initial permit inspection. The Collections Superintendent manages the posters and monitors the list of FSEs in the District's service area.

## 7.7 INSPECTION AND ENFORCEMENT PROCEDURES

The District's Ordinances include provisions for inspection of FOG-generating facilities, as well as enforcement actions available in the event of violations. Specifically, Section 12.12 of Ordinance No. 25, Order No. 93-31 describes the authority to enter upon all properties in the District for inspection purposes. Ordinance No. 38, Order No.09-24, Section 5.2 describes the District's authority to inspect grease traps, and Section 6.4 describes the authority to inspect grease interceptors in FSEs. Collections staff incorporate FOG enforcement and inspection activities into their work routine.

## 7.8 APPENDIX G – SUPPORTING DOCUMENTS FOR ELEMENT 7

- Ordinance No. 38, Order No. 09-24 Establishing a FOG Control Ordinance

# ELEMENT 8 – SYSTEM EVALUATION, CAPACITY ASSURANCE, AND CIP

SWRCB Waste Discharge Requirement:

The District's capital improvement plan (CIP) that will provide hydraulic capacity of key sanitary sewer system elements from dry weather peak flow conditions, as well as the appropriate design storm or wet weather event. At a minimum, the plan must include:

- **System Evaluation and Condition Assessment**: The Plan must include procedures to evaluate the sanitary sewer system assets; identify and justify the percentage of the system for condition assessment each year; prioritize the condition assessment of system areas that hold a high level of environmental consequence or are located in or within the vicinity of surface waters, steep terrain, high groundwater elevations, environmentally sensitive areas, or are within the vicinity of a receiving water with a bacterial-related impairment on the most current Clean Water Act section 303(d) List; utilize observations/evidence of system conditions that may contribute to exiting of sewage from the system; maintain documents and recordkeeping; and identify system assets vulnerable to direct and indirect impacts of climate change.
- **Design Criteria:** The Plan must include procedures to identify system components that have a hydraulic deficiency and/or limited capacity. The plan should identify the major sources that contribute to peak flows, with consideration of data from existing system condition assessments, system inspections, system audits, spill history, and other available information, flood-prone areas, potential impacts of potentially higher-intensity storm events as a result of climate change, and increases of erosive forces in canyons and streams. The plan should also review necessary redundancy in pumping and storage capacities.
- **Prioritization of Corrective Action:** The findings of the condition assessments and capacity assessments must be used to prioritize corrective actions. Prioritization must consider the severity of the consequences of potential spills.
- **Capital Improvement Plan:** The capital improvement plan must include the project schedules, internal and external project funding sources for each project; 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.

## 8.1 BACKGROUND

The District's Sewer Master Plan (Master Plan). The Plan, adopted in 2004, updated in 2007, and reviewed in 2018 evaluates hydraulic capacity of key sewer system elements under peak flow conditions, and recommends capital improvements to the collection system to correct predicted capacity issues. The District is currently completing a Master Plan Update. This section will be updated further in late 2025 to reflect findings from the completed 2025 Master Plan.

## 8.2 PROJECT DRIVERS AND CAPACITY ASSESSMENT

The 2007 Master Plan evaluated approximately 85 miles of gravity pipeline, 20 miles of pressure pipelines, and 27 pumping stations that were in service in 2005. The computer model that was originally used to assess hydraulic capacity was the H2OMAP Sewer Version 3.5. In 2018, the District's hydraulic model was converted to Infoworks ICM. The 2018 model was constructed using a combination of 2018 water usage data, available pump station data, and plant flow data to estimate dry and wet weather flows. Although the original model and Master Plan identified several problem areas, the updated model did not identify the same areas as having capacity issues. ISD does not have any known sewer system spill trouble spots, and has no recorded spills from the system that have resulted from wet weather inflow and infiltration. Based on results from the 2018 model update and field data confirming the absence of wet weather spills, in 2018, the system was not predicted to have any capacity issues during the District's design storm event.

The 2025 Master Plan update includes a new hydraulic model developed in Infoworks ICM. The 2025 hydraulic model includes the District's interceptors, which comprise approximately 37 miles of gravity sewer pipelines. In addition, the model includes 29 pumping stations and 15.4 miles of forcemain pipe. The calibrated hydraulic model identifies no predicted spills during the District's 10-year, 24-hour design storm. This result was confirmed during the wet weather events that occurred on December 31, 2022. During this event, which significantly exceeded the design storm, the District was able to manage flow and avoid sanitary spills. This event helped to confirm that the system will be able to handle potentially higher-intensity storm events that might occur as a result of climate change.

The hydraulic model confirms the need for a second forcemain to convey buildout flows from the E. Cypress Road corridor, in order to keep velocities within the forcemain within the District's design criteria. Although a second forcemain is required, all pump stations have sufficient firm capacity, with the largest pump out of service, to convey predicted flows from the design storm.

The 2025 Master Plan included flow monitoring that was conducted during winter 2024. The results from this program show that the majority of the system inflow and infiltration is received from the wastewater collection systems on and directly south of Bethel Island. These pipes are located near the water's edge, where the groundwater table is high. The hydraulic model was calibrated to flow data that included this elevated I&I. After the flow monitoring program was completed, the District completed a separate extensive grouting project on Bethel Island that focused on eliminating visible I&I in the sewer system. Operators at the District's RWF have reported a decrease in dry weather flow following the completion of this project. Future flow monitoring efforts will help to quantify this result.

The WDR requires a review of whether higher-intensity storms may create erosive forces in canyons and streams that could impact the integrity of the District's gravity pipelines. The City of Oakley is relatively flat, and the District's sewer system does not cross canyons or natural waterways that have the potential for erosion during heavy wet weather events. However, portions of the system are near engineered stormwater channels. The District will review Master Plan results and update the SSMP in the future if changes are needed in the CIP to address this topic.

Condition assessments other than capacity, including the percentage of the system that is designated for condition assessment each year, are discussed in Element 4. As discussed in Element 4, the need for additional condition assessment of system areas that hold a high level of environmental consequence or are located in or within the vicinity of surface waters, high groundwater elevations, environmentally sensitive areas, or are within the vicinity of a receiving water with a bacterial-related impairment on the most current Clean Water Act section 303(d) List is under review.

Element 4 also discusses how the District manages structural Grade 4 and 5 defects, how the District maintains documents and records; and how the District is reviewing whether specific system assets might be vulnerable to direct and indirect impacts of climate change.

## 8.3 CAPITAL IMPROVEMENT PROGRAM BUDGET AND SCHEDULE

The District is experiencing substantial growth within the eastern portion of the service area. However, the District also prepared well, as a component of the 2004 Master Plan, to accommodate these additional flows. The current Master Plan confirms no gravity sewer capacity improvements are required to convey build-out flows during the design storm event. A second, 14-inch forcemain is required to serve the buildout population, when it occurs. Portions of this forcemain have been completed through development projects. The remainder of the forcemain will be design and constructed by the District, or by future development as it occurs. The 2025 Master Plan will include a full CIP for both rehabilitation and capacity needs.

## 8.4 APPENDIX H – SUPPORTING DOCUMENTS FOR ELEMENT 8

- Placeholder for the 2025 Master Plan Table of Contents

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# ELEMENT 9 – MONITORING, MEASUREMENT, & PROGRAM MODIFICATIONS

SWRCB Waste Discharge Requirement:

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

- Maintaining relevant information including audit findings, to establish and prioritize appropriate Plan activities;
- Monitor the implementation and measure the effectiveness of each Plan element;
- Update Plan procedures and activities, as appropriate, based on the results of monitoring or performance evaluations; and
- Identify and illustrate spill trends, including spill frequency, locations, and estimated volumes.

This section of the SSMP discusses the District Monitoring, Measurement, and Program Modifications.

## 9.1 ADAPTIVE MANAGEMENT

The District includes adaptive management principles to ensure effective implementation and continuous improvement, as discussed below.

- Maintaining relevant information, including audit findings, to establish and prioritize appropriate Plan activities. The District conducts triannual audits as discussed in Element 10. Recommendations from the audits are incorporated into Plan updates, as shown on the schedule in Element 1.

- Monitoring the implementation and measuring the effectiveness of each Plan Element is completed through the Plan audits. Performance metrics are tracked in this Element 9.

- Assessing the success of the preventive operation and maintenance activities. The effectiveness of preventive operation and maintenance activities is assessed through the Plan audits and recommendations from the audits are included in SSMP updates per the schedule shown in Element 1.

- Updating Plan procedures and activities, as appropriate, based on results of monitoring and performance evaluations.

- Identifying and illustrating spill trends, including spill frequency, locations and estimated volumes.

The remaining information provides information on spill trends, frequency, locations, and estimated volumes.

## 9.2 UTILITY METRICS TO MEASURE PROGRESS AND PRIORITIZE ACTIVITIES

The District maintains complaint and blockage records, and records preventive maintenance activities in the CMMS. This information is used to establish and prioritize appropriate SSMP activities.

The District has established the preventive maintenance sewer metrics that are shown in Table 9-1 for use in monitoring, measuring and adjusting sewer maintenance activities. These metrics will may be adjusted from time to time, and will be reviewed as part of the SSMP audit.

**Table 9-1. Success Factors and Metrics**

| Sewer Maintenance Success Factor | Metric |
|---|---|
| System Pipes | Miles |
| Pipes Cleaned | Miles |
| Pipe Inspected (CCTV) | Miles |
| 8-Week Hot Spots Cleaned | Number by Underlying Cause (Roots, Debris, FOG, Structural) |
| Spills | Number by Underlying Cause |
| Response Time | Minutes per Spill after Notification |
| Pump Station Spills | Number by Cause |
| Pipe Rehabilitated | Miles/Year |
| Claims | #/Year and $/Year/Incident |

The District is in the process of developing one or more tables to summarize annual progress on each of the success factors listed above. These tables will be added to this Section in a subsequent SSMP Update.

## 9.3 SPILL TRENDS – NUMBER AND CAUSE

In the past five years (i.e., from January 2020 through December 2024), the District reported the spills shown in Table 9-2 and Table 9-3.

**Table 9-2. Spills from 2020-2024 by Cause**

| Year | Roots | FOG | Debris | Structural Failure | Wet Weather Capacity | Other | Total |
|---|---|---|---|---|---|---|---|
| 2020 | | 2 | | | | 0 | 2 |
| 2021 | | | | | | 1 | 1 |
| 2022 | | 1 | | | | 3 | 4 |
| 2023 | | | | | | 5 | 5 |
| 2024 | | | | 1 | | 0 | 1 |

**Table 9-3 Spills from 2020 – 2024 by Volume**

| Year | Volume Spilled (gal) | Volume Recovered (gal) | Volume Reaching Waterway |
|---|---|---|---|
| 2020 | 98 | 98 | 0 |
| 2021 | 3,900 | 0 | 0 |
| 2022 | 1,629 | 979 | 650 |
| 2023 | 730 | 230 | 0 |
| 2024 | 89 | 3 | 0 |

## 9.4 APPENDIX I – SUPPORTING DOCUMENTS FOR ELEMENT 9

There are no Appendix documents to accompany Element 9. However, this Appendix I is included as a placeholder for future documents.

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# ELEMENT 10 – SSMP PROGRAM AUDITS

SWRCB Waste Discharge Requirement:

As part of the Sewer System Management Plan (SSMP), the Enrollee shall include internal audit procedures, appropriate to the size and performance of the system, for the Enrollee to comply with section 5.4 (Sewer System Management Plan Audits) of this General Order.

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 Enrollee's compliance with the SSMP requirements, including identification of any deficiencies in the SSMP and steps to correct them. The audit must:

- Evaluate the implementation and effectiveness of the Enrollee's Sewer System Management Plan in preventing spills;
- Evaluate the Enrollee's compliance with the most updated General Order;
- Identify Sewer System Management Plan deficiencies in addressing ongoing spills and discharges to waters of the State; and
- Identify necessary modifications to the SSMP Plan to correct deficiencies;
- The Enrollee shall submit a complete audit report that includes:
- Audit findings and recommended corrective actions;
- A statement that sewer system operators' input on the audit findings has been considered; and

A proposed schedule for the Enrollee to address the identified deficiencies.

## 10.1 SUMMARY

An audit of ISD's SSMP will be made every three years. The audit will focus on the program goals and requirements and will identify shortfalls and remedial actions needed. The audit is performed by the District Engineer or designee, the Collections Superintendent, the Collections Supervisor, and two Lead Maintenance Workers. The most recent audit is located in Appendix J. If revisions are made, documentation is recorded on ATTACHMENT A - Plan Review and Revision Log, which is also included in Appendix J.

If a substantial modification is made to the SSMP, the modification will be approved by the ISD Board of Directors. However, minor modifications to the SSMP, such as staff changes, will not be subject to approval. The entire SSMP will be approved by the Board of Directors and recertified to the State every six years.

## 10.2 APPENDIX J – SUPPORTING DOCUMENTS FOR ELEMENT 10

- Most recent SSMP audit(s) and Blank Audit Form
- SSMP Plan Review and Revision Log

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# ELEMENT 11 – COMMUNICATION PROGRAM

SWRCB Waste Discharge Requirement:

- The Enrollee shall communicate on a regular basis with the public for spills and discharges resulting in closures of public areas, or that enter a source of drinking water; and the development, implementation, and update of its Plan (i.e., SSMP), including opportunities for public input to Plan implementation and updates;
- The Enrollee shall also create a plan of communication with owners/operators of systems that connect into the Enrollee's system, including satellite systems, for system operation, maintenance, and capital improvement-related activities.

## 11.1 BOARD MEETINGS

ISD's five-member Board of Directors meets on the third Tuesday of every month at 6:00 PM in the Board Room at the District's main office. The public is invited and encouraged to attend each meeting. The week before each meeting, details are posted on the City of Oakley's marquee, the District website, the local Post Offices, the District's main office entrance doors, and at the District's front entrance gate. The original and subsequent SSMPs were adopted by the Board of Directors and the public was invited to comment on the development of the SSMP documents.

## 11.2 DISTRICT NEWSLETTERS

*The Ironhouse Insider*, the District's quarterly newsletter, is mailed to all District ratepayers. SSMP and Board meeting topics are highlighted in newsletters as appropriate. FOG is discussed on a regular basis. Copies of all *Insiders* are kept in the District's library; a sample is located in Appendix K.

## 11.3 DISTRICT WEBSITE

The District's website features Board Meeting Minutes and the SSMP. ISD also has a presence on Twitter and Facebook to provide regular updates on issues of importance to customers, such as road work impacting neighborhoods. Access to Twitter and Facebook is via the website.

## 11.4 LOCAL NOTICES

If neighborhoods are experiencing issues with the sanitary sewer from issues such as FOG, high incidences of lift station pumps ragging, etc., letters are hand-delivered to residences and businesses in the area. Copies of these letters are available at the District. ISD also operates an informational booth at the local Festivals, as described in Section 7 of this document.

## 11.5 PUBLIC OUTREACH COMMITTEE

The Board of Directors has appointed a public outreach committee that is in charge of developing and hosting community awareness programs. The committee provides informational booths and/or support to the following: Oakley Cityhood celebrations, Science Week at the

Delta Science Center, and local festivals. The committee also organizes the District Open House. During the Open House, the District's Water Recycling Facility is showcased through public tours and information booths. At the Open House, the sanitary sewer collections staff typically demonstrate their spill response equipment and activities. The District is also a financial sponsor of the Delta Science Center in Oakley, which tests Delta waters and instructs local students and the public in studying the Delta ecosystem, its endangered species.

## 11.6 APPENDIX K – SUPPORTING DOCUMENTS FOR ELEMENT 11

- Copy of Ironhouse Insider