



SEWER SYSTEM MANAGEMENT PLAN



Ironhouse Sanitary District

Updated April 2017

Prepared by



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INTRODUCTION

I. INTRODUCTION

The purpose of Ironhouse Sanitary District's (ISD or District) Sewer System Management Plan (SSMP) 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 overflows (SSOs).
- Providing adequate sewer capacity to convey peak flows.
- Maintaining and improving the condition of the collection system infrastructure in order to provide reliable service into the future.

II. DOCUMENT ORGANIZATION

This SSMP has been prepared by Ironhouse Sanitary District (the District) staff in compliance with requirements of the State Water Resources Control Board (SWRCB) pursuant to Section 13267 of the California Water Code.

The SSMP is intended to meet the requirements of the Statewide General Waste Discharge Requirements, Order No. 2006-0003-DWQ (GWDR), amended by Order No. WQ 2013-0058-EXEC, which is also referenced as the Amended Monitoring and Reporting Program (Amended MRP).

The SSMP includes eleven elements as listed below. Each of these elements forms a section of this document.

SSMP Elements

1. Goals
2. Organization
3. Legal Authority
4. Operations and Maintenance Program
5. Design and Performance Provisions
6. Overflow Emergency Response Plan
7. FOG Control Program
8. System Evaluation and Capacity Assurance Plan
9. Monitoring, Measurement and Plan Modifications
10. SSMP Program Audits
11. Communication Plan

III. 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 I-1 and I-2.

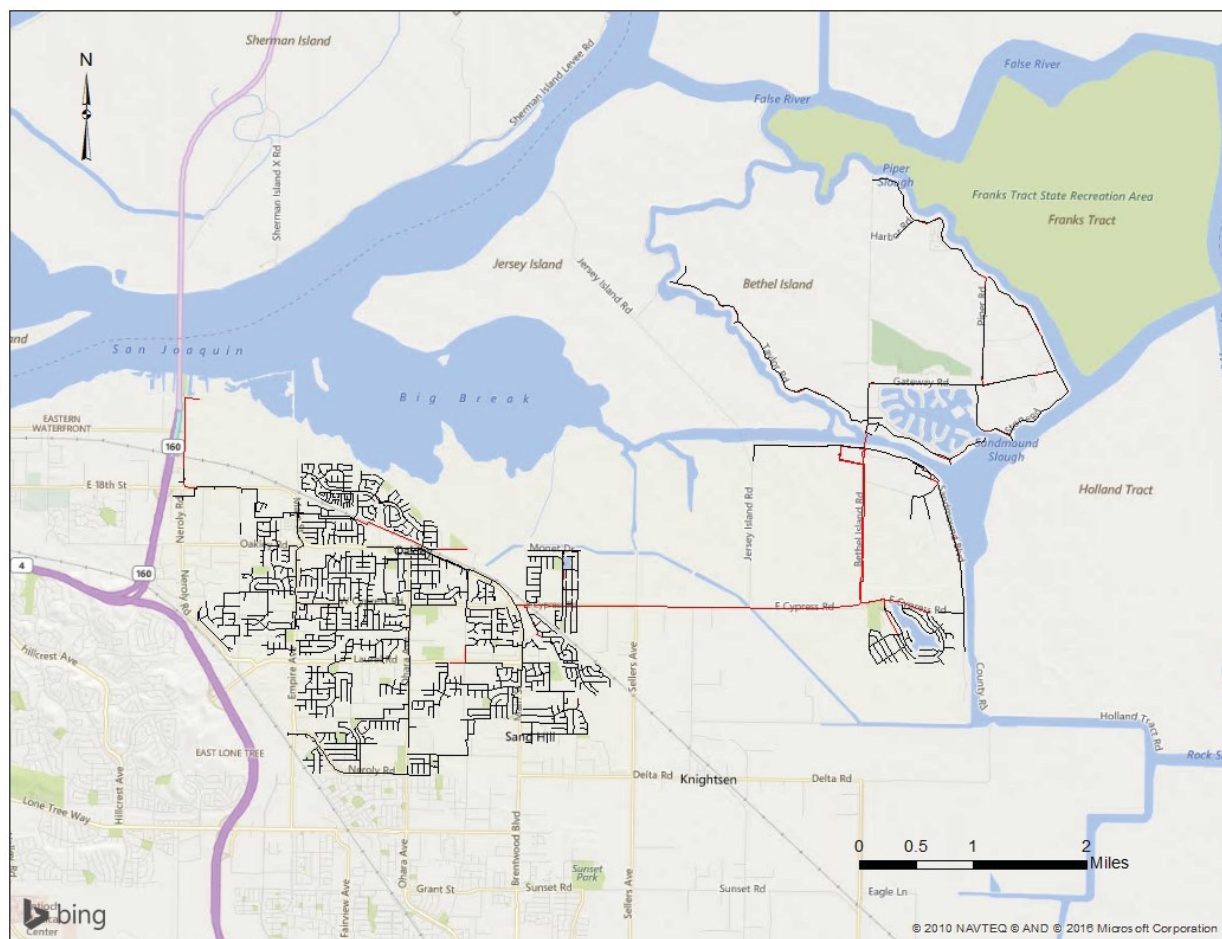
Ironhouse Sanitary District at a Glance

- The District was formed in 1945
- The District serves 41,361 residents in Oakley and Bethel Island
- The current wastewater treatment plant (WWTP) has been operating since 2011
- The District treats and recycles approximately 2 million gallons per day (MGD) of wastewater to recycled water standards
- The majority of the District's recycled water is used on Jersey Island to grow hay which is in turn used to feed ISD-owned cattle
- 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.

Figure I-1. Service Area Map



Figure I-2. Sewer Collection System



ISD provides stewardship 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 125 miles of collection system pipelines and 15.9 miles of forcemain pipelines. Over half of the system was constructed after 1980. The system includes approximately 2000 manholes and 34 sewer lift stations.

Sanitary Sewer Collection System Assets

Table I-1 provides information about the District's sewer collection system assets, as stored in the most current GIS map.

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

Pipe Size	Gravity Sewer Length (feet)	Forcemain Length (feet)	Total Length (feet)	Total Length (miles)	Percentage of Total
4	56	10,826	10,882	2.1	1.6%
6	82,406	19,030	101,436	19.2	14.2%
8	372,304	14,794	387,098	73.3	54.3%
10	35,313	18,330	53,643	10.2	7.5%
12	38,653	425	39,078	7.4	5.5%
14	na	9099	9,099	1.7	1.3%
15	35,932	na	35,932	6.8	5.0%
18	15,532	452	15,984	3	2.2%
21	4010	na	4,010	0.8	0.6%
24	2805	na	2,805	0.5	0.4%
30	503	na	503	0.1	0.1%
Unknown	40,020	12,811	52,831	10	7.4%
	627,534	85,767	713,301	135.1	100.0%

Notes:

1. Quantities were taken from District's GIS maps and include pipe lengths associated with new subdivisions that are not reflected in the CIWQS totals.



CHAPTER 1 – GOALS

SWRCB Waste Discharge Requirement:

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

This SSMP provides a plan that complies with the requirements of the State Water Resources Control Board **ORDER NO. 2006-0003-DWQ** (The Order) and **ORDER NO. WQ 2013-0058-EXEC** to properly manage, operate, and maintain all parts of the ISD sanitary sewer system to prevent sanitary sewer overflows (SSOs), and mitigate any SSOs that do occur.

ISD's Mission Statement is as follows:

"We protect public health, safety and the environment through responsible wastewater collection, treatment and water reuse."

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 overflows
- Mitigate the impacts that are associated with any SSOs that may occur
- Meet all applicable regulatory notification and reporting requirements

The District developed a five year Strategic Plan dated November 21, 2013. This plan is revised from time to time by the General Manager, and contains six elements as follows:

- Fiscal Planning
- Public Affairs/Regulatory Relations
- Infrastructure
- Administrative Management/Organizational Health
- Environmental Integrity
- Jersey Island Management

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.

In 2016, the District completed a multi-workshop visioning effort to further refine near-term objectives and activities. Materials from these workshops can be obtained from the ISD District Secretary.

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.



APPENDIX A - SUPPORTING DOCUMENTS FOR ELEMENT 1

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



CHAPTER 2 – ORGANIZATION

SWRCB Waste Discharge Requirement:

The Sewer System Management Plan (SSMP) must identify

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

2.1 AUTHORIZED REPRESENTATIVE OF IRONHOUSE SANITARY DISTRICT

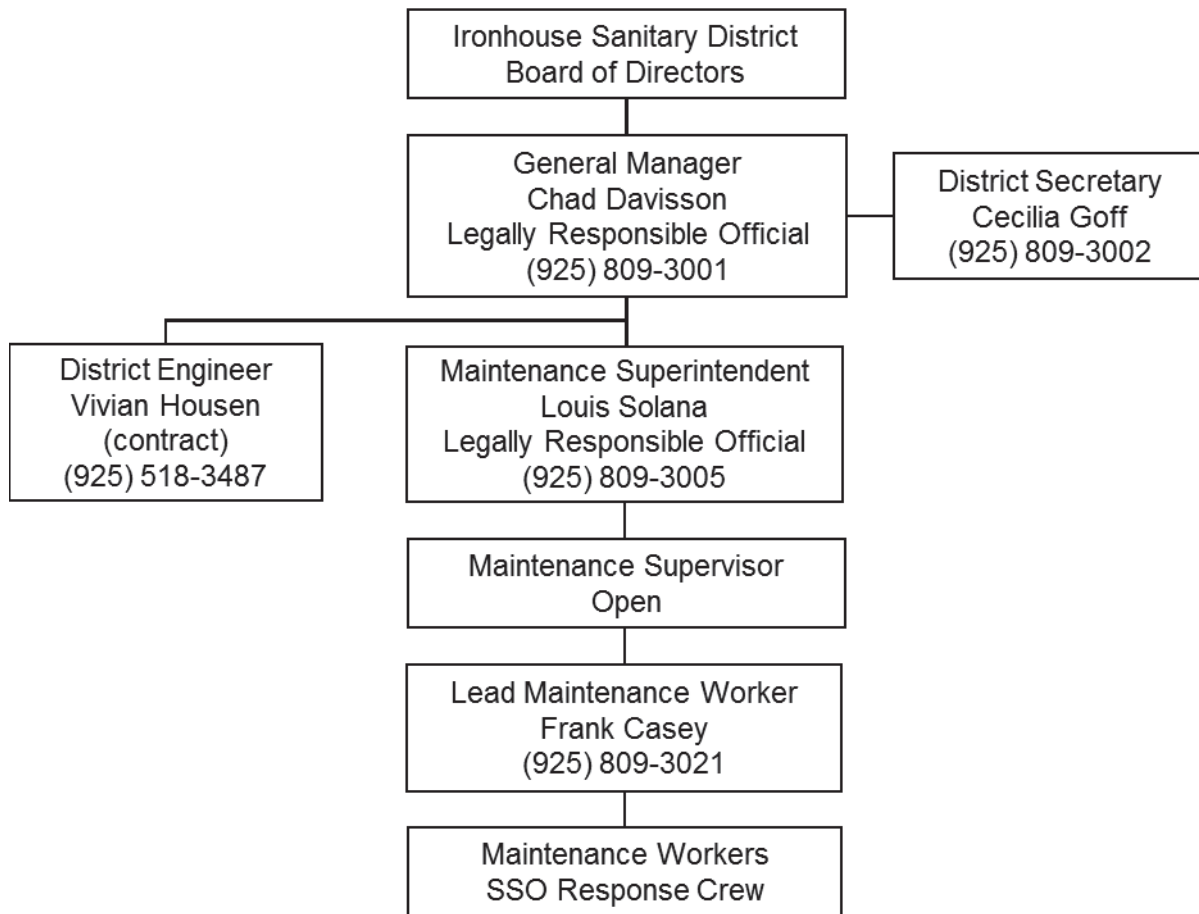
The ISD General Manager (Chad Davisson) is the authorized representative or Legally Responsible Official (LRO). In addition to the General Manager, the legally responsible officials authorized to enter and certify data into the online sanitary sewer overflow database, California Integrated Water Quality System (CIWQS), on behalf of the District are the Maintenance Superintendent (Louis Solana), and his successors. The 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 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 directly line shown in Table 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	Chad Davisson	davisson@isd.us.com
1 – Goals	General Manager	Chad Davisson	davisson@isd.us.com
2 - Organization	General Manager	Chad Davisson	davisson@isd.us.com
3 - Legal Authority	General Manager	Chad Davisson	davisson@isd.us.com
4 - O & M Program	Maintenance Superintendent	Louis Solana	solana@isd.us.com
5 - Design & Performance Provisions	District Engineer	Vivian Housen	vhousen@housenassociates.com
6 - Overflow Emergency Response Program	Maintenance Superintendent	Louis Solana	solana@isd.us.com
7 - FOG Control Program	Maintenance Superintendent	Louis Solana	solana@isd.us.com
8 – SECAP	District Engineer	Vivian Housen	vhousen@housenassociates.com
9 - Monitoring, Measurement, and Program Modifications	Maintenance Superintendent	Louis Solana	solana@isd.us.com
10 - SSMP Audits	District Engineer	Vivian Housen	vhousen@housenassociates.com
11 – Communication Plan	General Manager	Chad Davisson	davisson@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**.

MAINTENANCE 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, Overflow 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 SSOs 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.

MAINTENANCE SUPERVISOR

Manages field operations, maintenance activities, authorized to submit CIWQS data, communicates and takes direction from the Operation and Maintenance Superintendent, implements contingency plans, leads SSO emergency response, investigates and is responsible for phone notification of SSOs to regulatory agencies within two hours of a spill, trains Lead Maintenance Workers in proper SSO response and SSMP duties, and provides input to updating the SSMP.

LEAD MAINTENANCE WORKERS

Provide support to the Maintenance Supervisor, coordinate SSO emergency response activities, provide SSO data to the Maintenance Supervisor, complete trouble spot cleaning, train Maintenance Workers in proper SSO 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 SSOs, operate sewer cleaning equipment, bypass pumping equipment, portable generators, and other SSO response equipment during SSO response.



2.4 CHAIN OF COMMUNICATION FOR SSO REPORTING

The District has processes for reporting SSOs. One process is implemented during business hours and the other outside of business hours. During business hours, SSO-related calls received at the main number or by a District employee are transferred to the Maintenance Supervisor, who contacts the Maintenance Superintendent and Maintenance Workers and implements the OERP. As of the date of this SSMP, the Maintenance Supervisor position is vacant and calls are routed directly to the Maintenance Superintendent.

Outside of normal business hours, SSO 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 Maintenance Supervisor, Maintenance Superintendent, and Lead Maintenance Worker, and to initiate activities required by the OERP. 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 2-1. Emergency Response Crew
General Phone # (925) 625-2279**

Group	Staff	Position	Work #
Management	Chad Davisson	General Manager	925-809-3001
Administration	Cecilia Goff	District Secretary	925-809-3002
Sewer Collections	Louis Solana	Maintenance Superintendent	925-809-3005
Sewer Collections	Frank Casey	Lead Maintenance Worker	925-809-3021
Engineering	Vivian Housen	District Engineer	925-518-3487

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.

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CHAPTER 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 (examples may include I/I, stormwater, chemical dumping, unauthorized debris and cut roots, etc.);
- Require that sewers and connections be properly designed and constructed;
- Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the Public Agency;
- Limit the discharge of fats, oils, and grease and other debris that may cause blockages, and
- Enforce any violation of its sewer ordinances.

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.

3.2 DISTRICT ORDINANCE

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

A. Prevent illicit discharges into its sanitary sewer system (examples may include I/I, storm water, chemical dumping, unauthorized debris and cut roots, etc.).

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.

B. Require that sewers and connections be 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.

- C. Ensure access in easements, right-of-ways, and any other areas sanitary sewer system facilities are installed for maintenance, inspection, and repairs of the sanitary sewer system and for any portions of the service lateral owned or maintained by the Enrollee.**

Section 12.12 authorizes the District Engineer and other duly authorized employees and agents to enter private property for various sewer inspection purposes.

- D. Limit the discharge of roots, fats, oils, and grease and other debris that may cause blockages.**

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.

- E. Enforce any violation of its sewer ordinance and, if applicable, 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.

APPENDIX C - SUPPORTING DOCUMENTS FOR ELEMENT 3

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



CHAPTER 4 – OPERATIONS AND MAINTENANCE PROGRAM

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

- Maintain an up-to-date map of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable stormwater conveyance facilities;
- Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventative Maintenance (PM) program should have a system to document scheduled and conducted activities, such as work orders;
- Develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short- and long-term plans plus a schedule for developing the funds needed for the capital improvement plan;
- Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be appropriately trained; and
- Provide equipment and replacement part inventories, including identification of critical replacement parts.

4.1 SANITARY SEWER SYSTEM MAPPING

The District maintains a Geographic Information System (GIS) that is used in conjunction with the District's NEXGEN 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 Maintenance Superintendent ensures that the CMMS is updated with relevant information, including information from developer CAD drawings.

Hard copies of the maps are distributed to emergency on-call personnel and collection system maintenance personnel. The Maintenance Superintendent is responsible for updating maps and distributing hard copies of updated map books. Stormdrain maps of the City of Oakley 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

In January 2011, the District purchased the NEXGEN CMMS Asset Management program. The web-based program is hosted by NEXGEN at their Sacramento office. The District is licensed for five concurrent online users. The program is separated into two domains; one for the new wastewater treatment facility (online in October 2011) and one for the wastewater collection system.

The CMMS Maintenance and Resource modules consists of work orders, preventive maintenance (PM), projects, scheduler, parts inventory, labor, vendor/contractor, equipment, timesheet, and training elements. 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 34 lift stations, and manufacturers' recommendations. Copies of the historical and current PM schedules are available upon request from the Maintenance Superintendent.

Updating the PM schedule is the responsibility of the Maintenance Superintendent and the Maintenance 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. However, the District does not conduct scheduled maintenance due the relatively young age of the system. In 2017, the District will begin 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), within the next five years. The cleaning plan will be refined as needed using CCTV inspection.

4.4 FACILITY INSPECTIONS

Gravity Pipeline Inspections

The CCTV crew consists of two collection workers that are trained and PACP-certified in interpreting and recording the data. 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.

The District has historically conducted CCTV inspection on an as-needed basis, in response to SSOs and service calls. However, beginning in 2017, CCTV inspection will be conducted in conjunction with the preventive cleaning program, to prioritize locations for cleaning as discussed above. Since the initial locations to be cleaned will comprise areas with known maintenance issues, it is anticipated that the CCTV data that is collected through this process will also be valuable in developing future CIP needs. The objective of the inspection/cleaning program is to target areas of concern for vitrified clay pipes that are greater than 30 years old.



Lift Station Yearly Inspections

The District operates and maintains 34 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.

Bethel Island Emergency Ponds Inspection

The Bethel Island Emergency Ponds are inspected semi-annually. 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.

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

The District's prior rehabilitation and replacement plans (RRP) have been 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. However, in 2016, the District developed a computerized risk management tool that assesses risk based on a pipe segment's likelihood and consequence of failure.

In 2016, CCTV inspection was completed for pipes on the District's current trouble spots, using the National Association of Sewer Service Companies (NASSCO) Pipeline Assessment Condition Program (PACP) evaluation guidelines. Risk scores were generated by the risk management tool for these inspected lines, for use in future CIP planning. Based on these results, several lines within the downtown area with known defects have been prioritized for replacement in the FY17/18 CIP. These improvements, along with the replacement of aging air valves on the Bethel Island forcemain, comprise the District's highest priorities for the sanitary sewer system.



4.6 TRAINING PROGRAM

Formal training for District staff is provided by the Maintenance 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, overflow emergency response, and related topics. The Maintenance 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, SSO 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 Maintenance Superintendent.

4.7 EQUIPMENT AND PARTS INVENTORY

The NEXGEN program 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. Parts that are low in quantity will automatically trigger replacement procedures tied to preferred vendors.

APPENDIX D – SUPPORTING DOCUMENTS FOR CHAPTER 4

- Pump Station Inspection Schedule



CHAPTER 5 – DESIGN AND PERFORMANCE STANDARDS

SWRCB Waste Discharge Requirement:

- Design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer systems; and
- Procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

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 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 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.

APPENDIX E – SUPPORTING DOCUMENTS FOR CHAPTER 5

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CHAPTER 6 – OVERFLOW EMERGENCY RESPONSE PLAN

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

SWRCB Waste Discharge Requirement:

Each Enrollee shall develop and implement an overflow emergency response plan that identifies measures to protect public health and the environment. At a minimum, this plan must include the following:

- Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;
- A program to ensure an appropriate response to all overflows;
- Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, Regional Water Boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the MRP. All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board WDRs or NPDES permit requirements. The Sewer System Management Plan (SSMP) should identify the officials who will receive immediate notification;
- Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;
- Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and
- A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.

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**Ironhouse Sanitary District
SEWER MAINTENANCE
OVERFLOW EMERGENCY
RESPONSE PLAN
(OERP)**

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



Updated April 2017

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

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



IRONHOUSE SANITARY DISTRICT SANITARY SEWER COLLECTION SYSTEM EMERGENCY OVERFLOW RESPONSE PLAN FOR OUTSIDE SEWER SPILLS

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APPENDIX F – SUPPORTING DOCUMENTS FOR CHAPTER 6

- Sewer Maintenance Equipment List
- SSO Volume Estimation Methods
- Water Quality Monitoring Program
- SSO Technical Report Template
- SSO Field Form



INTRODUCTION

6.1 PURPOSE

The purpose of the Overflow Emergency Response Plan (OERP) is to outline the District's SSO response activities, with the objective of minimizing the impact of SSOs to the public and the environment. The OERP 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.

6.2 STATEWIDE WDR REQUIREMENT

SWRCB Waste Discharge Requirement:

Each Enrollee shall develop and implement an overflow emergency response plan that identifies measures to protect public health and the environment. At a minimum, this plan must include the following:

- Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;
- A program to ensure an appropriate response to all overflows;
- Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, Regional Water Boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the MRP. All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board WDRs or NPDES permit requirements. The Sewer System Management Plan (SSMP) should identify the officials who will receive immediate notification;
- Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;
- Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and
- A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.



6.3 SSO CATEGORIES

Definition of SSO: The SWRCB defines a sanitary sewer overflow (SSO) as any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system. SSOs include:

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

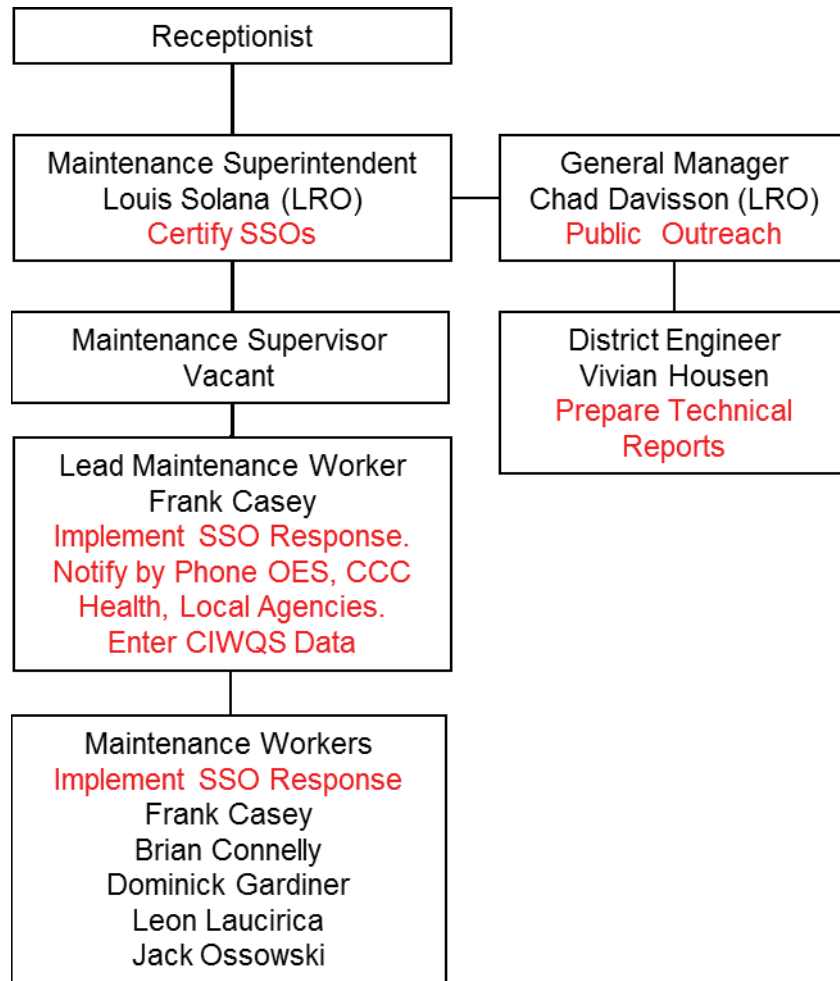
THREE CATEGORIES OF SSOs: The three categories of reportable SSOs are defined as follows.

- **Category 1 SSO** – Any discharges of sewage resulting from a failure in the Ironhouse Sanitary District sanitary sewer system, regardless of their volume, that reach surface water or that reach a drainage channel or storm drain and are not fully recovered.
- **Category 2 SSO** – Discharges of sewage resulting from a failure in the Ironhouse Sanitary District sanitary sewer system that are over 1,000 gallons but do not reach surface water or that are not completely recovered from a drainage channel or stormdrain system.
- **Category 3 SSO** – Discharges of sewage resulting from a failure in the Ironhouse Sanitary District sanitary sewer system that are less than 1,000 gallons and do not reach surface water or are completely recovered from a drainage channel or stormdrain system

6.4 NOTIFICATION PROCEDURES AND FLOWCHARTS

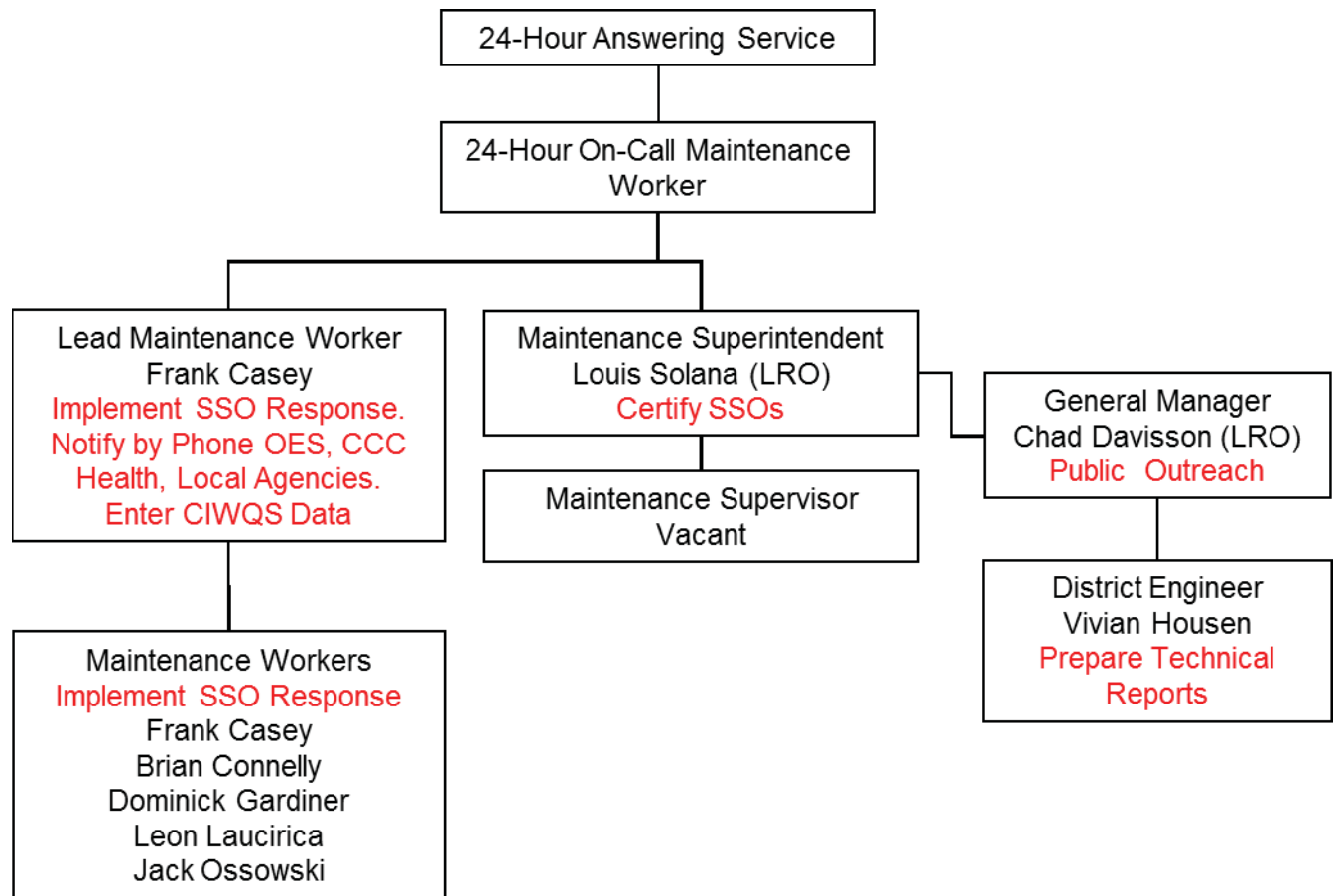
6.4.1 INCIDENT INFORMATION

A. Notification Procedures for SSOs between 8 AM – 5 PM Monday – Friday (excludes lunch hour)





B. Notification Procedures for SSOs – After Hours & Weekends





SSO RESPONSE PROGRAM

6.5 ROLE OF RESPONDERS

The SSO First Responder is responsible for directing the initial sewer response crew and SSO standby crew through the entire SSO event from mitigation, cause removal, clean-up, and follow-up CCTV. The SSO 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 SSO responders are required to take the appropriate action to secure the wastewater overflow area, relieve the cause of the overflow, 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 United States.

6.6 DESIGNATED EMERGENCY RESPONDERS

The list of staff designated to respond to SSOs and their contact information is provided in Table 6-1.

Table 6-1. SSO Emergency Response Crew

Department	Staff	Position	Phone #
Maintenance Department	Louis Solana	Superintendent	925-809-3005
	Frank Casey	Lead	925-809-3021
	Dominick Gardiner	SSO Response	
	Jack Ossowski	SSO Response	
	Leon Laucirica	SSO Response	925-809-3022
	Brian Connelly	SSO Response	925-809-3017

6.7 SPILL RESPONSE EQUIPMENT

The District owns a variety of equipment used for clearing blockages and for impact mitigation and cleanup activities. District staff is trained to operate this equipment. A list of the District's sewer maintenance equipment can be found in Appendix F of this document.



6.8 FIELD PROCEDURES

See INVESTIGATION AND DOCUMENTATION for field procedures that should be used as guidelines for tasks to be completed during an SSO response. Actual tasks may require adjustment based on field conditions.

6.9 SEWAGE ESTIMATION

Use the methods outlined in Appendix F to estimate the volume of the spilled sewage. Use three 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.

6.10 WATER QUALITY SAMPLING

Water quality sampling and testing must be completed where feasible and safe, when spilled sewage enters a surface water to determine the extent and impact of the SSO. The water quality sampling procedures follow the Water Quality Monitoring Program as follows:

- First Responders should collect samples as soon as possible after the discovery and mitigation of the SSO event, following the sampling procedures that are outlined in the Water Quality Monitoring Plan, which is included in Appendix F. At a minimum:
 - The water quality samples should be collected from upstream of the spill, from the spill area, and downstream of the spill in flowing water (e.g. creeks) where safety of the personnel would not be put at risk.
 - The samples shall then be brought to the Fruit Growers Laboratory in Stockton.

Table 6-3. 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:

- Chris Christean, Facilities Manager: 925-809-3033
- Adrian Vazquez, Lead Plan Operator III: 925-809-3030

6.11 WATER QUALITY MONITORING PROGRAM

The Water Quality Monitoring Program must be implemented immediately upon discovery of any Category 1 SSO of 50,000 gallons or more. Water quality testing for SSOs of 50,000 gallons or more must be completed within 48 hours of the District becoming aware of the SSO.

The District's SSO Water Quality Monitoring Program is included in Appendix F, and includes the following:



- Protocols for water quality monitoring
- Sampling time constraints
- Sampling procedure best practice
- Requirement for water quality analyses for ammonia and bacterial indicators to be performed by an accredited or certified laboratory
- Requirement for monitoring instruments and devices used to implement the SSO Water Quality Monitoring Program to be properly maintained and calibrated, including any records to document maintenance and calibration, as necessary, to ensure their continued accuracy

6.12 SSO TECHNICAL REPORT

For Category 1 SSOs of 50,000 gallons or more, an SSO Technical Report must be prepared and submitted to the CIWQS online SSO database within 45 calendar days of the SSO end date. The SSO Technical Report must include, at a minimum, the following:

1. Causes and Circumstances of the SSOs
2. Complete and detailed explanation of how and when the SSO was discovered
3. Diagram showing the SSO failure point, appearance point(s), and final destination(s)
4. Detailed description of the causes(s) of the SSO
5. Copies of the original field crew records used to document the SSO
6. Historical maintenance records for the failure location
7. Response to SSO:
8. Chronological narrative description of all actions taken to terminate the SSO
9. Explanation of how the OERP was implemented to respond to and mitigate the SSO
10. Final corrective action(s) completed and/or planned to be completed, including a schedule or actions not yet completed
11. Water Quality Monitoring:
12. Description of all water quality sampling activities conducted including analytical results and evaluation of the results
13. Detailed location map illustrating all water quality sampling points

The District Engineer is responsible for the development and certification of the SSO Technical Report. The SSO Technical Report template can be found in Appendix F of this document.

6.13 RESPONSE ON/IN 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 & document all evidence that this SSO 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 or unwilling to address the cause of the overflow, 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 SSO 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 SSOs 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 overflow 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 SSO was caused by District operations, call out and oversee a water damage restoration contractor to complete cleanup and restoration inside the property



INVESTIGATION & DOCUMENTATION

6.14 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 SSO 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.
7. Ensure all photos, forms, maps & CCTV get logged in SSO binder and into CMMS program.

6.15 FAILURE ANALYSIS INVESTIGATION

For each SSO 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-SSO Debrief is to determine actions necessary, if any, to reduce the recurrence and better mitigate the effects of SSOs.

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 SSOs. The procedures for investigating an SSO are as follows:

- Reviewing and completing the Sewer Overflow Report
- Reviewing 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
- Reviewing communications with the all reporting parties, and witnesses
- Review volume estimate, volume recovered estimate, volume estimation assumptions and associated drawings
- Reviewing available photographs
- Interviewing staff that responded to the spill
- Reviewing past maintenance records of all affected manholes and pipe segments
- Conducting a CCTV inspection to determine the condition of the line segment immediately following the SSO and reviewing the video and logs
- Reviewing any FOG related information or results
- Identify any changes or additions needed to the OERP 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 SSO, and identification of corrective actions.



SSO REPORTING PROCEDURES/REGULATORY NOTIFICATION

6.16 DOCUMENTATION

In accordance with the WDR, the District maintains records for each sanitary sewer overflow. Records include:

- Documentation of response steps and/or remedial actions
- Photographic evidence to document the extent of the SSO and field crew response operations
- Site conditions after field crew SSO response operations have been completed
- The date, time, location, and direction of photographs taken will be documented
- Documentation of how any estimations of the volume of discharged and/or recovered overflow were calculated

The records are maintained at the District office and are also entered into the District's CMMS system. The District also maintains records of complaints received, even if the complaint does not relate to a District SSO.

6.17 REGULATORY REPORTING

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

A. Multiple Appearance Points – Single SSO

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

B. 2-Hour Notification to Regulatory Agencies of SSOs

Cal OES is only to be notified of a Category 1 SSO discharged to surface water or spilled in a location where it probably will be discharged to surface water. The First Responder is responsible for reviewing field data for reporting to regulatory agencies. If it is determined that the criteria for OES notification was met, then the First Responder must notify OES of the event no later than two (2) hours after:

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

The OES phone number is (800) 852-7550. The First Responder is responsible for obtaining an OES Control number. Following the initial notification to OES and until the SSO report is certified in the SWRCB online SSO Database, the LRO will provide updates (or provide direction for updates to be provided) to OES regarding substantial changes to estimated volume



of untreated or partially treated sewage discharged and any substantial changes to known impact(s).

C. Detailed Reporting Requirements

This section provides detail on the District's regulatory reporting process, which is also described below.

SSO Reporting for Category 1 SSOs

- Cal OES shall receive notification of Category 1 SSOs that reach a waterway, as stated earlier in this Section, within 2 hours of becoming aware of the SSO.
- The Data Submitter must then submit the initial draft report to the SWRCB's CIWQS Online SSO database @ <http://ciwqs.waterboards.ca.gov/ciwqs> within 3 business days of becoming aware of the SSO.
- Within 15 calendar days of the SSO end date, the LRO must review and certify the report in the CWIQS Online SSO database @ <http://ciwqs.waterboards.ca.gov/ciwqs>

Draft Category 1 SSO Reporting

1. SSO Contact Information: Name and telephone number of staff who can answer specific questions about the SSO being reported
2. SSO Location Name
3. Location of the overflow event (SSO) by entering GPS coordinates. If a single overflow 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 SSO appearance point explanation field
4. Whether or not the SSO reached surface water, a drainage channel, or entered and was discharged from a drainage structure
5. Whether or not the SSO reached a municipal separate storm drain system
6. Whether or not the total SSO volume that reached a municipal separate storm drain system was fully recovered
7. Estimate of the SSO volume, inclusive of all discharge point(s)
8. Estimate of the SSO volume that reached surface water, a drainage channel, or was not recovered from a storm drain
9. Estimate of the SSO volume recovered (if applicable)
10. Number of SSO appearance point(s)
11. Description and location of SSO appearance point(s). If a single sanitary sewer system failure results in multiple SSO appearance points, each appearance point must be described.
12. SSO start date and time
13. Date and time the enrollee was notified of, or self-discovered, the SSO
14. Estimated operator arrival time
15. For spills greater than or equal to 1,000 gallons, the date and time OES was called
16. For spills greater than or equal to 1,000 gallons, the OES control number

Certified Category 1 SSO

At a minimum, the following information shall be reported when completing a certified Category 1 SSO report, in addition to items 1-16 above:



1. Description of SSO destination(s)
2. SSO end date and time
3. SSO causes (mainline blockage, roots, etc.)
4. SSO failure point (main, lateral, etc.)
5. Whether or not the spill was associated with a storm event
6. Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the overflow and a schedule of major milestones for those steps
7. Description of spill response activities
8. Spill response completion date
9. Whether or not there is an ongoing investigation, the reasons for the investigation and the expected date of completion
10. Whether or not a beach closure occurred or may have occurred as a result of the SSO
11. Whether or not health warnings were posted as a result of the SSO
12. Name of beach(es) closed and/or impacted. If no beach was impacted, NA must be selected
13. Name of surface water(s) impacted
14. If water quality samples were collected, identify parameters the water quality samples were analyzed for. If no samples were taken, NA shall be selected
15. If water quality samples were taken, identify which regulatory agencies received sample results (if applicable). If no samples were taken, NA shall be selected
16. Description of methodology(ies) and type of data relied upon for estimations of the SSO volume discharged and recovered
17. SSO Certification: Upon SSO Certification, the CIWQS Online SSO Database will issue a final SSO identification (ID) number

SSO Reporting for Category 2 SSOs

Within 3 business days of becoming aware of the SSO, the SSO Reporter or Leadworker, depending on the nature of the SSO as defined in the flowcharts in this OERP, must submit the initial report to the SWRCB's CWIQS Online SSO database at <http://ciwqs.waterboards.ca.gov/ciwqs>.

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

SSO Reporting for Category 3 SSOs

Within 30 calendar days of the end of the calendar month in which the SSO occurred, the LRO must submit and certify a report to the SWRCB's CWIQS Online SSO database @ <http://ciwqs.waterboards.ca.gov/ciwqs>.

No Spill Certification (Monthly)

Within 30 calendar days of the end of a calendar month that there are no SSO's, the LRO must submit and certify a "No Spill" certification to the CIWQS online SSO database.

**CIWQS Not Available**

In the event that the CIWQS online SSO database is not available, the LRO must fax all required information to the RWQCB office at (510) 622-2460 in accordance with the time schedules identified above. In such an event, the District should then submit the appropriate reports using the CIWQS online SSO 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 SSO document file.

Amending SSO Reports

The LRO is responsible for amending SSO reports. Certified SSO reports may be updated by amending the report or adding an attachment to the SSO report within 120 calendar days after the SSO end date. After 120 days, the District must contact the State SSO Program Manager to request to amend an SSO report along with a justification for why the additional information was not available prior to the end of the 120 days. The SWRCB SSO Program Manager contact information is as follows:

Gil Vazquez, P.E.
State Water Resources Control Board
Division of Water Quality
1001 I Street 15th Floor
Sacramento, CA 95814
E-mail: gil.vazquez@waterboards.ca.gov
Phone: (916) 322-1400

D. 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 SSO report in CIWQS. The CIWQS 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/ssr/docs/discharger_workbook.pdf

Required timelines for reporting are shown in the flowchart on the following page.

**SSO 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 SSO	Call OES 1-800-852-7550. Ask for Control Number.	Lead Maintenance Worker
Cat 1 or Cat 2 SSO	Within 72 hours of beginning of SSO	Enter SSO Report in CIWQS	Lead Maintenance Worker
	Within 15 calendar days of beginning of SSO	Certify SSO Report in CIWQS	Maintenance Superintendent
Cat 3 SSO	Within 30 days of end of month in which SSO occurred	Certify SSO Report in CIWQS	Maintenance Superintendent
50,000 gal or more have been released	Within 48 hours of being aware of SSO	Complete Water Quality Testing according to OERP WQ Monitoring Program	Lead Maintenance Worker
	Within 45 calendar days from last day of SSO	Submit Technical Report	District Engineer

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CHAPTER 7 – FATS, OILS, & GREASE (FOG) CONTROL PROGRAM

SWRCB Waste Discharge Requirement:

Each Enrollee shall evaluate its service area to determine whether a FOG control program is needed. If an Enrollee determines that a FOG program is not needed, the Enrollee must provide justification for why it is not needed. If FOG is found to be a problem, the Enrollee must prepare and implement a FOG source control program to reduce the amount of these substances discharged to the sanitary sewer system. This plan shall include the following as appropriate:

- An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;
- A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area;
- The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;
- 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
- Development and implementation of source control measures for all sources of FOG discharged to the sanitary sewer system for each section identified in (f) above.

This chapter provides a description of the District's FOG 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.

7.1 BACKGROUND

The District has reported 15 SSOs over the past 5 years. Grease deposition was determined to be the SSO cause at three of these locations. This information does not support the need for a FOG control program. 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:

1. Purpose
2. Definitions
3. Grease Discharge Permit
4. Grease Removal Device Standards and Design Specifications
5. Grease Trap Inspection, Cleaning, and Maintenance
6. Grease Interceptor Inspection, Maintenance, Cleaning
7. Recordkeeping
8. Abandoned Devices
9. 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.

Posters describing Best Management Practices (BMPs) are delivered to the FSE at the initial permit inspection. The Maintenance 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.

APPENDIX G – SUPPORTING DOCUMENTS FOR ELEMENT 7

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

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CHAPTER 8 – SYSTEM EVALUATION & CAPACITY ASSURANCE

SWRCB Waste Discharge Requirement:

The Enrollee shall prepare and implement a capital improvement plan (CIP) that will provide 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. At a minimum, the plan must include:

- **Evaluation:** Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs that escape from the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to the peak flows associated with overflow events;
- **Design Criteria:** Where design criteria do not exist or are deficient, undertake the evaluation identified in (a) above to establish appropriate design criteria; and
- **Capacity Enhancement Measures:** The steps needed to establish a short- and long-term CIP to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, I/I reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding.
- **Schedule:** The Enrollee shall develop a schedule of completion dates for all portions of the capital improvement program developed in (a)-(c) above. This schedule shall be reviewed and updated consistent with the Sewer System Management Plan (SSMP) review and update requirements as described in Section D. 14.

8.1 BACKGROUND

This chapter describes the District's Sewer Master Plan (Master Plan). The Plan, adopted in 2004 and updated in 2005, 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.

8.2 PROJECT DRIVERS AND CAPACITY ASSESSMENT CRITERIA

The Master Plan evaluated 85 miles of gravity pipeline, 20 miles of pressure pipelines, and 27 pumping stations that were in service in 2005. The computer model used to assess hydraulic capacity was the H2OMAP Sewer Version 3.5. Although the model and Master Plan identified several problem areas, ISD does not have any known sewer system overflow trouble spots, and has no recorded overflows from the areas in question. In 2017, the District Engineer will review the Master Plan, compare the assumptions from the Master Plan to current conditions, and develop a plan for continued assessment of capacity needs.



8.3 CAPITAL IMPROVEMENT PROGRAM BUDGET AND SCHEDULE

Based on the results of the hydraulic modeling a capacity-related Capital Improvement Program (CIP) was established in 2005. Predicted capacity issues are associated with future development and growth. Therefore, as development occurs, the recommendations from the Master Plan will be revisited. The Master Plan is located at ISD's main office in the Board Room Library, and the Table of Contents from this document is included in Appendix H.

APPENDIX H – SUPPORTING DOCUMENTS FOR CHAPTER 8

- Table of Contents from Sewer Master Plan



CHAPTER 9 – MONITORING, MEASUREMENT, & PROGRAM MODIFICATIONS

SWRCB Waste Discharge Requirement:

The Enrollee shall:

- Maintain relevant information that can be used to establish and prioritize appropriate Sewer System Management Plan (SSMP) activities;
- Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;
- Assess the success of the preventative maintenance program;
- Update program elements, as appropriate, based on monitoring or performance evaluations; and
- Identify and illustrate SSO trends, including: frequency, location, and volume.

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

9.1 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)
SSOs	Number by Underlying Cause
Response Time	Minutes per SSO after Notification
Pump Station Overflows	Number by Cause
Pipe Rehabilitated	Miles/Year
Claims	#/Year and \$/Year/Incident

9.2 SSO TRENDS – NUMBER AND CAUSE

In the past three years (i.e., from January 2014 through December 13, 2016), the District reported the SSOs shown in Table 9-2.

Table 9-2. SSOs in 2014, 2015 and 2016

Year	Roots	FOG	Debris	Structural Failure	Other	Total
2014			1	1		2
2015			1		2	3
2016					1	1

APPENDIX I – SUPPORTING DOCUMENTS FOR CHAPTER 9

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



CHAPTER 10 – SSMP PROGRAM AUDITS

SWRCB Waste Discharge Requirement:

As part of the Sewer System Management Plan (SSMP), the Enrollee shall conduct periodic internal audits, appropriate to the size of the system and the number of SSOs. At a minimum, these audits must occur every two 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 identified in this subsection (D.13), including identification of any deficiencies in the SSMP and steps to correct them.

10.1 SUMMARY

An audit of ISD's SSMP will be made every two 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 Maintenance Superintendent, the Maintenance 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 five years.

APPENDIX J – SUPPORTING DOCUMENTS FOR CHAPTER 10

- Most recent SSMP audit(s)
- SSMP Change Log

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CHAPTER 11 – COMMUNICATION PROGRAM

SWRCB Waste Discharge Requirement:

- The Enrollee shall communicate on a regular basis with the public on the development, implementation, and performance of its Sewer System Management Plan (SSMP). The communication system shall provide the public the opportunity to provide input to the Enrollee as the program is developed and implemented.
- The Enrollee shall also create a plan of communication with systems that are tributary and/or satellite to the Enrollee's sanitary sewer system.

11.1 BOARD MEETINGS

ISD's five member Board of Directors meets on the first and 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 SSMP was adopted by the Board of Directors and the public was invited to comment on the development of the SSMP. The Notice of Public Hearing was advertised in the local newspaper concerning adoption of the SSMP.

The Board will take action to the current SSMP update at a regularly-scheduled public meeting.

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 SSO 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.

APPENDIX K – SUPPORTING DOCUMENTS FOR CHAPTER 11

- Copy of Ironhouse Insider



Appendix A
Element 1 (Introduction) Supporting Documents

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**STATE WATER RESOURCES CONTROL BOARD
ORDER NO. 2006-0003-DWQ**

**STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS
FOR
SANITARY SEWER SYSTEMS**

The State Water Resources Control Board, hereinafter referred to as "State Water Board", finds that:

1. All federal and state agencies, municipalities, counties, districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California are required to comply with the terms of this Order. Such entities are hereinafter referred to as "Enrollees".
2. Sanitary sewer overflows (SSOs) are overflows from sanitary sewer systems of domestic wastewater, as well as industrial and commercial wastewater, depending on the pattern of land uses in the area served by the sanitary sewer system. SSOs often contain high levels of suspended solids, pathogenic organisms, toxic pollutants, nutrients, oxygen-demanding organic compounds, oil and grease and other pollutants. SSOs may cause a public nuisance, particularly when raw untreated wastewater is discharged to areas with high public exposure, such as streets or surface waters used for drinking, fishing, or body contact recreation. SSOs may pollute surface or ground waters, threaten public health, adversely affect aquatic life, and impair the recreational use and aesthetic enjoyment of surface waters.
3. Sanitary sewer systems experience periodic failures resulting in discharges that may affect waters of the state. There are many factors (including factors related to geology, design, construction methods and materials, age of the system, population growth, and system operation and maintenance), which affect the likelihood of an SSO. A proactive approach that requires Enrollees to ensure a system-wide operation, maintenance, and management plan is in place will reduce the number and frequency of SSOs within the state. This approach will in turn decrease the risk to human health and the environment caused by SSOs.
4. Major causes of SSOs include: grease blockages, root blockages, sewer line flood damage, manhole structure failures, vandalism, pump station mechanical failures, power outages, excessive storm or ground water inflow/infiltration, debris blockages, sanitary sewer system age and construction material failures, lack of proper operation and maintenance, insufficient capacity and contractor-caused damages. Many SSOs are preventable with adequate and appropriate facilities, source control measures and operation and maintenance of the sanitary sewer system.

SEWER SYSTEM MANAGEMENT PLANS

5. To facilitate proper funding and management of sanitary sewer systems, each Enrollee must develop and implement a system-specific Sewer System Management Plan (SSMP). To be effective, SSMPs must include provisions to provide proper and efficient management, operation, and maintenance of sanitary sewer systems, while taking into consideration risk management and cost benefit analysis. Additionally, an SSMP must contain a spill response plan that establishes standard procedures for immediate response to an SSO in a manner designed to minimize water quality impacts and potential nuisance conditions.
6. Many local public agencies in California have already developed SSMPs and implemented measures to reduce SSOs. These entities can build upon their existing efforts to establish a comprehensive SSMP consistent with this Order. Others, however, still require technical assistance and, in some cases, funding to improve sanitary sewer system operation and maintenance in order to reduce SSOs.
7. SSMP certification by technically qualified and experienced persons can provide a useful and cost-effective means for ensuring that SSMPs are developed and implemented appropriately.
8. It is the State Water Board's intent to gather additional information on the causes and sources of SSOs to augment existing information and to determine the full extent of SSOs and consequent public health and/or environmental impacts occurring in the State.
9. Both uniform SSO reporting and a centralized statewide electronic database are needed to collect information to allow the State Water Board and Regional Water Quality Control Boards (Regional Water Boards) to effectively analyze the extent of SSOs statewide and their potential impacts on beneficial uses and public health. The monitoring and reporting program required by this Order and the attached Monitoring and Reporting Program No. 2006-0003-DWQ, are necessary to assure compliance with these waste discharge requirements (WDRs).
10. Information regarding SSOs must be provided to Regional Water Boards and other regulatory agencies in a timely manner and be made available to the public in a complete, concise, and timely fashion.
11. Some Regional Water Boards have issued WDRs or WDRs that serve as National Pollution Discharge Elimination System (NPDES) permits to sanitary sewer system owners/operators within their jurisdictions. This Order establishes minimum requirements to prevent SSOs. Although it is the State Water Board's intent that this Order be the primary regulatory mechanism for sanitary sewer systems statewide, Regional Water Boards may issue more stringent or more

prescriptive WDRs for sanitary sewer systems. Upon issuance or reissuance of a Regional Water Board's WDRs for a system subject to this Order, the Regional Water Board shall coordinate its requirements with stated requirements within this Order, to identify requirements that are more stringent, to remove requirements that are less stringent than this Order, and to provide consistency in reporting.

REGULATORY CONSIDERATIONS

12. California Water Code section 13263 provides that the State Water Board may prescribe general WDRs for a category of discharges if the State Water Board finds or determines that:

- The discharges are produced by the same or similar operations;
- The discharges involve the same or similar types of waste;
- The discharges require the same or similar treatment standards; and
- The discharges are more appropriately regulated under general discharge requirements than individual discharge requirements.

This Order establishes requirements for a class of operations, facilities, and discharges that are similar throughout the state.

13. The issuance of general WDRs to the Enrollees will:

- a) Reduce the administrative burden of issuing individual WDRs to each Enrollee;
- b) Provide for a unified statewide approach for the reporting and database tracking of SSOs;
- c) Establish consistent and uniform requirements for SSMP development and implementation;
- d) Provide statewide consistency in reporting; and
- e) Facilitate consistent enforcement for violations.

14. The beneficial uses of surface waters that can be impaired by SSOs include, but are not limited to, aquatic life, drinking water supply, body contact and non-contact recreation, and aesthetics. The beneficial uses of ground water that can be impaired include, but are not limited to, drinking water and agricultural supply. Surface and ground waters throughout the state support these uses to varying degrees.

15. The implementation of requirements set forth in this Order will ensure the reasonable protection of past, present, and probable future beneficial uses of water and the prevention of nuisance. The requirements implement the water quality control plans (Basin Plans) for each region and take into account the environmental characteristics of hydrographic units within the state. Additionally, the State Water Board has considered water quality conditions that could reasonably be achieved through the coordinated control of all factors that affect

water quality in the area, costs associated with compliance with these requirements, the need for developing housing within California, and the need to develop and use recycled water.

16. The Federal Clean Water Act largely prohibits any discharge of pollutants from a point source to waters of the United States except as authorized under an NPDES permit. In general, any point source discharge of sewage effluent to waters of the United States must comply with technology-based, secondary treatment standards, at a minimum, and any more stringent requirements necessary to meet applicable water quality standards and other requirements. Hence, the unpermitted discharge of wastewater from a sanitary sewer system to waters of the United States is illegal under the Clean Water Act. In addition, many Basin Plans adopted by the Regional Water Boards contain discharge prohibitions that apply to the discharge of untreated or partially treated wastewater. Finally, the California Water Code generally prohibits the discharge of waste to land prior to the filing of any required report of waste discharge and the subsequent issuance of either WDRs or a waiver of WDRs.
17. California Water Code section 13263 requires a water board to, after any necessary hearing, prescribe requirements as to the nature of any proposed discharge, existing discharge, or material change in an existing discharge. The requirements shall, among other things, take into consideration the need to prevent nuisance.
18. California Water Code section 13050, subdivision (m), defines nuisance as anything which meets all of the following requirements:
 - a. Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.
 - b. Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.
 - c. Occurs during, or as a result of, the treatment or disposal of wastes.
19. This Order is consistent with State Water Board Resolution No. 68-16 (Statement of Policy with Respect to Maintaining High Quality of Waters in California) in that the Order imposes conditions to prevent impacts to water quality, does not allow the degradation of water quality, will not unreasonably affect beneficial uses of water, and will not result in water quality less than prescribed in State Water Board or Regional Water Board plans and policies.
20. The action to adopt this General Order is exempt from the California Environmental Quality Act (Public Resources Code §21000 et seq.) because it is an action taken by a regulatory agency to assure the protection of the environment and the regulatory process involves procedures for protection of the environment. (Cal. Code Regs., tit. 14, §15308). In addition, the action to adopt

this Order is exempt from CEQA pursuant to Cal.Code Regs., title 14, §15301 to the extent that it applies to existing sanitary sewer collection systems that constitute “existing facilities” as that term is used in Section 15301, and §15302, to the extent that it results in the repair or replacement of existing systems involving negligible or no expansion of capacity.

21. The Fact Sheet, which is incorporated by reference in the Order, contains supplemental information that was also considered in establishing these requirements.
22. The State Water Board has notified all affected public agencies and all known interested persons of the intent to prescribe general WDRs that require Enrollees to develop SSMPs and to report all SSOs.
23. The State Water Board conducted a public hearing on February 8, 2006, to receive oral and written comments on the draft order. The State Water Board received and considered, at its May 2, 2006, meeting, additional public comments on substantial changes made to the proposed general WDRs following the February 8, 2006, public hearing. The State Water Board has considered all comments pertaining to the proposed general WDRs.

IT IS HEREBY ORDERED, that pursuant to California Water Code section 13263, the Enrollees, their agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted hereunder, shall comply with the following:

A. DEFINITIONS

1. **Sanitary sewer overflow (SSO)** - Any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system. SSOs include:
 - (i) Overflows or releases of untreated or partially treated wastewater that reach waters of the United States;
 - (ii) Overflows or releases of untreated or partially treated wastewater that do not reach waters of the United States; and
 - (iii) Wastewater backups into buildings and on private property that are caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer system.
2. **Sanitary sewer system** – Any system of pipes, pump stations, sewer lines, or other conveyances, upstream of a wastewater treatment plant headworks used to collect and convey wastewater to the publicly owned treatment facility. Temporary storage and conveyance facilities (such as vaults, temporary piping, construction trenches, wet wells, impoundments, tanks, etc.) are considered to be part of the sanitary sewer system, and discharges into these temporary storage facilities are not considered to be SSOs.

For purposes of this Order, sanitary sewer systems include only those systems owned by public agencies that are comprised of more than one mile of pipes or sewer lines.

3. **Enrollee** - A federal or state agency, municipality, county, district, and other public entity that owns or operates a sanitary sewer system, as defined in the general WDRs, and that has submitted a complete and approved application for coverage under this Order.
4. **SSO Reporting System** – Online spill reporting system that is hosted, controlled, and maintained by the State Water Board. The web address for this site is <http://ciwqs.waterboards.ca.gov>. This online database is maintained on a secure site and is controlled by unique usernames and passwords.
5. **Untreated or partially treated wastewater** – Any volume of waste discharged from the sanitary sewer system upstream of a wastewater treatment plant headworks.
6. **Satellite collection system** – The portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility to which the sanitary sewer system is tributary.
7. **Nuisance** - California Water Code section 13050, subdivision (m), defines nuisance as anything which meets all of the following requirements:
 - a. Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.
 - b. Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.
 - c. Occurs during, or as a result of, the treatment or disposal of wastes.

B. APPLICATION REQUIREMENTS

1. **Deadlines for Application** – All public agencies that currently own or operate sanitary sewer systems within the State of California must apply for coverage under the general WDRs within six (6) months of the date of adoption of the general WDRs. Additionally, public agencies that acquire or assume responsibility for operating sanitary sewer systems after the date of adoption of this Order must apply for coverage under the general WDRs at least three (3) months prior to operation of those facilities.
2. **Applications under the general WDRs** – In order to apply for coverage pursuant to the general WDRs, a legally authorized representative for each agency must submit a complete application package. Within sixty (60) days of adoption of the general WDRs, State Water Board staff will send specific instructions on how to

apply for coverage under the general WDRs to all known public agencies that own sanitary sewer systems. Agencies that do not receive notice may obtain applications and instructions online on the Water Board's website.

3. Coverage under the general WDRs – Permit coverage will be in effect once a complete application package has been submitted and approved by the State Water Board's Division of Water Quality.

C. PROHIBITIONS

1. Any SSO that results in a discharge of untreated or partially treated wastewater to waters of the United States is prohibited.
2. Any SSO that results in a discharge of untreated or partially treated wastewater that creates a nuisance as defined in California Water Code Section 13050(m) is prohibited.

D. PROVISIONS

1. The Enrollee must comply with all conditions of this Order. Any noncompliance with this Order constitutes a violation of the California Water Code and is grounds for enforcement action.
2. It is the intent of the State Water Board that sanitary sewer systems be regulated in a manner consistent with the general WDRs. Nothing in the general WDRs shall be:
 - (i) Interpreted or applied in a manner inconsistent with the Federal Clean Water Act, or supersede a more specific or more stringent state or federal requirement in an existing permit, regulation, or administrative/judicial order or Consent Decree;
 - (ii) Interpreted or applied to authorize an SSO that is illegal under either the Clean Water Act, an applicable Basin Plan prohibition or water quality standard, or the California Water Code;
 - (iii) Interpreted or applied to prohibit a Regional Water Board from issuing an individual NPDES permit or WDR, superseding this general WDR, for a sanitary sewer system, authorized under the Clean Water Act or California Water Code; or
 - (iv) Interpreted or applied to supersede any more specific or more stringent WDRs or enforcement order issued by a Regional Water Board.
3. The Enrollee shall take all feasible steps to eliminate SSOs. In the event that an SSO does occur, the Enrollee shall take all feasible steps to contain and mitigate the impacts of an SSO.
4. In the event of an SSO, the Enrollee shall take all feasible steps to prevent untreated or partially treated wastewater from discharging from storm drains into

flood control channels or waters of the United States by blocking the storm drainage system and by removing the wastewater from the storm drains.

5. All SSOs must be reported in accordance with Section G of the general WDRs.
6. In any enforcement action, the State and/or Regional Water Boards will consider the appropriate factors under the duly adopted State Water Board Enforcement Policy. And, consistent with the Enforcement Policy, the State and/or Regional Water Boards must consider the Enrollee's efforts to contain, control, and mitigate SSOs when considering the California Water Code Section 13327 factors. In assessing these factors, the State and/or Regional Water Boards will also consider whether:
 - (i) The Enrollee has complied with the requirements of this Order, including requirements for reporting and developing and implementing a SSMP;
 - (ii) The Enrollee can identify the cause or likely cause of the discharge event;
 - (iii) There were no feasible alternatives to the discharge, such as temporary storage or retention of untreated wastewater, reduction of inflow and infiltration, use of adequate backup equipment, collecting and hauling of untreated wastewater to a treatment facility, or an increase in the capacity of the system as necessary to contain the design storm event identified in the SSMP. It is inappropriate to consider the lack of feasible alternatives, if the Enrollee does not implement a periodic or continuing process to identify and correct problems.
 - (iv) The discharge was exceptional, unintentional, temporary, and caused by factors beyond the reasonable control of the Enrollee;
 - (v) The discharge could have been prevented by the exercise of reasonable control described in a certified SSMP for:
 - Proper management, operation and maintenance;
 - Adequate treatment facilities, sanitary sewer system facilities, and/or components with an appropriate design capacity, to reasonably prevent SSOs (e.g., adequately enlarging treatment or collection facilities to accommodate growth, infiltration and inflow (I/I), etc.);
 - Preventive maintenance (including cleaning and fats, oils, and grease (FOG) control);
 - Installation of adequate backup equipment; and
 - Inflow and infiltration prevention and control to the extent practicable.
 - (vi) The sanitary sewer system design capacity is appropriate to reasonably prevent SSOs.

- (vii) The Enrollee took all reasonable steps to stop and mitigate the impact of the discharge as soon as possible.
7. When a sanitary sewer overflow occurs, the Enrollee shall take all feasible steps and necessary remedial actions to 1) control or limit the volume of untreated or partially treated wastewater discharged, 2) terminate the discharge, and 3) recover as much of the wastewater discharged as possible for proper disposal, including any wash down water.

The Enrollee shall implement all remedial actions to the extent they may be applicable to the discharge and not inconsistent with an emergency response plan, including the following:

- (i) Interception and rerouting of untreated or partially treated wastewater flows around the wastewater line failure;
 - (ii) Vacuum truck recovery of sanitary sewer overflows and wash down water;
 - (iii) Cleanup of debris at the overflow site;
 - (iv) System modifications to prevent another SSO at the same location;
 - (v) Adequate sampling to determine the nature and impact of the release; and
 - (vi) Adequate public notification to protect the public from exposure to the SSO.
8. The Enrollee shall properly, manage, operate, and maintain all parts of the sanitary sewer system owned or operated by the Enrollee, and shall ensure that the system operators (including employees, contractors, or other agents) are adequately trained and possess adequate knowledge, skills, and abilities.
9. The Enrollee shall allocate adequate resources for the operation, maintenance, and repair of its sanitary sewer system, by establishing a proper rate structure, accounting mechanisms, and auditing procedures to ensure an adequate measure of revenues and expenditures. These procedures must be in compliance with applicable laws and regulations and comply with generally acceptable accounting practices.
10. The Enrollee shall provide adequate capacity to convey base flows and peak flows, including flows related to wet weather events. Capacity shall meet or exceed the design criteria as defined in the Enrollee's System Evaluation and Capacity Assurance Plan for all parts of the sanitary sewer system owned or operated by the Enrollee.
11. The Enrollee shall develop and implement a written Sewer System Management Plan (SSMP) and make it available to the State and/or Regional Water Board upon request. A copy of this document must be publicly available at the Enrollee's office and/or available on the Internet. This SSMP must be approved by the Enrollee's governing board at a public meeting.

12. In accordance with the California Business and Professions Code sections 6735, 7835, and 7835.1, all engineering and geologic evaluations and judgments shall be performed by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities. Specific elements of the SSMP that require professional evaluation and judgments shall be prepared by or under the direction of appropriately qualified professionals, and shall bear the professional(s)' signature and stamp.
13. The mandatory elements of the SSMP are specified below. However, if the Enrollee believes that any element of this section is not appropriate or applicable to the Enrollee's sanitary sewer system, the SSMP program does not need to address that element. The Enrollee must justify why that element is not applicable. The SSMP must be approved by the deadlines listed in the SSMP Time Schedule below.

Sewer System Management Plan (SSMP)

- (i) **Goal:** The goal of the SSMP is to provide a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer system. This will help reduce and prevent SSOs, as well as mitigate any SSOs that do occur.
- (ii) **Organization:** The SSMP must identify:
 - (a) The name of the responsible or authorized representative as described in Section J of this Order.
 - (b) The names and telephone numbers for management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP program. The SSMP must identify lines of authority through an organization chart or similar document with a narrative explanation; and
 - (c) The chain of communication for reporting SSOs, from receipt of a complaint or other information, including the person responsible for reporting SSOs to the State and Regional Water Board and other agencies if applicable (such as County Health Officer, County Environmental Health Agency, Regional Water Board, and/or State Office of Emergency Services (OES)).
- (iii) **Legal Authority:** 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:
 - (a) Prevent illicit discharges into its sanitary sewer system (examples may include I/I, stormwater, chemical dumping, unauthorized debris and cut roots, etc.);

- (b) Require that sewers and connections be properly designed and constructed;
 - (c) Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the Public Agency;
 - (d) Limit the discharge of fats, oils, and grease and other debris that may cause blockages, and
 - (e) Enforce any violation of its sewer ordinances.
- (iv) **Operation and Maintenance Program.** The SSMP must include those elements listed below that are appropriate and applicable to the Enrollee's system:
- (a) Maintain an up-to-date map of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable stormwater conveyance facilities;
 - (b) Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventative Maintenance (PM) program should have a system to document scheduled and conducted activities, such as work orders;
 - (c) Develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short- and long-term plans plus a schedule for developing the funds needed for the capital improvement plan;
 - (d) Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be appropriately trained; and

- (e) Provide equipment and replacement part inventories, including identification of critical replacement parts.

(v) **Design and Performance Provisions:**

- (a) Design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer systems; and
- (b) Procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

(vi) **Overflow Emergency Response Plan** - Each Enrollee shall develop and implement an overflow emergency response plan that identifies measures to protect public health and the environment. At a minimum, this plan must include the following:

- (a) Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;
- (b) A program to ensure an appropriate response to all overflows;
- (c) Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, Regional Water Boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the MRP. All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board WDRs or NPDES permit requirements. The SSMP should identify the officials who will receive immediate notification;
- (d) Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;
- (e) Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and
- (f) A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.

(vii) **FOG Control Program:** Each Enrollee shall evaluate its service area to determine whether a FOG control program is needed. If an Enrollee determines that a FOG program is not needed, the Enrollee must provide justification for why it is not needed. If FOG is found to be a problem, the Enrollee must prepare and implement a FOG source control program to reduce the amount of these substances discharged to the sanitary sewer system. This plan shall include the following as appropriate:

- (a) An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;
- (b) A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area;
- (c) The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;
- (d) Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements;
- (e) Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the FOG ordinance;
- (f) An identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section; and
- (g) Development and implementation of source control measures for all sources of FOG discharged to the sanitary sewer system for each section identified in (f) above.

(viii) **System Evaluation and Capacity Assurance Plan:** The Enrollee shall prepare and implement a capital improvement plan (CIP) that will provide 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. At a minimum, the plan must include:

- (a) **Evaluation:** Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs

that escape from the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to the peak flows associated with overflow events;

- (b) **Design Criteria:** Where design criteria do not exist or are deficient, undertake the evaluation identified in (a) above to establish appropriate design criteria; and
 - (c) **Capacity Enhancement Measures:** The steps needed to establish a short- and long-term CIP to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, I/I reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding.
 - (d) **Schedule:** The Enrollee shall develop a schedule of completion dates for all portions of the capital improvement program developed in (a)-(c) above. This schedule shall be reviewed and updated consistent with the SSMP review and update requirements as described in Section D. 14.
- (ix) **Monitoring, Measurement, and Program Modifications:** The Enrollee shall:
- (a) Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;
 - (b) Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;
 - (c) Assess the success of the preventative maintenance program;
 - (d) Update program elements, as appropriate, based on monitoring or performance evaluations; and
 - (e) Identify and illustrate SSO trends, including: frequency, location, and volume.
- (x) **SSMP Program Audits** - As part of the SSMP, the Enrollee shall conduct periodic internal audits, appropriate to the size of the system and the number of SSOs. At a minimum, these audits must occur every two 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 identified in this subsection (D.13), including identification of any deficiencies in the SSMP and steps to correct them.

- (xi) **Communication Program** – The Enrollee shall communicate on a regular basis with the public on the development, implementation, and performance of its SSMP. The communication system shall provide the public the opportunity to provide input to the Enrollee as the program is developed and implemented.

The Enrollee shall also create a plan of communication with systems that are tributary and/or satellite to the Enrollee's sanitary sewer system.

14. Both the SSMP and the Enrollee's program to implement the SSMP must be certified by the Enrollee to be in compliance with the requirements set forth above and must be presented to the Enrollee's governing board for approval at a public meeting. The Enrollee shall certify that the SSMP, and subparts thereof, are in compliance with the general WDRs within the time frames identified in the time schedule provided in subsection D.15, below.

In order to complete this certification, the Enrollee's authorized representative must complete the certification portion in the Online SSO Database Questionnaire by checking the appropriate milestone box, printing and signing the automated form, and sending the form to:

State Water Resources Control Board
Division of Water Quality
Attn: SSO Program Manager
P.O. Box 100
Sacramento, CA 95812

The SSMP must be updated every five (5) years, and must include any significant program changes. Re-certification by the governing board of the Enrollee is required in accordance with D.14 when significant updates to the SSMP are made. To complete the re-certification process, the Enrollee shall enter the data in the Online SSO Database and mail the form to the State Water Board, as described above.

15. The Enrollee shall comply with these requirements according to the following schedule. This time schedule does not supersede existing requirements or time schedules associated with other permits or regulatory requirements.

Sewer System Management Plan Time Schedule

<u>Task and Associated Section</u>	Completion Date			
	Population > 100,000	Population between 100,000 and 10,000	Population between 10,000 and 2,500	Population < 2,500
Application for Permit Coverage Section C	6 months after WDRs Adoption			
Reporting Program Section G	6 months after WDRs Adoption ¹			
SSMP Development Plan and Schedule No specific Section	9 months after WDRs Adoption ²	12 months after WDRs Adoption ²	15 months after WDRs Adoption ²	18 months after WDRs Adoption ²
Goals and Organization Structure Section D 13 (i) & (ii)	12 months after WDRs Adoption ²		18 months after WDRs Adoption ²	
Overflow Emergency Response Program Section D 13 (vi)	24 months after WDRs Adoption ²	30 months after WDRs Adoption ²	36 months after WDRs Adoption ²	39 months after WDRs Adoption ²
Legal Authority Section D 13 (iii)				
Operation and Maintenance Program Section D 13 (iv)				
Grease Control Program Section D 13 (vii)				
Design and Performance Section D 13 (v)	36 months after WDRs Adoption	39 months after WDRs Adoption	48 months after WDRs Adoption	51 months after WDRs Adoption
System Evaluation and Capacity Assurance Plan Section D 13 (viii)				
Final SSMP, incorporating all of the SSMP requirements Section D 13				

1. In the event that by July 1, 2006 the Executive Director is able to execute a memorandum of agreement (MOA) with the California Water Environment Association (CWEA) or discharger representatives outlining a strategy and time schedule for CWEA or another entity to provide statewide training on the adopted monitoring program, SSO database electronic reporting, and SSMP development, consistent with this Order, then the schedule of Reporting Program Section G shall be replaced with the following schedule:

Reporting Program Section G	
Regional Boards 4, 8, and 9	8 months after WDRs Adoption
Regional Boards 1, 2, and 3	12 months after WDRs Adoption
Regional Boards 5, 6, and 7	16 months after WDRs Adoption

If this MOU is not executed by July 1, 2006, the reporting program time schedule will remain six (6) months for all regions and agency size categories.

2. In the event that the Executive Director executes the MOA identified in note 1 by July 1, 2006, then the deadline for this task shall be extended by six (6) months. The time schedule identified in the MOA must be consistent with the extended time schedule provided by this note. If the MOA is not executed by July 1, 2006, the six (6) month time extension will not be granted.

E. WDRs and SSMP AVAILABILITY

1. A copy of the general WDRs and the certified SSMP shall be maintained at appropriate locations (such as the Enrollee's offices, facilities, and/or Internet homepage) and shall be available to sanitary sewer system operating and maintenance personnel at all times.

F. ENTRY AND INSPECTION

1. The Enrollee shall allow the State or Regional Water Boards or their authorized representative, upon presentation of credentials and other documents as may be required by law, to:
 - a. Enter upon the Enrollee's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order;

- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
- d. Sample or monitor at reasonable times, for the purposes of assuring compliance with this Order or as otherwise authorized by the California Water Code, any substances or parameters at any location.

G. GENERAL MONITORING AND REPORTING REQUIREMENTS

1. The Enrollee shall furnish to the State or Regional Water Board, within a reasonable time, any information that the State or Regional Water Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The Enrollee shall also furnish to the Executive Director of the State Water Board or Executive Officer of the applicable Regional Water Board, upon request, copies of records required to be kept by this Order.
2. The Enrollee shall comply with the attached Monitoring and Reporting Program No. 2006-0003 and future revisions thereto, as specified by the Executive Director. Monitoring results shall be reported at the intervals specified in Monitoring and Reporting Program No. 2006-0003. Unless superseded by a specific enforcement Order for a specific Enrollee, these reporting requirements are intended to replace other mandatory routine written reports associated with SSOs.
3. All Enrollees must obtain SSO Database accounts and receive a "Username" and "Password" by registering through the California Integrated Water Quality System (CIWQS). These accounts will allow controlled and secure entry into the SSO Database. Additionally, within 30 days of receiving an account and prior to recording spills into the SSO Database, all Enrollees must complete the "Collection System Questionnaire", which collects pertinent information regarding a Enrollee's collection system. The "Collection System Questionnaire" must be updated at least every 12 months.
4. Pursuant to Health and Safety Code section 5411.5, any person who, without regard to intent or negligence, causes or permits any untreated wastewater or other waste to be discharged in or on any waters of the State, or discharged in or deposited where it is, or probably will be, discharged in or on any surface waters of the State, as soon as that person has knowledge of the discharge, shall immediately notify the local health officer of the discharge. Discharges of untreated or partially treated wastewater to storm drains and drainage channels, whether man-made or natural or concrete-lined, shall be reported as required above.

Any SSO greater than 1,000 gallons discharged in or on any waters of the State, or discharged in or deposited where it is, or probably will be, discharged in or on any surface waters of the State shall also be reported to the Office of Emergency Services pursuant to California Water Code section 13271.

H. CHANGE IN OWNERSHIP

1. This Order is not transferable to any person or party, except after notice to the Executive Director. The Enrollee shall submit this notice in writing at least 30 days in advance of any proposed transfer. The notice must include a written agreement between the existing and new Enrollee containing a specific date for the transfer of this Order's responsibility and coverage between the existing Enrollee and the new Enrollee. This agreement shall include an acknowledgement that the existing Enrollee is liable for violations up to the transfer date and that the new Enrollee is liable from the transfer date forward.

I. INCOMPLETE REPORTS

1. If an Enrollee becomes aware that it failed to submit any relevant facts in any report required under this Order, the Enrollee shall promptly submit such facts or information by formally amending the report in the Online SSO Database.

J. REPORT DECLARATION

1. All applications, reports, or information shall be signed and certified as follows:
 - (i) All reports required by this Order and other information required by the State or Regional Water Board shall be signed and certified by a person designated, for a municipality, state, federal or other public agency, as either a principal executive officer or ranking elected official, or by a duly authorized representative of that person, as described in paragraph (ii) of this provision. (For purposes of electronic reporting, an electronic signature and accompanying certification, which is in compliance with the Online SSO database procedures, meet this certification requirement.)
 - (ii) An individual is a duly authorized representative only if:
 - (a) The authorization is made in writing by a person described in paragraph (i) of this provision; and
 - (b) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity.

K. CIVIL MONETARY REMEDIES FOR DISCHARGE VIOLATIONS

1. The California Water Code provides various enforcement options, including civil monetary remedies, for violations of this Order.
2. The California Water Code also provides that any person failing or refusing to furnish technical or monitoring program reports, as required under this Order, or

falsifying any information provided in the technical or monitoring reports is subject to civil monetary penalties.

L. SEVERABILITY

1. The provisions of this Order are severable, and if any provision of this Order, or the application of any provision of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order, shall not be affected thereby.
2. This order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the Enrollee from liability under federal, state or local laws, nor create a vested right for the Enrollee to continue the waste discharge.

CERTIFICATION

The undersigned Clerk to the State Water Board does hereby certify that the foregoing is a full, true, and correct copy of general WDRs duly and regularly adopted at a meeting of the State Water Resources Control Board held on May 2, 2006.

AYE: Tam M. Doduc
Gerald D. Secundy

NO: Arthur G. Baggett

ABSENT: None

ABSTAIN: None



Song Her
Clerk to the Board

STATE OF CALIFORNIA
WATER RESOURCES CONTROL BOARD
ORDER NO. WQ 2013-0058-EXEC

AMENDING MONITORING AND REPORTING PROGRAM
FOR
STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR
SANITARY SEWER SYSTEMS

The State of California, Water Resources Control Board (hereafter State Water Board) finds:

1. The State Water Board is authorized to prescribe statewide general Waste Discharge Requirements (WDRs) for categories of discharges that involve the same or similar operations and the same or similar types of waste pursuant to Water Code section 13263(i).
2. Water Code section 13193 *et seq.* requires the Regional Water Quality Control Boards (Regional Water Boards) and the State Water Board (collectively, the Water Boards) to gather Sanitary Sewer Overflow (SSO) information and make this information available to the public, including but not limited to, SSO cause, estimated volume, location, date, time, duration, whether or not the SSO reached or may have reached waters of the state, response and corrective action taken, and an enrollee's contact information for each SSO event. An enrollee is defined as the public entity having legal authority over the operation and maintenance of, or capital improvements to, a sanitary sewer system greater than one mile in length.
3. Water Code section 13271, *et seq.* requires notification to the California Office of Emergency Services (Cal OES), formerly the California Emergency Management Agency, for certain unauthorized discharges, including SSOs.
4. On May 2, 2006, the State Water Board adopted Order 2006-0003-DWQ, "Statewide Waste Discharge Requirements for Sanitary Sewer Systems"¹ (hereafter SSS WDRs) to comply with Water Code section 13193 and to establish the framework for the statewide SSO Reduction Program.
5. Subsection G.2 of the SSS WDRs and the Monitoring and Reporting Program (MRP) provide that the Executive Director may modify the terms of the MRP at any time.
6. On February 20, 2008, the State Water Board Executive Director adopted a revised MRP for the SSS WDRs to rectify early notification deficiencies and ensure that first responders are notified in a timely manner of SSOs discharged into waters of the state.
7. When notified of an SSO that reaches a drainage channel or surface water of the state, Cal OES, pursuant to Water Code section 13271(a)(3), forwards the SSO notification information² to local government agencies and first responders including local public health officials and the applicable Regional Water Board. Receipt of notifications for a single SSO event from both the SSO reporter

¹ Available for download at:

http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2006/wqo/wqo2006_0003.pdf

² Cal OES Hazardous Materials Spill Reports available Online at:

[http://w3.calema.ca.gov/operational/mal haz.nsf/\\$defaultview](http://w3.calema.ca.gov/operational/mal haz.nsf/$defaultview) and <http://w3.calema.ca.gov/operational/mal haz.nsf>

and Cal OES is duplicative. To address this, the SSO notification requirements added by the February 20, 2008 MRP revision are being removed in this MRP revision.

8. In the February 28, 2008 Memorandum of Agreement between the State Water Board and the California Water and Environment Association (CWEA), the State Water Board committed to re-designing the CIWQS³ Online SSO Database to allow "event" based SSO reporting versus the original "location" based reporting. Revisions to this MRP and accompanying changes to the CIWQS Online SSO Database will implement this change by allowing for multiple SSO appearance points to be associated with each SSO event caused by a single asset failure.
9. Based on stakeholder input and Water Board staff experience implementing the SSO Reduction Program, SSO categories have been revised in this MRP. In the prior version of the MRP, SSOs have been categorized as Category 1 or Category 2. This MRP implements changes to SSO categories by adding a Category 3 SSO type. This change will improve data management to further assist Water Board staff with evaluation of high threat and low threat SSOs by placing them in unique categories (i.e., Category 1 and Category 3, respectively). This change will also assist enrollees in identifying SSOs that require Cal OES notification.
10. Based on over six years of implementation of the SSS WDRs, the State Water Board concludes that the February 20, 2008 MRP must be updated to better advance the SSO Reduction Program⁴ objectives, assess compliance, and enforce the requirements of the SSS WDRs.

IT IS HEREBY ORDERED THAT:

Pursuant to the authority delegated by Water Code section 13267(f), Resolution 2002-0104, and Order 2006-0003-DWQ, the MRP for the SSS WDRs (Order 2006-0003-DWQ) is hereby amended as shown in Attachment A and shall be effective on September 9, 2013.

8/6/13

Date



Thomas Howard
Executive Director

³ California Integrated Water Quality System (CIWQS) publicly available at
<http://www.waterboards.ca.gov/ciwqs/publicreports.shtml>

⁴ Statewide Sanitary Sewer Overflow Reduction Program information is available at:
http://www.waterboards.ca.gov/water_issues/programs/ssor/

ATTACHMENT A

STATE WATER RESOURCES CONTROL BOARD ORDER NO. WQ 2013-0058-EXEC

AMENDING MONITORING AND REPORTING PROGRAM FOR STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR SANITARY SEWER SYSTEMS

This Monitoring and Reporting Program (MRP) establishes monitoring, record keeping, reporting and public notification requirements for Order 2006-0003-DWQ, "Statewide General Waste Discharge Requirements for Sanitary Sewer Systems" (SSS WDRs). This MRP shall be effective from September 9, 2013 until it is rescinded. The Executive Director may make revisions to this MRP at any time. These revisions may include a reduction or increase in the monitoring and reporting requirements. All site specific records and data developed pursuant to the SSS WDRs and this MRP shall be complete, accurate, and justified by evidence maintained by the enrollee. Failure to comply with this MRP may subject an enrollee to civil liabilities of up to \$5,000 a day per violation pursuant to Water Code section 13350; up to \$1,000 a day per violation pursuant to Water Code section 13268; or referral to the Attorney General for judicial civil enforcement. The State Water Resources Control Board (State Water Board) reserves the right to take any further enforcement action authorized by law.

A. SUMMARY OF MRP REQUIREMENTS

Table 1 – Spill Categories and Definitions

CATEGORIES	DEFINITIONS [see Section A on page 5 of Order 2006-0003-DWQ, for Sanitary Sewer Overflow (SSO) definition]
CATEGORY 1	Discharges of untreated or partially treated wastewater of <u>any volume</u> resulting from an enrollee's sanitary sewer system failure or flow condition that: • Reach surface water and/or reach a drainage channel tributary to a surface water; or • Reach a Municipal Separate Storm Sewer System (MS4) and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).
CATEGORY 2	Discharges of untreated or partially treated wastewater of <u>1,000 gallons or greater</u> resulting from an enrollee's sanitary sewer system failure or flow condition that <u>do not</u> reach surface water, a drainage channel, or a MS4 unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.
CATEGORY 3	All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition.
PRIVATE LATERAL SEWAGE DISCHARGE (PLSD)	Discharges of untreated or partially treated wastewater resulting from blockages or other problems <u>within a privately owned sewer lateral</u> connected to the enrollee's sanitary sewer system or from other private sewer assets. PLSDs that the enrollee becomes aware of may be <u>voluntarily</u> reported to the California Integrated Water Quality System (CIWQS) Online SSO Database.

Table 2 – Notification, Reporting, Monitoring, and Record Keeping Requirements

ELEMENT	REQUIREMENT	METHOD
NOTIFICATION (see section B of MRP)	Within two hours of becoming aware of any Category 1 SSO <u>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</u>, notify the California Office of Emergency Services (Cal OES) and obtain a notification control number.	Call Cal OES at: (800) 852-7550
REPORTING (see section C of MRP)	- Category 1 SSO: Submit draft report within three business days of becoming aware of the SSO and certify within 15 calendar days of SSO end date. - Category 2 SSO: Submit draft report within 3 business days of becoming aware of the SSO and certify within 15 calendar days of the SSO end date. - Category 3 SSO: Submit certified report within 30 calendar days of the end of month in which SSO the occurred. - SSO Technical Report: Submit within 45 calendar days after the end date of any Category 1 SSO in which 50,000 gallons or greater are spilled to surface waters. “No Spill” Certification: Certify that no SSOs occurred within 30 calendar days of the end of the month or, if reporting quarterly, the quarter in which no SSOs occurred. - Collection System Questionnaire: Update and certify every 12 months.	Enter data into the CIWQS Online SSO Database (http://ciwqs.waterboards.ca.gov/), certified by enrollee’s Legally Responsible Official(s).
WATER QUALITY MONITORING (see section D of MRP)	Conduct water quality sampling <u>within 48 hours</u> after initial SSO notification for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters.	Water quality results are required to be uploaded into CIWQS for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters.
RECORD KEEPING (see section E of MRP)	- SSO event records. - Records documenting Sanitary Sewer Management Plan (SSMP) implementation and changes/updates to the SSMP. - Records to document Water Quality Monitoring for SSOs of 50,000 gallons or greater spilled to surface waters. - Collection system telemetry records if relied upon to document and/or estimate SSO Volume.	Self-maintained records shall be available during inspections or upon request.

B. NOTIFICATION REQUIREMENTS

Although Regional Water Quality Control Boards (Regional Water Boards) and the State Water Board (collectively, the Water Boards) staff do not have duties as first responders, this MRP is an appropriate mechanism to ensure that the agencies that have first responder duties are notified in a timely manner in order to protect public health and beneficial uses.

1. For any Category 1 SSO greater than or equal to 1,000 gallons that results in a discharge to a surface water or spilled in a location where it probably will be discharged to surface water, either directly or by way of a drainage channel or MS4, the enrollee shall, as soon as possible, but not later than two (2) hours after (A) the enrollee has knowledge of the discharge, (B) notification is possible, and (C) notification can be provided without substantially impeding cleanup or other emergency measures, notify the Cal OES and obtain a notification control number.
2. To satisfy notification requirements for each applicable SSO, the enrollee shall provide the information requested by Cal OES before receiving a control number. Spill information requested by Cal OES may include:
 - i. Name of person notifying Cal OES and direct return phone number.
 - ii. Estimated SSO volume discharged (gallons).
 - iii. If ongoing, estimated SSO discharge rate (gallons per minute).
 - iv. SSO Incident Description:
 - a. Brief narrative.
 - b. On-scene point of contact for additional information (name and cell phone number).
 - c. Date and time enrollee became aware of the SSO.
 - d. Name of sanitary sewer system agency causing the SSO.
 - e. SSO cause (if known).
 - v. Indication of whether the SSO has been contained.
 - vi. Indication of whether surface water is impacted.
 - vii. Name of surface water impacted by the SSO, if applicable.
 - viii. Indication of whether a drinking water supply is or may be impacted by the SSO.
 - ix. Any other known SSO impacts.
 - x. SSO incident location (address, city, state, and zip code).
3. Following the initial notification to Cal OES and until such time that an enrollee certifies the SSO report in the CIWQS Online SSO Database, the enrollee shall provide updates to Cal OES regarding substantial changes to the estimated volume of untreated or partially treated sewage discharged and any substantial change(s) to known impact(s).
4. PLSDs: The enrollee is strongly encouraged to notify Cal OES of discharges greater than or equal to 1,000 gallons of untreated or partially treated wastewater that result or may result in a discharge to surface water resulting from failures or flow conditions within a privately owned sewer lateral or from other private sewer asset(s) if the enrollee becomes aware of the PLSD.

C. **REPORTING REQUIREMENTS**

1. **CIWQS Online SSO Database Account:** All enrollees shall obtain a CIWQS Online SSO Database account and receive a “Username” and “Password” by registering through CIWQS. These accounts allow controlled and secure entry into the CIWQS Online SSO Database.
2. **SSO Mandatory Reporting Information:** For reporting purposes, if one SSO event results in multiple appearance points in a sewer system asset, the enrollee shall complete one SSO report in the CIWQS Online SSO Database which includes the GPS coordinates for the location of the SSO appearance point closest to the failure point, blockage or location of the flow condition that caused the SSO, and provide descriptions of the locations of all other discharge points associated with the SSO event.
3. **SSO Categories**
 - i. **Category 1** – Discharges of untreated or partially treated wastewater of any volume resulting from an enrollee’s sanitary sewer system failure or flow condition that:
 - a. Reach surface water and/or reach a drainage channel tributary to a surface water; or
 - b. Reach a MS4 and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).
 - ii. **Category 2** – Discharges of untreated or partially treated wastewater greater than or equal to 1,000 gallons resulting from an enrollee’s sanitary sewer system failure or flow condition that does not reach a surface water, a drainage channel, or the MS4 unless the entire SSO volume discharged to the storm drain system is fully recovered and disposed of properly.
 - iii. **Category 3** – All other discharges of untreated or partially treated wastewater resulting from an enrollee’s sanitary sewer system failure or flow condition.
4. **Sanitary Sewer Overflow Reporting to CIWQS - Timeframes**
 - i. **Category 1 and Category 2 SSOs** – All SSOs that meet the above criteria for Category 1 or Category 2 SSOs shall be reported to the CIWQS Online SSO Database:
 - a. Draft reports for Category 1 and Category 2 SSOs shall be submitted to the CIWQS Online SSO Database within three (3) business days of the enrollee becoming aware of the SSO. Minimum information that shall be reported in a draft Category 1 SSO report shall include all information identified in section 8.i.a. below. Minimum information that shall be reported in a Category 2 SSO draft report shall include all information identified in section 8.i.c below.
 - b. A final Category 1 or Category 2 SSO report shall be certified through the CIWQS Online SSO Database within 15 calendar days of the end date of the SSO. Minimum information that shall be certified in the final Category 1 SSO report shall include all information identified in section 8.i.b below. Minimum information that shall be certified in a final Category 2 SSO report shall include all information identified in section 8.i.d below.

- ii. **Category 3 SSOs** – All SSOs that meet the above criteria for Category 3 SSOs shall be reported to the CIWQS Online SSO Database and certified within 30 calendar days after the end of the calendar month in which the SSO occurs (e.g., all Category 3 SSOs occurring in the month of February shall be entered into the database and certified by March 30). Minimum information that shall be certified in a final Category 3 SSO report shall include all information identified in section 8.i.e below.
- iii. **“No Spill” Certification** – If there are no SSOs during the calendar month, the enrollee shall either 1) certify, within 30 calendar days after the end of each calendar month, a “No Spill” certification statement in the CIWQS Online SSO Database certifying that there were no SSOs for the designated month, or 2) certify, quarterly within 30 calendar days after the end of each quarter, “No Spill” certification statements in the CIWQS Online SSO Database certifying that there were no SSOs for each month in the quarter being reported on. For quarterly reporting, the quarters are Q1 - January/ February/ March, Q2 - April/May/June, Q3 - July/August/September, and Q4 - October/November/December.

If there are no SSOs during a calendar month but the enrollee reported a PLSD, the enrollee shall still certify a “No Spill” certification statement for that month.
- iv. **Amended SSO Reports** – The enrollee may update or add additional information to a certified SSO report within 120 calendar days after the SSO end date by amending the report or by adding an attachment to the SSO report in the CIWQS Online SSO Database. SSO reports certified in the CIWQS Online SSO Database prior to the adoption date of this MRP may only be amended up to 120 days after the effective date of this MRP. After 120 days, the enrollee may contact the SSO Program Manager to request to amend an SSO report if the enrollee also submits justification for why the additional information was not available prior to the end of the 120 days.

5. **SSO Technical Report**

The enrollee shall submit an SSO Technical Report in the CIWQS Online SSO Database within 45 calendar days of the SSO end date for any SSO in which 50,000 gallons or greater are spilled to surface waters. This report, which does not preclude the Water Boards from requiring more detailed analyses if requested, shall include at a minimum, the following:

- i. **Causes and Circumstances of the SSO:**
 - a. Complete and detailed explanation of how and when the SSO was discovered.
 - b. Diagram showing the SSO failure point, appearance point(s), and final destination(s).
 - c. Detailed description of the methodology employed and available data used to calculate the volume of the SSO and, if applicable, the SSO volume recovered.
 - d. Detailed description of the cause(s) of the SSO.
 - e. Copies of original field crew records used to document the SSO.
 - f. Historical maintenance records for the failure location.
- ii. **Enrollee’s Response to SSO:**
 - a. Chronological narrative description of all actions taken by enrollee to terminate the spill.
 - b. Explanation of how the SSMP Overflow Emergency Response plan was implemented to respond to and mitigate the SSO.

- c. Final corrective action(s) completed and/or planned to be completed, including a schedule for actions not yet completed.

iii. **Water Quality Monitoring:**

- a. Description of all water quality sampling activities conducted including analytical results and evaluation of the results.
- b. Detailed location map illustrating all water quality sampling points.

6. **PLSDs**

Discharges of untreated or partially treated wastewater resulting from blockages or other problems within a privately owned sewer lateral connected to the enrollee's sanitary sewer system or from other private sanitary sewer system assets may be voluntarily reported to the CIWQS Online SSO Database.

- i. The enrollee is also encouraged to provide notification to Cal OES per section B above when a PLSD greater than or equal to 1,000 gallons has or may result in a discharge to surface water. For any PLSD greater than or equal to 1,000 gallons regardless of the spill destination, the enrollee is also encouraged to file a spill report as required by Health and Safety Code section 5410 et. seq. and Water Code section 13271, or notify the responsible party that notification and reporting should be completed as specified above and required by State law.
- ii. If a PLSD is recorded in the CIWQS Online SSO Database, the enrollee must identify the sewage discharge as occurring and caused by a private sanitary sewer system asset and should identify a responsible party (other than the enrollee), if known. Certification of PLSD reports by enrollees is not required.

7. **CIWQS Online SSO Database Unavailability**

In the event that the CIWQS Online SSO Database is not available, the enrollee must fax or e-mail all required information to the appropriate Regional Water Board office in accordance with the time schedules identified herein. In such event, the enrollee must also enter all required information into the CIWQS Online SSO Database when the database becomes available.

8. **Mandatory Information to be Included in CIWQS Online SSO Reporting**

All enrollees shall obtain a CIWQS Online SSO Database account and receive a "Username" and "Password" by registering through CIWQS which can be reached at CIWQS@waterboards.ca.gov or by calling (866) 792-4977, M-F, 8 A.M. to 5 P.M. These accounts will allow controlled and secure entry into the CIWQS Online SSO Database. Additionally, within thirty (30) days of initial enrollment and prior to recording SSOs into the CIWQS Online SSO Database, all enrollees must complete a Collection System Questionnaire (Questionnaire). The Questionnaire shall be updated at least once every 12 months.

i. **SSO Reports**

At a minimum, the following mandatory information shall be reported prior to finalizing and certifying an SSO report for each category of SSO:

- a. **Draft Category 1 SSOs**: At a minimum, the following mandatory information shall be reported for a draft Category 1 SSO report:
1. SSO Contact Information: Name and telephone number of enrollee contact person who can answer specific questions about the SSO being reported.
 2. SSO Location Name.
 3. Location of the overflow event (SSO) by entering GPS coordinates. If a single overflow 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 SSO appearance point explanation field.
 4. Whether or not the SSO reached surface water, a drainage channel, or entered and was discharged from a drainage structure.
 5. Whether or not the SSO reached a municipal separate storm drain system.
 6. Whether or not the total SSO volume that reached a municipal separate storm drain system was fully recovered.
 7. Estimate of the SSO volume, inclusive of all discharge point(s).
 8. Estimate of the SSO volume that reached surface water, a drainage channel, or was not recovered from a storm drain.
 9. Estimate of the SSO volume recovered (if applicable).
 10. Number of SSO appearance point(s).
 11. Description and location of SSO appearance point(s). If a single sanitary sewer system failure results in multiple SSO appearance points, each appearance point must be described.
 12. SSO start date and time.
 13. Date and time the enrollee was notified of, or self-discovered, the SSO.
 14. Estimated operator arrival time.
 15. For spills greater than or equal to 1,000 gallons, the date and time Cal OES was called.
 16. For spills greater than or equal to 1,000 gallons, the Cal OES control number.
- b. **Certified Category 1 SSOs**: At a minimum, the following mandatory information shall be reported for a certified Category 1 SSO report, in addition to all fields in section 8.i.a :
1. Description of SSO destination(s).
 2. SSO end date and time.
 3. SSO causes (mainline blockage, roots, etc.).
 4. SSO failure point (main, lateral, etc.).
 5. Whether or not the spill was associated with a storm event.
 6. Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the overflow; and a schedule of major milestones for those steps.
 7. Description of spill response activities.
 8. Spill response completion date.
 9. Whether or not there is an ongoing investigation, the reasons for the investigation and the expected date of completion.

10. Whether or not a beach closure occurred or may have occurred as a result of the SSO.
 11. Whether or not health warnings were posted as a result of the SSO.
 12. Name of beach(es) closed and/or impacted. If no beach was impacted, NA shall be selected.
 13. Name of surface water(s) impacted.
 14. If water quality samples were collected, identify parameters the water quality samples were analyzed for. If no samples were taken, NA shall be selected.
 15. If water quality samples were taken, identify which regulatory agencies received sample results (if applicable). If no samples were taken, NA shall be selected.
 16. Description of methodology(ies) and type of data relied upon for estimations of the SSO volume discharged and recovered.
 17. SSO Certification: Upon SSO Certification, the CIWQS Online SSO Database will issue a final SSO identification (ID) number.
- c. **Draft Category 2 SSOs**: At a minimum, the following mandatory information shall be reported for a draft Category 2 SSO report:
1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO.
- d. **Certified Category 2 SSOs**: At a minimum, the following mandatory information shall be reported for a certified Category 2 SSO report:
1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO and Items 1-9, and 17 in section 8.i.b above for Certified Category 1 SSO.
- e. **Certified Category 3 SSOs**: At a minimum, the following mandatory information shall be reported for a certified Category 3 SSO report:
1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO and Items 1-5, and 17 in section 8.i.b above for Certified Category 1 SSO.
- ii. **Reporting SSOs to Other Regulatory Agencies**
- These reporting requirements do not preclude an enrollee from reporting SSOs to other regulatory agencies pursuant to state law. In addition, these reporting requirements do not replace other Regional Water Board notification and reporting requirements for SSOs.
- iii. **Collection System Questionnaire**
- The required Questionnaire (see subsection G of the SSS WDRs) provides the Water Boards with site-specific information related to the enrollee's sanitary sewer system. The enrollee shall complete and certify the Questionnaire at least every 12 months to facilitate program implementation, compliance assessment, and enforcement response.
- iv. **SSMP Availability**
- The enrollee shall provide the publicly available internet web site address to the CIWQS Online SSO Database where a downloadable copy of the enrollee's approved SSMP, critical supporting documents referenced in the SSMP, and proof of local governing board approval of the SSMP is posted. If all of the SSMP documentation listed in this subsection is not publicly available on the Internet, the enrollee shall comply with the following procedure:

- a. Submit an **electronic** copy of the enrollee's approved SSMP, critical supporting documents referenced in the SSMP, and proof of local governing board approval of the SSMP to the State Water Board, within 30 days of that approval and within 30 days of any subsequent SSMP re-certifications, to the following mailing address:

State Water Resources Control Board
Division of Water Quality
Attn: SSO Program Manager
1001 I Street, 15th Floor, Sacramento, CA 95814

D. WATER QUALITY MONITORING REQUIREMENTS:

To comply with subsection D.7(v) of the SSS WDRs, the enrollee shall develop and implement an SSO Water Quality Monitoring Program to assess impacts from SSOs to surface waters in which 50,000 gallons or greater are spilled to surface waters. The SSO Water Quality Monitoring Program, shall, at a minimum:

1. Contain protocols for water quality monitoring.
2. Account for spill travel time in the surface water and scenarios where monitoring may not be possible (e.g. safety, access restrictions, etc.).
3. Require water quality analyses for ammonia and bacterial indicators to be performed by an accredited or certified laboratory.
4. Require monitoring instruments and devices used to implement the SSO Water Quality Monitoring Program to be properly maintained and calibrated, including any records to document maintenance and calibration, as necessary, to ensure their continued accuracy.
5. Within 48 hours of the enrollee becoming aware of the SSO, require water quality sampling for, at a minimum, the following constituents:
 - i. Ammonia
 - ii. Appropriate Bacterial indicator(s) per the applicable Basin Plan water quality objective or Regional Board direction which may include total and fecal coliform, enterococcus, and e-coli.

E. RECORD KEEPING REQUIREMENTS:

The following records shall be maintained by the enrollee for a minimum of five (5) years and shall be made available for review by the Water Boards during an onsite inspection or through an information request:

1. General Records: The enrollee shall maintain records to document compliance with all provisions of the SSS WDRs and this MRP for each sanitary sewer system owned including any required records generated by an enrollee's sanitary sewer system contractor(s).
2. SSO Records: The enrollee shall maintain records for each SSO event, including but not limited to:
 - i. Complaint records documenting how the enrollee responded to all notifications of possible or actual SSOs, both during and after business hours, including complaints that do not

result in SSOs. Each complaint record shall, at a minimum, include the following information:

- a. Date, time, and method of notification.
 - b. Date and time the complainant or informant first noticed the SSO.
 - c. Narrative description of the complaint, including any information the caller can provide regarding whether or not the complainant or informant reporting the potential SSO knows if the SSO has reached surface waters, drainage channels or storm drains.
 - d. Follow-up return contact information for complainant or informant for each complaint received, if not reported anonymously.
 - e. Final resolution of the complaint.
- ii. Records documenting steps and/or remedial actions undertaken by enrollee, using all available information, to comply with section D.7 of the SSS WDRs.
 - iii. Records documenting how all estimate(s) of volume(s) discharged and, if applicable, volume(s) recovered were calculated.
3. Records documenting all changes made to the SSMP since its last certification indicating when a subsection(s) of the SSMP was changed and/or updated and who authorized the change or update. These records shall be attached to the SSMP.
 4. Electronic monitoring records relied upon for documenting SSO events and/or estimating the SSO volume discharged, including, but not limited to records from:
 - i. Supervisory Control and Data Acquisition (SCADA) systems
 - ii. Alarm system(s)
 - iii. Flow monitoring device(s) or other instrument(s) used to estimate wastewater levels, flow rates and/or volumes.

F. CERTIFICATION

1. All information required to be reported into the CIWQS Online SSO Database shall be certified by a person designated as described in subsection J of the SSS WDRs. This designated person is also known as a Legally Responsible Official (LRO). An enrollee may have more than one LRO.
2. Any designated person (i.e. an LRO) shall be registered with the State Water Board to certify reports in accordance with the CIWQS protocols for reporting.
3. Data Submitter (DS): Any enrollee employee or contractor may enter draft data into the CIWQS Online SSO Database on behalf of the enrollee if authorized by the LRO and registered with the State Water Board. However, only LROs may certify reports in CIWQS.
4. The enrollee shall maintain continuous coverage by an LRO. Any change of a registered LRO or DS (e.g., retired staff), including deactivation or a change to the LRO's or DS's contact information, shall be submitted by the enrollee to the State Water Board within 30 days of the change by calling (866) 792-4977 or e-mailing help@ciwqs.waterboards.ca.gov.

5. A registered designated person (i.e., an LRO) shall certify all required reports under penalty of perjury laws of the state as stated in the CIWQS Online SSO Database at the time of certification.

CERTIFICATION

The undersigned Clerk to the Board does hereby certify that the foregoing is a full, true, and correct copy of an order amended by the Executive Director of the State Water Resources Control Board.

Date

7/30/13


Jeanine Townsend
Clerk to the Board

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Appendix B
Element 2 (Organization) Placeholder for Future
Supporting Documents

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Appendix C
Element 3 (Legal Authority) Supporting Documents

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ORDINANCE NO. 25

ORDER NO. 93-31

SEWER USE ORDINANCE
IRONHOUSE SANITARY DISTRICT

An Ordinance and Order establishing, prescribing and providing for the collection of the annual sewer service charge, and adopting uniform fees, rates and charges for connections to and for the Ironhouse Sanitary District (The "District").

The Board of Directors of the Ironhouse Sanitary District does ordain and order as follows:

Section 1 - Repeal of Ordinances and Resolutions

This Ordinance replaces all ordinances and resolutions of the Contra Costa Sanitation District No. 15, Oakley-Bethel Island Wastewater Management Authority, Oakley Sanitary District, and the Ironhouse Sanitary District in conflict or inconsistent with any provision of this Ordinance.

Section 2 - Definitions

2.1 Terms and Definitions. The following terms when used in this Ordinance shall have the following respective meanings:

(a) "Auditor" shall mean the person retained by the District to furnish audits.

(b) "Board" shall mean the Board of Directors of the District.

(c) "Boat Berth Space" shall mean an area which could be occupied by a boat along side or contained in a floating or fixed facility constructed for the purpose of securing and/or sheltering boats while on the water.

(d) "BOD"(denoting Biochemical Oxygen Demand) shall mean the quantity of oxygen required in the biological oxidation of organic matter under standard laboratory procedure in five (5) days at 20 degree C, expressed in milligrams per liter.

(e) "Commercial Owner" shall mean any owner who is not a residential owner or institutional owner.

(f) "Commercial Sewerage Service" shall mean the furnishing of sewerage to the premises of any commercial owner.

(g) "Connection Fee" means fees, tolls, rates, rentals or other charges necessary to provide for capital improvements to the system.

(h) "District" shall mean Ironhouse Sanitary District.

(i) "District Manager" shall mean the person appointed by the Board of Directors to perform the duties of District Manager.

(j) "Domestic Sewage" shall mean the water-borne waste derived from the ordinary living processes, and such character as to permit satisfactory disposal without special treatment by the system.

(k) "Domestic Sewerage Service" shall mean the furnishing of sewerage service to the premises of any owner from which domestic sewage originates.

(l) "Engineer" shall mean the District Engineer, or any other person designated by the Board to perform the services or make the determinations permitted or required under this Ordinance to be made by the Engineer.

(m) "Family" shall mean any one or more persons using a single family dwelling unit.

(n) "Identifiable Commercial Activity" shall mean any activity proposed to be or presently being conducted on the premises of any commercial owner and which can be identified as separate and/or different from any other activity proposed to be or presently being conducted on the premises.

(o) "Industrial Liquid Waste" shall mean any liquid waste requiring special treatment or processing, such as liquid waste from industrial manufacturing processes, trade or business as distinct from domestic sewage to which chemicals have been added or septic tank sludge.

(p) "Inspection Fee" means fees, tolls, rates, rentals or other charges necessary to pay for the actual cost of inspection including any administration time.

(q) "Institutional Owner" shall mean any owner, public or private, operating a public or nonprofit activity, such as school, church, hospital, lodge, club, fire department, library, or memorial building.

(r) "Installer" shall mean a person, firm, corporation, or other legal entity or taxing agency, including the District, who installs or causes to be installed a public sewer which will connect to the District's sewerage service system.

(s) "Intract Sewer" shall mean the sewer system within the limits of subdivisions, tracts or parcels.

(t) "Launching Facility" shall mean a launching ramp, hoist, or elevator capable of launching one boat at a time (i.e., a two lane ramp or a one lane ramp and a hoist operated by the same marina would equate to two launching facilities).

(u) "Levee" shall mean any embankment constructed along the waterways for flood control purposes.

(v) "Liveaboard Vessel" shall mean any boat or houseboat which was occupied 60 or more nights during the previous rate year. Any boat or houseboat containing a U.S. Coast Guard approved Type 1 or Type 2 sanitation device shall be exempt from the liveaboard fee, provided they are not also permanently connected to the Ironhouse District collection system.

(w) "Lodging Unit" shall mean any unit of one or more rooms having one or more plumbing fixtures suitable for lodging for one or more persons, both without kitchen or laundry facilities, in any rooming house, hotel, motel, or boatel.

(x) "Main Extension" or "Sewer Extension" shall mean the extension of any trunk sewer or main sewer, exclusive of side sewers and service connections.

(y) "Main Sewer" shall mean a public sewer which has been or is being constructed to accommodate more than one side sewer.

(z) "Marina" shall mean any commercial or publicly-owned enterprise constructed along the waterways having boat berthing and other facilities for the use of the general public.

(aa) "Mobile Home" shall mean motorized or non-motorized vehicle containing facilities for sleeping which may or may not contain plumbing facilities, and the dimensions are such that the product obtained by multiplying the length by the width shall be equal to or greater than 320 square feet.

(bb) "Mobile Home Space" shall mean an area with a facility for connecting to the sewer within a mobile home park or other premises, which could be occupied by a mobile home.

(cc) "Multiplier" shall mean the number of sewer units to multiply the fees or charges by.

(dd) "Multiple Dwelling Structure" shall mean any two or more single-family dwelling units in any single building or structure, or group of buildings or structures, including, but not limited to, any apartment house or apartment court.

(ee) "Multiple Lodging Structure" shall mean any two or more lodging units in any single building or structure, or group of

buildings or structures, including, but not limited to, and rooming house, hotel, motel or boatel.

(ff) "Occupant" shall mean any person actually occupying any premises, whether as owner or tenant or under contract or otherwise.

(gg) "Offtract sewer" shall mean sewer lines located outside of subdivision boundary.

(hh) "Owner" or "Owner of record" shall mean the person shown as the owner on the most current assessment roll of Contra Costa County, or the person owning a building located on land owned by another person.

(ii) "pH" shall mean the logarithm of the reciprocal of the hydrogen ion concentration.

(jj) "Person" shall mean any human being, individual, firm, company, partnership, association, and private, public or municipal corporation, the United States of America, the State of California, districts and all political subdivisions and governmental agencies thereof.

(kk) "Plant Capacity Fee" means fees, tolls, rates, rentals, or other charges for facilities furnished by the District in connection with its sanitary sewerage treatment facility.

(ll) "Premises" shall mean any lot, or any piece or parcel of land comprising one or more contiguous lots of record in one ownership, or any building or other structure, or any part of any building or structure used or useful for human habitation or gathering or for carrying on a business or occupation or any commercial or industrial activity.

(mm) "Recreational Vehicle" shall mean a motorized or non-motorized vehicle containing facilities for sleeping which may or may not contain plumbing facilities. The length shall be less than 40 feet and the dimensions are such that the product obtained by multiplying the length by the width shall be less than 320 square feet.

(nn) "Recreational Vehicle Space" shall mean an area of sewered premises upon which an occupied recreational vehicle may be parked. The space may or may not have facilities for connecting to the sewer.

(oo) "Residential Owner" shall mean any owner who is not a commercial owner or institutional owner.

(pp) "Sanitary Disposal Station" shall mean any facility which receives, or is designed to receive, domestic sewage which has been stored prior to discharge to the facility.

(qq) "Sewage" shall mean domestic sewage or industrial liquid waste, or both.

(rr) "Sewerage Service" shall mean the services and facilities furnished or available to premises by the District's sewerage service system for the collection, treatment, and disposal of sewage.

(ss) "Sewerage Service System" shall mean the sewage collection and disposal system together with all extensions, additions, or improvements thereto at any time heretofore or hereafter made, including all truck and main sewers within or without the boundaries of the District and appurtenant to said sewage disposal system, and any pump stations, sewage treatment facilities, and appurtenances serving or used by the District hereinafter referred to as "System".

(tt) "Sewage Service Fee" means fees, tolls, or rates charged to current users for the cost of operating and maintaining the collection, treatment and disposal of sewage.

(uu) "Sewer Service Unit" hereinafter referred to as "unit", shall mean a measure service provided which is, in part, based upon the volume and strength of the sewage flow.

(vv) "Side Sewer" shall mean a privately owned and maintained sewer which connects the plumbing system of any house or other building to a main sewer, including any holding tanks, pumping units, and force systems. The side sewer begins at the point of connection to the main sewer (including that branch of wye by which connection is made, or saddle, or other means of connection) and for houses and other buildings terminates at the point of connection to the plumbing system two feet outside the foundation, and shall not be considered as part of the "sewerage service system" as defined above.

(ww) "Single-Family Dwelling Unit" hereinafter referred to as "unit", shall mean any dwelling of one or more rooms or each group of rooms in any single or multiple dwelling structure constituting a dwelling unit suitable for residential occupancy by any number of persons living together as a single family, said dwelling having one or more plumbing fixtures. Single-family dwelling unit shall include a mobile home or recreational vehicle installed in a permanent or semi-permanent manner.

(xx) "Standard Specifications" shall mean the Central Contra Costa Sanitary District Standard Specifications and Addenda, latest edition, and subsequent revisions and amendments, and are by this reference incorporated herein as though fully set forth.

(yy) "Street" shall mean any public highway, road, street, avenue, alley, way, in the District.

(zz) "Suspended Solids" shall mean solids that either float on the surface of, or are in suspension in, water sewage, or other liquids, and which are removable by laboratory filtering.

(aaa) "Tax Collector" shall mean the County Tax Collector of Contra Costa County.

(bbb) "Treasurer" shall mean the Treasurer of Ironhouse Sanitary District.

(ccc) "Trunk Sewer" shall mean a public sewer which has been or is being constructed to accommodate more than one main sewer.

(ddd) "Trunkline Fee" means fees, tolls, rates, rentals or other charges necessary to finance the cost of acquiring and constructing trunkline sewerage facilities, appurtenances and administration as may be required to build sufficient capacity into the District's sanitary sewerage collection system to service the needs of its increasing population and commercial expansion including rebate to others for construction of excess capacity in trunklines.

Section 3 - Establishment of Units - Connection fees, plant capacity fee, trunkline fee and sewerage service fee shall be calculated by using the following applicable multiplier.

<u>Type of Service</u>	<u>Equivalent Service Unit</u>
Residential	
Single Family Dwelling Unit	1
Multiple Dwelling Unit	1 each unit
Multiple Lodging Unit	$1 + 1/2 \times \text{No. of Rooms}$
Mobile Home Space	1 each space
Liveaboard Vessel (sewered or unsewered)	1 each vessel
Commercial	
Bar (each seat)	0.10 per seat
Laundromat (each machine)	0.35
Retail Store/Office Space (per 1,000 S.F.)	0.50
Repair Shop (per 1,000 S.F.)	0.25
Service Station (w/Public Restrooms)	0.40 per pump
Service Station (w/o Public Restrooms)	0.50
Barber Shop	$1 + .50 \times \text{No. of chairs}$
Beauty Shop	$1 + 1 \times \text{No. of chairs}$
Veterinary	3

Commercial cont'd

Dry Cleaners	1
Markets (per 1,000 S.F. retail area)	1
Medical - Dental (per doctor)	1

Recreational Facilities

Recreational Vehicle Space (sewered)	0.40 per space
Recreational Vehicle Space (unsewered)	0.07 per space
Boat Berth Space	0.04 per space
Camping, Picnic (each site)	0.07
Boat Launch Facility	2

Restaurants

Restaurant	.10 X No. of seats
Fast Food	4
On/Off Premises	4 + .10 X No. of seats

Public Facilities

Churches	1
Schools, primary	0.067 per student
Schools, secondary	0.10 per student

Others - The Engineer shall assign, based on flow, composition and/or strength, the unit multiplier for all services or categories of use not listed above.

Section 4 - Establishment of Fees - Fees charged by the District for services shall be as follows:

- 4.1 **Plan Check Fee.** Plan check fee shall be equal to 2% of the Engineer's estimated construction cost for all sewer construction including, but not limited to, sewer lines, trunkline, pump station, manholes, trenching, dewatering, backfill, paving and testing.
- 4.2 **Inspection Fee.** Inspection fee for two or more equivalent units shall be equal to 4% of the construction cost as described in Section 4.1 above, or \$50.00 per single inspection.
- 4.3 **Connection Fee.** The connection fee shall be equal to the total number of equivalent service units determined in Section 3 above multiplied time \$275.00.
- 4.4 **Permit Fee.** The fee charged to cover administration fees for permit issuance. The fee is \$20.00 per permit issued.

- 4.5 **Trunkline Capacity Fee.** Trunkline capacity fee shall be equal to the total number of equivalent service units as determined above, multiplied by \$600.00.
- 4.6 **Plant Capacity Fee.** Plant capacity fee shall be equal to the total number of equivalent service units determined above multiplied by \$2,571.00.
- 4.7 **Annexation Cost.** The owner of the property being annexed shall pay all cost and fees due LAFCo and state plus District's expense related to the annexation.
- 4.8 **Monthly Service Charge.** The monthly service charge shall be equal to the total number of equivalent service units as determined above multiplied by \$16.50. Monthly service charges will be collected by the County Tax Collector.
- 4.9 **Change of Use.** Where connection fees have previously been paid for sewage service for a structure, building, identifiable commercial activity, or separate premises, and it is proposed to alter the original character to use for the structure, building, identifiable commercial activity or separate premises, the Engineer shall establish and collect connection fees for the new proposed use, giving credit for a decrease in calculated fees.

Section 5 - Use of Public Sewer Required

- 5.1 **Disposal of Wastes.** No person shall place, deposit, permit to be deposited, or maintain in any unsanitary manner on public or private property within the District, or in any area under the jurisdiction of said District any human or animal excrement or other objectionable waste.
- 5.2 **Violation Unlawful.** No person shall connect to, construct, install, provide, maintain or use any privy, privy vault, septic tank, cesspool, or any other means of sewage disposal from any building in said District except by connection to a public sewer in the manner as provided in this Ordinance. The Board of Directors may grant an exception to this requirement for reason of undue hardship.
- 5.3 **Sewer Required.** The owner of any building situated within the District and abutting on any street in which there is now located, or may in the future be located, a public sanitary sewer of the District, shall at his expense, connect said building directly with the proper public sewer in accordance with the provisions of this Ordinance within ninety (90) days after date of official notice to do so, provided that said public sewer is within three hundred (300) feet of the property line at streetline.

- 5.4 **Sewer Not Available.** Where a public sanitary or combined sewer is not available under the provisions of this Ordinance, the owner of a building shall connect the building sewer to a private sewerage disposal system complying with the requirements of the County Health Officer.
- 5.5 **Abandonment of Facilities.** At such time as the owner makes a direct connection to the public sewer, he shall abandon any septic tanks cesspools, or similar private sewage disposal system and fill them with suitable material within 90 days, or as determined by the Engineer, and in connection therewith shall comply with all pertinent state, county, and city laws, ordinances, rules and regulations, and shall obtain all permits and pay all fees required by the entity having jurisdiction.

Section 6 - Side Sewer and Connections

- 6.1 **Permit Required.** No person shall uncover, make any connections with or opening into, use, alter or disturb any main sewer, lateral sewer or appurtenance thereof without first obtaining a written permit from the District and paying all fees and connection charges of the District.
- 6.2 **Contractor's Registration.** Except as provided in Paragraph 6.3 hereof, no person who has not complied with the State Contractor's License Law (Sections 7000-7145 of the Business and Professions Code) shall install or construct any District sanitary sewer or make connections to any District sanitary sewer in a public street or easement in the District. All contractors must register with the District prior to commencing or carrying out any such work within the District.
- 6.3 **Contractor's Registration Exception.** The provisions of Paragraph 6.2 shall not apply to work done solely on private property by property owner, provided that such work is subject to inspection by the District for workmanship and possible entrance of foreign material.
- 6.4 **All Costs Paid by owner.** All costs and expenses incident to the installation and connection of the side sewer and sewer line extension in right of ways shall be borne by the owner. The acceptance of any permit shall constitute agreement to comply with all the provisions, terms and requirements of this and other ordinances, rules and regulations of the District and other public entities having jurisdiction, and with any plans and specifications filed with the District.
- 6.5 **Separate Sewers.** The owner shall provide a separate and independent side sewer for every building, except where one building stands at the rear of another on an interior lot, both of which belong to the same owner, and no main sewer is

available or can be constructed to the rear building through an adjoining alley, court, yard or driveway. The side sewer from the front building may be extended to the rear building and the whole considered as one side sewer during the period of such ownership. Upon subsequent sale or other division of said ownership, the building not directly connected with a main sewer shall be separately connected with a side sewer, and it shall be unlawful for the owner thereof to continue to use or maintain such indirect connection.

6.6 Sewage Backflow Protective Devices.

(A) Due to the topographical characteristics of certain areas within the District, there exists the danger of damage to health and property resulting from the possibility of sewage overflow and back-flooding on public and private property. It is the purpose of this Ordinance to protect the health and safety of the residents of the District and to minimize the possibility of damage to property requiring, where topographical conditions warrant it, the installation and maintenance of an approved sewage backflow protective device.

(B) Where the surface elevation of the nearest upstream public sewer structure capable of overflow and relief of pressure (i.e., manhole, pressure relief, flushing inlet or rodding inlet structure) is higher than the elevation of the lowest floor containing gravity waste drainage plumbing of any structure connected, or to be connected, to the District's sewerage system, the owner, at his sole cost and expense, shall install and keep in operable condition at all times a sewage backflow protective device.

(C) All sewage backflow protective devices shall be located in the manner and meet the standards prescribed in the District's Standard Specifications, latest edition.

(D) It shall be unlawful for the owner to maintain any building sewer connection to the District's sewerage system without an approved sewage backflow protective device, as required by the provisions of this Ordinance.

6.7 Existing Side Sewers. Existing side sewers may be used in connection with new buildings only when they are found by the Engineer, on examination and test required by him, to meet all requirements of the District. The cost of examination and testing of existing side sewers shall be borne by the owner at the same rates as for inspection.

6.8 Sewer Too Low. In all buildings in which any side sewer is too low to permit gravity flow to the main sewer, sanitary sewage carried by such side sewer shall be lifted by artificial means, approved by the Engineer, and discharged to

the main sewer at the expense of the owner.

- 6.9 **Maintenance of Side Sewer.** Side sewers between the building and connection at the main line shall be maintained by the owner of the property served thereby.
- 6.10 **Plans, Profiles, and Specifications Required.** The application for a permit for main sewer construction shall be accompanied by three (3) complete sets of plans, profiles and specifications, complying with all applicable ordinances, rules and regulations of the District, prepared by a registered Civil Engineer, showing all details of the proposed work based on an accurate survey of the ground. The application, together with the plans, profiles and specifications shall be examined by the District Engineer, who shall, within twenty (20) days, approve it as filed, reject it, or require it to be modified as he deems necessary for proper installation. The permit shall prescribe such terms and conditions as necessary in the public interest.
- 6.11 **Subdivisions and Mobile Home Parks.** The requirements of Paragraph 6.10 of this Ordinance shall be fully complied with before any final subdivision improvement plans shall be approved by the Board of Directors. The final plan shall provide for the dedication for public use of streets, easements, or rights-of-way in which public sewer lines are to be constructed.
- (A) Faithful Performance Security Bond - 100% of approved Engineer's Estimate.
- (B) Payment Security Bond - 100% of approved Engineer's Estimate.
- (C) Maintenance Security Bond shall be effective for one year immediately following acceptance of the work by the Board and shall equal 10% of approved Engineer's Estimate.
- (D) The Plan Checking Fees are due and payable at the time plans and specifications are delivered to the District office for checking. The Faithful Performance Security Bond and Payment Security Bond are to be delivered and accepted by the District before any agreement is entered and/or construction is begun. The Maintenance Security Bond shall be delivered to and accepted by the District before the acceptance of sewerage system by the Board.
- 6.12 **Easements or Rights of Way.** In the event that an easement is required for the extension of the mainsewer or the making of connections, the applicant shall procure and have accepted by the Board a proper easement or grant of the right-of-way having a minimum width of ten (10) feet and sufficient working

easement and length to allow the laying and maintenance of such extension or connection.

- 6.13 **Design and Construction Standards.** Minimum standards for the design and construction of sewers within the District shall be in accordance with the District Standard Specifications heretofore or hereafter adopted by the District Board, copies of which are on file in the District Office. The Engineer may permit or require modifications of the Standard Specifications where special conditions warrant.
- 6.14 **Asbuilt Drawing.** One (1) complete set of "as-built" drawings of a reproducible nature, on mylar, acceptable to the Engineer, showing the actual location and depth of all mains, structures, wyes, and laterals, shall be filed with the District before final acceptance of the work and before paving of streets.
- 6.15 **Completion of Sewer Required.** Before any acceptance of sewer line by the District, which line has been constructed by an installer, and before the admission of the sewage into the system, the sewer line shall be tested by the owner and shall be complete, in full compliance with all requirements of the District's Standard Specifications and to the satisfactions of the Engineer.
- 6.16 **Drainage Into Main Sewer Prohibited.** No person shall make connection of roof downspouts, exterior foundation drains, areaway drains, or other sources of surface runoff or groundwater to a side sewer which, in turn, is connected directly or indirectly to a main sewer.
- 6.17 **Design and Construction Requirements.** The connection of the side sewer to the main sewer shall conform to the Standard Specifications and other requirements of the District. All such connections shall be tested in accordance with the Standard Specifications. The Engineer may permit deviations from the prescribed procedures and materials when, in his opinion, special conditions and the best interests of the District warrant such deviations.
- 6.18 **Notification.** The applicant for a side sewer permit shall notify the Engineer when the side sewer is ready for inspection and connection to the main sewer. The connection shall be made under the supervision of the Engineer or his representative. Any damage to the main sewer shall be repaired at the cost of the applicant to the satisfaction of the Engineer.
- 6.19 **Compliance with Local Regulations.** Any person constructing a sewer within a street shall comply with all state, county, and city laws, ordinances, rules and regulations pertaining to the

cutting of pavement, opening, barricading, lighting and protection of trenches, backfilling, and repaving, and shall obtain all permits and pay all fees required by the entity having jurisdiction before the issuance of a permit by the District.

6.20 Protection of Public. All excavations for side sewer and main sewer installation shall be adequately guarded with barricades and lights so as to protect the public from hazard. The owner shall restore streets, sidewalks, parkways, and other public property disturbed in the course of the work in a manner satisfactory to the District.

6.21 Building Removal. When a building is demolished or removed from any premises, the lateral sewer shall be plugged immediately. The plug shall be a permanent type and shall be located at the property line under the ground surface.

Section 7 - Fees, Rates, Charges, and Billing for Facilities and Services

7.1 General Purposes for Accumulating Funds. The general purposes for accumulating funds are;

(A) For the payment at, or before maturity of, the principle of and interest on any and all bonds issued by the District for expansion and/or improvement of the System;

(B) For the payment of any and all costs assessable to the District for planning, design, and construction of facilities forming a part of a regional or subregional sewage interceptor and treatment facility;

(C) For the provision of funds for the payment of the cost of administration, operation, maintenance, new construction, and replacement of any and all sewerage facilities.

7.2 Methods of Accumulating Funds.

(A) Funds shall normally be accumulated by a system of initial fees, charges, and annual sewerage service charges, and shall be established, from time to time, by order or resolution of the Board after consideration of the Engineer's recommendations.

(B) The fees herein provided for shall be paid at the following times:

(1) Plan Checking Fee - At the time of submitting plans and specifications to the District for checking.

(2) Inspection Fee - At the time of application for the Construction Permit or approval of subdivision plans for construction.

(3) Connection Fee - At the time of application for building permit or when notified by the Engineer of the amount determined to be payable, except in the case of connections through works constructed under assessment district proceedings, in which case the Fee shall be paid when the capital funds are received and disbursed pursuant to the assessment proceedings.

(4) Permit Fee - At time of permit issuance.

(5) Capacity Fees and/or Trunk Line Fee and/or Annexation Fee - At the time the subdivision approval for construction or for a single unit at time of building permit application.

(6) Annexation Cost - At the time of initiation of proceedings.

7.3 **Refunds.** Owner's failure to construct or failure to complete a project for which plans have been approved and permits issued and for which fees have been paid shall not constitute a reason for any refund of any monies of fees previously paid.

Section 8 - Specifications

8.1 **District Standards.** The latest Standard Specifications of Central Contra Costa Sanitary District, Martinez, California, and subsequent revisions and amendments thereto are adopted as the Standard Specifications of the District and are by this reference incorporated herein as though fully set forth.

8.2 **Variance.** Under special conditions, the Engineer may approve modifications and/or require additions to the Standard Specifications.

Section 9 - Enforcement Measures

9.1 Liability for Violation.

(A) Any person violating any of the provisions of the ordinances, rules, or regulations of the District shall become liable to the District for any expense, loss or damage occasioned by the District by reason of such violation.

(B) A violation of any of the District's ordinances, rules, or regulations is a misdemeanor and is punishable in accordance with the provisions of Section 4766 of the California Health and Safety Code.

- 9.2 **Discontinuance of Service.** The District may refuse to furnish sewerage service and may discontinue all services, as provided in Paragraph 9.4, to any premises where the Engineer finds that practices or conditions exist, or are imminent that would be detrimental or injurious to the System, or where necessary to protect itself against fraud, abuse, or improper operational and maintenance procedures.
- 9.3 **Enforcement.** The District, the Board, and all proper District officers, agents, or employees shall promptly take all steps, actions or remedies necessary for the collection of fees, charges and penalties as provided in this Ordinance (including which are now or hereafter be provided for in the law. Said remedies for collecting and enforcing said fees, charges and penalties, set forth in the law, are cumulative and may be pursued alternately or consecutively, as the Board determines.
- 9.4 **Violation - Nonpayment of Bills.** Upon failure of the owner or user of any premises violates any other provision of this Ordinance, and said violation continues for a period of sixty days, the Engineer may disconnect the premises from the System, subject to the hearing provisions of Paragraph 12.9.
- 9.5 **Public Nuisance - Abatement.** During the period of such disconnection, human habitation of such premises shall constitute a public nuisance, and the District shall cause proceedings to be brought for the abatement of the occupancy of said premises by human being during the period of such disconnection. In such event, and as a condition of reconnection, there is to be paid to the District, in accordance with the provisions of Paragraph 12.10D(2), a reasonable attorney's fee and costs of suit arising in said action.
- 9.6 **Emergency Disconnection.** Notwithstanding the provisions of Paragraphs 9.4 and 12.9, if, in the opinion of the Engineer, such violation constitutes a public hazard or menace, the Engineer may immediately enter upon the premises without notice and such things including disconnection of the premises from the System and expending such sums as are necessary to abate such hazard.
- 9.7 **Correction of Violations.** Any sum expended by the District in correcting a violation shall be a charge upon the property, the responsible party, and the owner of the property, and the District may collect such sum from the same.
- 9.8 **Reconnection After Violation.** The Engineer shall estimate the cost of disconnection and the reconnection to the System and the owner or user shall deposit the cost, as estimated, of disconnection and reconnection, in accordance with the provisions of paragraph 12.10B, before the premises are

reconnected to System.

- 9.9 **Reconnection After Nonpayment of Bills.** Whenever premises have been disconnected from the system for nonpayment of sewerage service charges, in addition to the requirements of Paragraph 9.8, such premises shall not be reconnected to the System until all delinquent charges and penalties have been paid and until a connection permit has been obtained and until such of the following charges as are applicable have been paid: a sewer disconnection fee equal to the actual cost to the District of such disconnection; a sewer inspection fee for reconnection, and a permit fee; and until the owner and/or user of such premises otherwise has complied with this Ordinance. Reconnection will not be performed by the District.

Section 10 - Rebatement Provisions

- 10.1 **Policy and Intent.** It is the policy of the District that sewer lines should be designed and installed initially to provide service to the widest possible service area. The Board of Directors finds that the replacement of sewers, or duplication sewers due to increased demand for capacity, results in:

- A. Increased capital expense and maintenance and operation expense to the taxpayers of the District;
- B. Inconvenience to the traveling public;
- C. Reduction in efficiency of the collection process, and
- D. Hazard to the public health.

The purpose of this section is to require the construction of sewers having capacities which are capable of handling sewage flows from service areas when they are ultimately and finally developed.

- 10.2 **Rebates.** The District will enter into rebate agreements with owner, subject to the following:
- A. No rebate shall be paid for any pipeline 12" in diameter or smaller.
 - B. No rebate shall be paid for pipe lines 12" and larger when the oversizing is required due to slope of the pipeline.
 - C. No rebate shall be paid for intact sewer line regardless of the diameter.

Section 11 - Applicants Outside District

- 11.1 **Outside of District.** The District shall not make sewerage service available to any applicant whose premises is located outside the boundaries of the District.
- 11.2 **Beyond District.** The District is not obligated to install any sewer lines beyond the boundaries of the District.

Section 12 - Use of Sewers - Requirements, Limitations, Charges

- 12.1 **Permit Required.** Permits to discharge into the sewerage system of the District anything but domestic sewage will be granted only in accordance with, and in consideration of, the conditions of this Ordinance, and shall be subject to reasonable rules, regulations and requirements.
- 12.2 **Prohibited Discharges.** 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:

A. Any storm water, surface water, ground water, roof runoff, subsurface drainage, uncontaminated cooling water, or unpolluted industrial waters. Unpolluted water shall mean any water within the following limits of quality:

pH	7.0 minimum, 8.5 maximum
Dissolved Solids	1,000 milligrams per liter, maximum
Biochemical Oxygen Demand	5 milligrams per liter, maximum
Suspended Solids	5 milligrams per liter, maximum
Settleable Solids	0.1 milliliters per liter, per hour, maximum
Grease or Oil	None
Color or Odor	None
Toxic Concentration of Substances	None

B. Any gasoline, benzene, naphtha, fuel oil, or other flammable or explosive liquid, solid or gas.

C. Any ashes, cinders, sand, mud, straw, shavings, metal, glass rags, feathers, tar, plastics, wood, paunch manure, or any other solid or viscose substances capable of causing obstruction to the flow in sewers, or other interference with the proper operation of the sewage treatment plant.

D. Any garbage that has not been properly shredded. Proper shredding is defined as having not more than 5 percent by weight (determined on a dry basis) of all material discharged

less than 1/4 inch in its largest dimension, and no particle greater than 1/2 inch in its largest direction.

E. Any liquid or vapor having a temperature higher than 150 degrees F.

F. Any water or waste having a pH lower than 6.5 or higher than 10.0 or having any other corrosive property capable of causing damage or hazard to structures, equipment and personnel of the sewage work.

G. Any water or 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.

H. Any noxious or malodorous substances which by themselves or by interaction with other wastes may create a public nuisance or hazard or make human entry into the sewers extraordinarily hazardous.

I. Any water or waste having a 5-day biochemical oxygen demand greater than 300 milligrams per liter.

J. Any water or waste having greater than 350 milligrams per liter of suspended solids.

K. Any water or waste which exerts or causes excessive discoloration.

L. Any unusual volume of flow or concentration of waste constituting a "slug". "Slug" is defined as any discharge of water, sewage, or industrial waste which in concentration of any given constituent or in quantity of flow exceeds for any period of duration longer than 15 minutes more than 5 times the average 24 hour concentration or flows during normal operation.

M. Any water or waste containing dissolved sulfides in excess of 0.1 milligram per liter.

N. Any water or waste containing a toxic or poisonous substance in sufficient quantity to injure or interfere with any sewage treatment process, constitute a hazard to humans or animals, or create any hazard in the receiving waters of the sewage treatment plant. The following is a partial list of toxic substances and their maximum concentration allowable for admission into the public sewer system.

<u>Toxicant</u>	<u>Maximum Allowable Concentration</u>
Alcohols	100 mg./liter
Algicides	(See Note A)
Aluminum	0.2 mg./liter
Antibiotics	(See Note A)
Arsenci & Arsenicals	1.0 mg./liter
Bactericides	(See Note A)
Barium	5.0 mg./liter
Beryllium	5.0 mg./liter
Boron	10.0 mg./liter
Bromine, Iodine, Chlorine (total)	50.0 mg./liter
Cadmium & Chromium Salts	0.5 mg./liter
Chromium & Chromim Salts	0.5 mg./liter
Copper & Copper Salts	0.1 mg./liter
Cresols & Creosotes	2.0 mg./liter
Cyanides & Nitriles	0.2 mg./liter
Fluorine	1.5 mg./liter
Fungicides	(See Note A)
Insecticides	(See Note A)
Iron	1.0 mg./liter
Lead	0.2 mg./liter
Manganese	0.2 mg./liter
Mercury & Mercurials (as Mercury)	0.01 mg./liter
Nickel	0.2 mg./liter
Organic Solvents	1.0 mg./liter
Phenols & their Derivatives	0.5 mg./liter
Selenium	2.0 mg./liter
Silver & Silver Compounds (as Silver)	0.01 mg./liter
Sulfonamides & Dyes	(See Note A)
Zinc Compounds (as Zinc)	0.2 mg./liter
Strong Oxidizing Agents, such as Chromates, Dichromates, Permanganates, Peroxides, etc.	(See Note A)
Strong Reducing Agents, such as Nitrates, Sulfites, Thiosulfates, etc.	(See Note A)

Note A: None will be allowed unless specifically approved in writing by the Engineer.

The maximum allowable concentration of toxic or potentially toxic materials not listed above will be determined by the Engineer on an individual basis. In no event shall any industrial waste discharged to the public sewers have a 96 hour median tolerance limit (TLM), as determined by the Routine Fish Bioassay Method, of less than 25 percent.

O. Any other substance, material, water or waste, which is not amenable to treatment by the treatment process, or causes

the sewerage treatment plant effluent to violate discharge requirements issued by the State Water Resources Control Board or the Regional Water Quality Control Board, or harms the sewers, treatment processes and equipment, or has any adverse effect on the receiving waters, or can endanger health, safety, public property, or can cause a nuisance.

- 12.3 More Stringent Limits Permitted.** When the volume of waste discharge from any single industrial establishment is greater than 10 percent of the average daily sewage flow of the District, the Engineer may impose separate or special concentration limits more stringent than those previously listed upon that establishment.

12.4 Precautions Against Entry of Unauthorized Materials to Sewer.

Any physical connection to a public sewer or to a private sewer connected to a main sewer from vessels, tanks or containers receiving any of the hereinbefore mentioned material and substances, through which quantities of the aforesaid prohibited material or substances could be discharged accidentally, directly or indirectly, into the main sewers is prohibited. The owner of any manufacturing process or storage vessel shall take precaution to prevent the accidental spillage of any of the hereinbefore mentioned materials into floor drains, basins, downspouts, gutters, or any other drainage facilities which are connected, directly or ultimately, to the sewer system.

12.5 Permit Procedure.

A. Each person discharging anything except domestic sewage into the sewer system at the time this Ordinance takes effect shall submit an application to the Engineer within two (2) months after this Ordinance takes effect and shall not discharge industrial waste into the sewer system after nine (9) months from the date of adoption of this Ordinance without a permit therefor.

B. No person discharging anything other than domestic sewage shall make a connection to the System without first applying to and receiving from the Engineer a permit therefore. This permit shall be in addition to all other permits required by the District.

C. All applicants for a permit to discharge anything other than domestic sewage to the System shall file with the Engineer industrial waste information as a prerequisite for the consideration of such a permit. The following is partial listing of information to be furnished by the applicant for a permit:

(1) Details of production, number of employees, water consumption and usage, water disposal facilities and other pertinent data to enable the Engineer to properly determine the nature of the waste being discharged;

(2) Plan of the properties showing accurately all sewers, drains and sewer connections;

(3) Laboratory determination of the characteristics of the sewage, industrial waste or other waste discharged to the sewer system when required by the Engineer, For the purpose of obtaining this permit, such laboratory determinations shall be performed at the expense of the applicant.

D. Terms and conditions as may be required by the Engineer in the issuance of a permit are as follows:

(1) A limitation on the volume of sewage and the rate of flow permitted from the premises;

(2) The installation by the discharger, at his own expense, of facilities or equipment for intermittent or continuous monitoring of the quantity or quality of sewage, industrial waste or other wastes discharged into the sewer system from such premises; such facilities and equipment shall be deeded to the District along with the necessary easements and/or rights of way as required by the District. The cost of maintaining said monitoring facilities or equipment shall be added to the Annual Sewage Service Charge to the discharger.

(3) The installation and maintenance by the discharger, at his own expense, of detention tanks or other facilities or equipment for reducing the maximum rates of discharge of sewage or industrial waste to such a percentage of the 24 hour rate as may be required by the Engineer.

(4) The installation and maintenance by the discharger, at his own expense of such preliminary treatment facilities as may be required by the Engineer.

(5) The installation and maintenance by the discharger, at his own expense, of a suitable control manhole in the portion of the side sewer located on private property to facilitate observation, sampling and measurement of the waste. Such manhole, when required, shall be accessible and safely located and shall be constructed in accordance with plans approved by the Engineer.

(6) The installation and maintenance by the discharger, at his own expense, of grease, oil and sand interceptors or traps that are necessary for the proper handling of liquid wastes containing grease and excessive amounts of any inflammable waste, and other harmful ingredients. All interceptors or traps shall be of an approved type and capacity and shall be so located as to be readily and easily accessible for cleaning and inspection;

(7) The submission to and approval by the Engineer of the plans for any of the above facilities or equipment required to be installed and maintained by the discharger;

(8) Such other terms and conditions as may be necessary to protect the System and carry out the provisions of this Ordinance;

(9) Such terms and conditions may also provide that subsequent to the commencement of operation of any preliminary treatment facilities, periodic reports shall be made by the discharger to the Engineer setting forth adequate data upon which the acceptability of the sewage, industrial waste or other waste, after treatment, may be determined.

(10) The permittee shall notify the Engineer of any changes in operation that affect the quantity or quality of the industrial waste discharge immediately upon such changes. The Engineer, at any time before or after granting a permit, may require additional pertinent information from each person discharging industrial waste into the sewer system.

12.6 Refusal of a Permit. The Engineer may refuse to grant any permit if he determines that one or more of the following conditions apply:

A. The applicant has not adequately completed the application for the permit or furnished information required by this Ordinance in connection therewith.

B. The application for a permit contains false statements or misrepresentations.

C. The applicant's existing or proposed discharge does not conform to the provisions of this Ordinance.

D. The granting of a permit would result in the establishment of a use or occupancy of land in violation of the zoning ordinance of any city or county having jurisdiction over the land for which a permit is sought.

E. The granting of a permit or occupancy or use pursuant thereto would result in the creation or maintenance of a public nuisance.

12.7 Grounds for Suspension or Revocation of a Permit. Any permit issued hereunder may be suspended or revoked at any time as provided hereunder upon any of the following grounds:

A. Upon any of the grounds for which a permit may be denied.

B. For violation of any condition or provision of the permit.

C. For violation of any provision of this Ordinance or of any rule or regulation issued pursuant thereto.

12.8 Effect of Suspension or Revocation of a Permit. Upon the suspension or revocation of a permit, the District shall terminate service and shall disconnect sanitary and waste disposal connection in accordance with the provisions of paragraphs 9.4 and 12.9 of this Ordinance; provided, however, that the District may continue service and may continue sanitary and waste disposal connection facilities upon the removal by the permitor of the grounds for suspension or revocation and upon such other terms and conditions as shall be authorized by this Ordinance and imposed by the Engineer.

12.9 Procedure for Suspension or Revocation of a Permit: Notice and Hearing. Prior to the suspension or revocation of a permit, and the termination of service and disconnection of sanitary and waste disposal facilities, the District shall notify, in writing, the owner and tenant, if any, of the property affected. Said Notice shall advise that said District will consider the suspension or revocation of the permit, termination of service, and disconnection. Said Notice shall state the date of proposed suspension or revocation, termination of service, and proposed disconnection of service, and the reason therefor, and the time and date and place that the District Board shall hold a hearing upon said proposed suspension, revocation, termination and disconnection. Said hearing shall not be less than ten days subsequent to the giving of notice as herein required. Said Notice shall be mailed to the owner at the address shown on the records of the Assessor of Contra Costa County or as known to the District, and a copy shall be delivered to the tenant or posted conspicuously on the property affected. District may (but shall not be required to) give such further or additional notice as in the Discretion of the District is convenient or desirable. At the conclusion of the hearing, the Board shall adopt a resolution determining whether grounds exist for suspension or revocation of the permit and for termination and disconnection of service. If such grounds are found to exist, the permit shall forthwith be suspended or revoked (as said

resolution shall so determine) and service shall forthwith be terminated and sanitary and waste disposal facilities forthwith disconnected. A copy of said resolution shall be mailed to the owner at the address shown on the records of the Assessor of the County or as known to the District and a copy shall be delivered to the tenant or posted conspicuously on the property; provided, however, that the service of said copy of the resolution shall not be a condition precedent or subsequent to suspension or revocation, termination or disconnection.

12.10 Procedure for Requested Restoration of Permit and Service:

Imposition of Conditions.

A. Any person whose permit has been suspended or revoked hereunder, or for whom service has been terminated and disconnection effected hereunder, may petition the District Board for reinstatement of the permit and reinstatement of service. The petition shall be filed with the Engineer and shall be verified by the petitioner under oath or by declaration under penalty of perjury. The petition shall contain a detailed statement of the corrective action taken by the petitioner or others to remove the grounds for suspension or revocation, termination and disconnection of the corrective measures or devices to prevent a repetition of any violation, and of proposed security against any further violation. The petition shall contain the name and address of the petitioner for purposes of receiving notice.

B. The petition shall be heard by the District Board within 35 days of the date of filing. Notice of time, date and place of hearing shall be given to the petitioner at least ten days before the hearing, in writing, and mailed to the petitioner at the address shown on the petition; provided, however, that the petitioner may waive said notice in writing. At the hearing, the District Board shall consider evidence presented by the petitioner in support of his petition and evidence in opposition.

C. The Board, in its discretion, may restore the permit, service and connection if it finds, by resolution that the grounds for suspension or revocation, termination and disconnection have been corrected and that there is adequate assurance from the petitioner of corrective measures or devices to prevent a repetition of any offense for which the permit was suspended or revoked and service terminated and disconnected.

D. The District Board may, as a condition to the restoration of the permit, service and connection:

(1) Require the petitioner to provide reasonable safeguards and security to avoid a repetition of any offense for which the permit was suspended or revoked and service terminated and disconnected.

(2) Impose reasonable charges in accordance with the schedule adopted by the District to compensate the District for expenses incurred by the District in connection with the suspension or revocation, termination and disconnection, and in connection with the reinstatement of the permit and the restoration of service and reconnection.

(3) Impose reasonable charges in accordance with the schedule adopted by the District for any damage to its facilities, in accordance with paragraph 9.1(A), or any overload to its facilities which the petitioner should equitably be required to pay.

(4) Impose such other reasonable conditions or regulations as shall be necessary to protect the public health, safety and property and to prevent a nuisance.

(5) Impose such reasonable conditions or regulations as shall be necessary to comply with the requirements of the State of California Regional Water Quality Control Board or the State of California Water Resources Control Board of this District.

12.11 Rules and Regulations. The Board may adopt reasonable rules and regulations or impose reasonable conditions, in addition to those herein specifically authorized, upon any permit issued, for the purpose of implementing this Ordinance. A copy of any such rules and regulations shall be maintained in the office of the District and shall be available for inspection upon request of any member of the public. Copies of said rules and regulations shall be reproduced for sale to members of the public at a reasonable charge. Without limitation to the generality of any other provision of this Ordinance, a violation of said rules and regulations shall be grounds for suspension or revocation of a permit.

12.12 District Personnel Authorized to Inspect Premises. The Engineer and other duly authorized employees and agents of the District, bearing credentials and identification, shall, in all cases affected by this Ordinance, be authorized to enter upon all properties in the District for the purpose of (1) determining the size, depth, location and condition of any sewer or storm drain connection, (2) determining the location of discharge connection of roof and surface drains and plumbing fixtures, and (3) inspecting, observing, measuring, sampling and testing the quantity, consistency and

characteristics of water and wastes being discharged into any public sewer or natural outlet.

The inspections authorized by this paragraph shall be conducted either with the consent of the owner or occupant, or pursuant to the provisions of Title 13 of Part III of the Code of Civil Procedure (CCP Section 1822.50 et seq.).

- 12.13 Sampling and Testing.** All measurements, tests and analyses of characteristics of waters and wastes to which reference is made in this Ordinance shall be determined in accordance with the latest edition of "Standard Methods for the Examination of Water and Wastewater," published by the American Public Health Association, and shall be performed upon suitable samples taken at the control manhole. In the event that no special manhole has been required, the control manhole shall be considered to be the nearest downstream manhole in the public sewer to the point at which the building sewer is connected. Sampling shall be carried out by customarily accepted methods to reflect the effect of constituents in the sewage upon the sewage works and to determine the existence of hazards to life, limb and property.

Section 13 - Protection of District Property

- 13.1 Damage to District Property.** No person shall break, dig up, obstruct, injure, manipulate, remove, or in any way interfere with the property and facilities, or any part thereof, including, but not limited to any valve, manhole cover, clean-out, flushing inlet, sewer lines, or apparatus connected therewith, of the District without prior written authorization from the District to do so.
- 13.2 Deposits on District Property.** No person shall place or deposit upon the property or in the facilities of the District any waste, garbage, trash, debris, or other unauthorized material.

Section 14 - Sewerage Service Charges

- 14.1 Definitions.** Unless otherwise defined by this section or clearly required by its context, terms used in this section shall have the meanings set forth for them in this Ordinance.
- 14.2 Purpose.** Revenue derived under this section shall be used only for the acquisition, planning, construction, reconstruction, maintenance and operation of its sanitation or sewerage facilities, to repay principal and interest on bonds issued for the construction or reconstruction of such sanitary or sewerage facilities, and to repay federal or state loans or advances made to such entity for the construction or reconstruction of sanitary or sewerage facilities.

14.3 Operative Date for Charges. Annual sewerage service charges are hereby assessed and levied upon all premises connected to the District's system on July 1, 1993 and thereafter for each succeeding fiscal year. Premises first connected to the system after July 1, 1985 shall pay for the annual sewerage service charge as it was on the date on which the application is made to connect the system for the current fiscal year as provided in this Ordinance.

14.4 Annual and Initial Charges.

A. Annual Sewerage Service Charges. For each premises connected or required by this Ordinance to be connected to the system, the annual sewerage service charge required to be paid is the applicable amount set forth in paragraph 14.5 of this Ordinance, except where annual sewerage service charges are paid for under a contractual agreement between the District and the premises' owner or occupant. Such agreed charges shall, as a minimum, be substantially equivalent to the applicable charges specified in paragraph 14.5.

B. Initial Annual Sewerage Service Charges. The initial annual sewerage service charge shall be paid at the time of connection for sewerage service prorated for the number of months remaining in the current fiscal year until the next following June 30, including the month during which connection is made. The initial charge for services for less than one year, and other bills requiring proration, shall be prorated only on the basis of the number of months in the period, and any period of less than a full month shall be counted as a full month.

Time of connection shall mean the date which the District issues the signed connection permit which will not be issued until all fees and service charges are paid.

14.5 Required Charges.

A. Minimum Annual and Unit Charges. Minimum annual sewerage service charges are established and shall be paid as follows:

(1) Minimum rate for any premises shall be one "annual unit charge." An "annual unit charge" shall be that amount of money determined by the Board in an order or resolution to be required per unit to meet the annual costs of the operation, construction, and maintenance of the District's system, plus bond principal and interest and capital improvements for the fiscal year charges which are to be made.

(2) Each unit shall have one "annual unit charge."

(3) Each unit in a multiple dwelling structure shall have one "annual unit charge."

(4) The minimum annual charge for multiple lodging structures, identifiable commercial activity and institutional owners shall be the rate established by order or resolution of the Board after consideration of the Engineer's recommendations for charges. Such rate charge shall be the sum of money determined by multiplying the "annual unit charge" for a unit by the applicable multiplier set forth in Section 3.

B. Vacant Premises. If any premises shall become vacant, the applicable minimum annual sewerage service charge shall continue to be charged to and collected from the owner of such premises until the premises have been disconnected from the System and the Engineer notified in writing by the owner of that disconnection.

C. Exemptions. No premises serviced by the system shall be exempt from payment of charges without Board approval by order or resolution setting forth the special conditions which form the basis for exemption.

D. Separate Connections.

(1) There shall be a separate connection to the System for each structure, building, identifiable commercial activity or separate premises.

(2) Upon written request to the Engineer, any two or more separate structures, buildings, or identifiable commercial activities on the same lot, or on adjoining lots, under a single ownership of record, provided the Engineer's written approval is first obtained, may be connected to the System by means of a single connection to serve such structures, buildings, identifiable commercial activities, or separate premises. In this single connection situation, one total annual service charge shall be levied, which charge shall be the total of the applicable minimum annual sewerage service charges set forth in this section for each structure, building, identifiable commercial activity, or separate premises, and the responsibility for payment of this total annual charge for all facilities and services furnished is the responsibility of the owner. Under this single connection option, the connecting sewer shall remain a private side sewer unless constructed as a main sewer and deeded or dedicated to the District.

E. Use Change and Charge Adjustment. Where applicable fees and annual sewerage service charges have already been paid for

sewerage service to be provided for a structure, building, identifiable commercial activity or separate premises, the Engineer may establish and collect connection or development fees and/or annual service charges in accordance with District ordinances and paragraph 14.5 for the new proposed use, giving credit for connection and development fees previously paid.

14.6 Collection of Annual Charges.

A. Authority and Conflict. This section is enacted pursuant to Health and Safety Code sections 4766 and 5473 to 5473.11, inclusive, and constitutes the ordinances referred to in Sections 4566 and 5473. In the case of any conflict between the provisions of this section and Ordinance and those of Sections 5473 to 5473.11, or Ordinance No. 1 of OBIWMA, the latter shall prevail.

B. Tax Roll Collection:

(1) All District annual sewerage service charges for the 1993/1994, and subsequent fiscal years, shall be collected on the County tax roll in the same manner, by the same persons, and at the same time as, together with and not separately from, the general taxes, and shall be delinquent at the same time and thereafter be subject to the same delinquency.

(2) All things required by Health and Safety Code Sections 5473 to 5473.11 to be done in a timely manner by the Engineer so that the Board for each fiscal year can take all actions required of it in order to collect the annual sewerage service charges for that year on the tax roll.

C. Direct Collection.

(1) If any levied annual sewerage service charge for a fiscal year, or portion thereof, billed on the tax roll become delinquent, they shall be collected as follows:

(a) By the Engineer, who may take any reasonable and proper action necessary to insure payment, including the billing and the filing of liens as provided in Health and Safety Code Section 5473.11. The Engineer may also institute action in any court of competent jurisdiction to collect any charges which may be due and payable in the same manner as any other debts owing to the District may be collected.

(b) Collection by consent and agreement with another entity's department's or utility's rates

pursuant to Health and Safety Code Sections 5471 and 5472.

(c) By such other action as authorized by law and by the District's Board, including disconnection from the System pursuant to the provisions of Section 9.

(2) Charges collected pursuant to this subsection (C) are subject to the following:

(a) A basic penalty of 10 percent of any unpaid charge shall be added to it for non-payment within the time and in the manner prescribed in this section and collected.

(b) A further penalty of one half of one percent per month for non-payment of any charge and basic penalty shall be added and collected.

Section 15 - Duties of Engineer

15.1 Engineers responsibility. The Engineer shall supervise all connections to the System and enforce all provisions of this Ordinance. The Engineer shall collect all fees and charges excepting those relating to the billing, collection and delinquency of Annual Sewerage Service Charges and Ad Valorem Taxes.

15.2 Right of Entry.

A. The Engineer shall be authorized to enter all private properties through which, or through part of which the District holds a duly-obtained easement for the purpose of, but not limited to, inspection, observation, measurement, sampling, repair and maintenance of any portions of the System lying within the easement.

B. The entries authorized by this paragraph shall be conducted either with the consent of the owner or occupant or pursuant to the provisions of Title 13 of part III of the code of Civil Procedure (CCP Section 1822.50 et seq.).

Section 16 - Notices

16.1 Written or Oral. Notices from the District to any person will be given in writing, either delivered personally to the owner of record or mailed to his last known address, except that in any emergency the Engineer may give oral notice by telephone or in person.

- 16.2 **Notices to the District.** Notices from any person to the District may be given by such person or his authorized representative orally or in writing at the District office or may be sent by mail to the Engineer at P.O. Box 1105, Oakley, CA 94561.

Section 17 - Appeals

- 17.1 **Appeal of Engineer's Determinations.** Any installer dissatisfied with any determination of the Engineer may appeal the determination to the Board within 15 days after receiving notice of the determination by filing written notice of appeal with the District. The notice of appeal shall state the grounds for appeal. At a regular meeting of the Board after the notice of appeal is filed, the Board shall hear the appeal. The decision of the Board shall be final.
- 17.2 **Payment and Refund.** Pending decision upon any appeal relative to the amount of any charge hereunder, the appellant desiring to proceed with construction shall pay such charge. After the appeal is heard, the Board shall order refunded to the appellant such amount, if any, as the Board shall determine should be refunded.
- 17.3 **Relief on Own Motion.** If the Board on its own motion finds that by reason of special circumstances any provision of this Ordinance should be suspended or modified as applied to a particular premises, it may, by resolution, order such suspension or modification for such premises during the period of such special circumstances, or any part thereof.

Section 18 - Validity

- 18.1 **Validity.** If any provision of this Ordinance, or the application thereof to any person or circumstance, is held invalid, no other provision of this Ordinance shall be affected thereby.

Section 19 - Effective Date

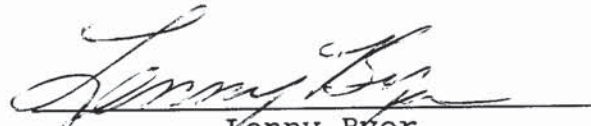
This Ordinance becomes effective on July 1, 1993. This order also designates the undersigned to prepare and publish a 1/4 page display advertisement in accordance with California Health and Safety Code Section 6490.

PASSED AND ADOPTED ON THE 1st day of June, 1993 by the following vote:

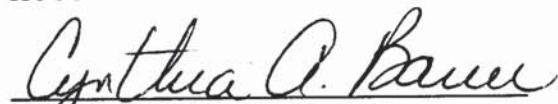
Ayes: L. Byer, D. Meadows, R. Kirkman, W. Trice, I. Powell, D. Mickelson, and R. Gromm

Noes: none

Absent: none


Lenny Byer
President of the Board

Attest:


Cynthia A. Bauer
Secretary to the Board

JE: cab
isd\ord25
(rev: 6-22-93)

ORDINANCE NO. 38

ORDER NO. 09-24

Whereas, the Board finds and determines that it is in the interest of Ironhouse Sanitary District (District) to adopt an Ordinance and Order establishing, prescribing and providing for the prevention of sanitary sewer blockages and obstructions from contributions and accumulations of fats, oils and greases into the sanitary sewer system from food preparation and serving establishments.

Whereas, the Board finds and determines there is no possibility that this Ordinance may have a significant adverse effect on the environment, and it is therefore exempt from CEQA pursuant to Section 15061(b)(3) of the State CEQA Guidelines.

Now, therefore, the Board of Directors of the District does ordain and order as follows:

Section 1. -- Establishment of a Fats, Oils, and Greases Control Ordinance.

This Ordinance is adopted to curb sanitary sewer overflows (SSOs) caused by the accumulation of fats, oils and greases in the District's sanitary sewer mains. A Food Service Establishment, as defined in Section 2, which is connected to the District's sanitary sewer and treatment system shall be subject to this Ordinance.

Section 2. – Definitions

2.1 Terms and Definitions. The following terms when used in this Ordinance shall have the following respective meanings:

- (a) "District Engineer" shall mean the District Engineer of Ironhouse Sanitary District, or her or his designee.
- (b) "District Inspector" shall mean the person appointed by the District Engineer to perform various inspection, enforcement and related duties under this Ordinance, or her or his designee.
- (c) "Effective Date" shall mean July 1, 2009, the date set forth in Section 10, below.

(d) “Fats, Oils, and Greases (FOG)” shall mean organic polar compounds derived from animal and/ or plant sources that contain multiple carbon chain triglyceride molecules. These substances are detectable and measurable using analytical test procedures established in the United States Code of Federal Regulations 40 CFR 136, as may be amended from time to time. All are sometimes referred to herein as “grease” or “greases”.

(e) “Food Service Establishment” shall mean an establishment engaged in activities of preparing, serving, or otherwise making a food related product available for consumption by the public, such as, but not limited to, a restaurant, fast-food outlet, commercial kitchen, caterer, hotel, school, hospital, prison, correctional facility, and care institution. These establishments use one or more of the following preparation activities: cooking by frying (all methods), baking (all methods), grilling, sautéing, rotisserie cooking, broiling (all methods), boiling, blanching, roasting, toasting, or poaching. Also included are infrared heating, searing, barbecuing, and any other food preparation activity that produces a hot, non-drinkable food product in or on a receptacle that requires washing.

(f) “Grease Discharge Permit” shall mean a permit issued by the District Engineer certifying that a Food Service Establishment has installed a Grease Removal Device of a size and design approved by the District Engineer.

(g) “Grease Interceptor” shall mean a structure or device designed for the purpose of removing and preventing fats, oils, and greases from entering the sanitary sewer collection system. This device is often below-ground in an outside area and is built as a two or three chamber baffled tank.

(h) “Grease Removal Device” shall mean a Grease Trap, a Grease Interceptor, or both.

(i) “Grease Trap” shall mean a type I hydromechanical grease interceptor device for separating and retaining waterborne greases and grease complexes prior to the wastewater exiting the trap and entering the sanitary sewer collection and treatment system. Such traps are typically compact under-the-sink units that are near food preparation areas.

(j) "Minimum Design Capability" shall mean the design features of a Grease Removal Device and its ability or volume required to effectively intercept and retain greases from grease-laden wastewaters discharged to the public sanitary sewer.

(k) "User" shall mean any person, including those located outside the jurisdictional limits of Ironhouse Sanitary District (District) who contributes, causes or permits the contribution or discharge of wastewater into sewers within the District's boundaries, including persons who contribute such wastewater from mobile sources, such as those who discharge hauled wastewater.

Section 3 – Grease Discharge Permit Required for Food Service Establishments

3.1 Grease Discharge Permit Required. In accordance with Sections 3.2 and 3.3, respectively, New and Existing Food Service Establishments shall apply for and obtain from the District Engineer a Grease Discharge Permit certifying that the Food Service Establishment has installed a Grease Removal Device of a size and design approved by the District Engineer. The requirements of this section are in addition to any applicable requirements of the Uniform Plumbing Code and the District's standard plans and specifications.

3.2 New Food Service Establishment. A Food Service Establishment which is constructed on or after the Effective Date of this Ordinance shall be classified for the purpose of this Ordinance as a New Food Service Establishment and shall install, operate and maintain a Grease Removal Device according to the requirements contained in this Ordinance. An Existing Food Service Establishment which will be expanded or renovated under a City or a County building permit, as applicable, that does not have a Grease Removal Device installed or the installed Grease Removal is determined to be inadequate by the District Engineer shall be deemed in its entirety to be a New Food Service Establishment and shall obtain a Grease Discharge Permit and shall install, operate and maintain a Grease Removal Device according to the requirements contained in this Ordinance. A Grease Removal Device shall be installed prior to the issuance of a certificate of occupancy for the New Food Service Establishment or for the expanded or renovated Existing Food Service Establishment. Grease Traps shall be prohibited for New Food Service Establishments, except for those establishments where inadequate space is available for the installation of a Grease Interceptor. The District Engineer must

approve the installation of a Grease Trap instead of a Grease Interceptor at a New Food Service Establishment.

3.3 Existing Food Service Establishment. A Food Service Establishment in existence as of the Effective Date of this Ordinance shall be classified for the purpose of this Ordinance as an Existing Food Service Establishment and shall be permitted to operate and maintain existing Grease Removal Devices, provided they are in efficient operating condition as determined by the District Engineer. On or after the Effective Date of this Ordinance and when the District Engineer determines the existence of any one or more of the conditions listed below, the District Engineer may require an Existing Food Service Establishment to either: (i) install, operate and maintain a new Grease Removal Device that complies with the requirements of this Ordinance, (ii) modify or repair any noncompliant Grease Removal Device or (iii) both. The Existing Food Service Establishment shall complete (i), (ii) or both to the satisfaction of the District Engineer within ninety days of delivery of written notification to the Existing Food Service Establishment that one or more of the conditions listed below applies and deliver an application for a Grease Discharge Permit.

(a) The Existing Food Service Establishment is found to be contributing oils and grease in quantities sufficient to cause line stoppages or necessitate increased maintenance on the wastewater collection system.

(b) The Existing Food Service Establishment does not have a Grease Removal Device.

(c) The Existing Food Service Establishment has an undersized, irreparable or defective Grease Removal Device.

(d) Remodeling of the food preparation or kitchen waste plumbing system of the Existing Food Service Establishment is performed which requires a permit to be issued by the City or the County, as applicable.

(e) The Existing Food Service Establishment is sold or undergoes a change of ownership.

(f) The Existing Food Service Establishment does not have plumbing connections to a Grease Removal Device which is in compliance with the requirements of this Ordinance.

(g) The Existing Food Service Establishment fails to submit a completed application form for a Grease Discharge Permit within sixty days after the date of the receipt of an application form by the District.

(h) The Existing Food Service Establishment has not been operated as a Food Service Establishment for twelve consecutive months.

Section 4 – Grease Removal Device Standards and Design Specifications.

4.1 Each Grease Removal Device shall be installed and connected so that it shall be at all times easily accessible for inspection, cleaning and removal of grease.

4.2 The Grease Removal Device shall be situated on the premises of the Food Service Establishment, except when such a location would be impractical or cause undue hardship on the Food Service Establishment, as determined by the District Engineer. In this circumstance and upon application by the Food Service Establishment, the City or the County, as applicable, may issue an encroachment permit to allow the Grease Removal Device to be installed in the public street or sidewalk area, provided it is located so that it will not be obstructed and will not at any time pose a hazard or obstruction to the public's use of the street or sidewalk area. The Food Service Establishment shall be solely responsible for obtaining all permits required by entities or agencies other than the District and shall bear all costs associated with installing the Grease Removal Device.

4.3 Waste discharge from fixtures and equipment in a Food Service Establishment which may contain grease or other objectionable materials including, but not limited to, scullery sinks, pot and pan sinks, food waste disposals, soup kettles, and floor drains located in areas where such objectionable materials may exist, may be drained into the sanitary waste through the Grease Removal Device when approved by the District Engineer provided:

(a) Toilets, urinals, wash basins and other fixtures containing fecal material shall not flow through the Grease Removal Device; and

(b) Grease Removal Devices shall be located upstream of any dishwashers or discharges exceeding one hundred ten degrees Fahrenheit.

4.4 Grease Removal Devices shall be maintained in efficient operating condition by periodic removal of the accumulated grease. The use of chemicals to dissolve grease is specifically prohibited. No accumulated grease shall be introduced into any drainage piping or public or private sewer. Users with Grease Removal Devices shall maintain them in good operating condition at all times.

4.5 Grease Removal Devices shall conform to the standards in the Uniform Plumbing Code (UPC), Chapter 10. Grease Removal Devices shall be installed in strict accordance with the manufacturer's instructions and shall be equipped with a cover that can be opened for inspection and sampling and a mechanism for a secure closing.

4.6 A Grease Removal Device shall conform to the following additional standards and design specifications:

- (a) A Grease Removal Device shall have a minimum of two compartments and shall be capable of separation and retention of grease and storage of settled solids. Design shall conform with the most current requirements as published by the Uniform Plumbing Code and any District standard plans and specifications.

- (b) A Grease Interceptor must have a manhole over each compartment or be designed in such a way for monitoring purposes.

- (c) A Grease Removal Device cover shall have a gas-tight fit.

- (d) A Grease Interceptor shall be designed, constructed and installed for adequate load-bearing capacity.

- (e) A Grease Interceptor shall be installed in a location outside of the building which provides easy access at all times for inspections, cleaning and proper maintenance, including pumping.

4.7 Grease Removal Device Capacity. Grease Interceptor capacity calculations shall be performed by each Food Service Establishment.

- (a) The correct Grease Removal Device will be based on size and type of operation according to the formula contained in Table 1003.4.1 and Table 1003.5.1 of the California Uniform Plumbing Code and the sizing

methods contained in the most current published Plumbing and Drainage Institute (PDI), where applicable.

(b) Minimum capacity of any one unit shall be as follows:

(i) A Grease Interceptor shall be seven hundred fifty gallons as required by the Uniform Plumbing Code and maximum capacity shall be one thousand five hundred gallons.

(ii) A Grease Trap shall be a minimum of forty pounds in size or as required by the Uniform Plumbing Code. Any deviation from this requirement shall be approved by the District Engineer.

(iii) Where sufficient capacity cannot be achieved with a single unit, installation of Grease Traps in series shall be required.

(iv) Grease Removal Device capacity calculations shall be approved by the District Engineer prior to the installation of the device.

4.8 Flow-through Rates and Control Devices.

(a) Flow-through Rates. Flow-through rates for Grease Removal Devices shall be calculated in accordance with the procedures in the Uniform Plumbing Code's most current edition.

(b) Flow-through Control Devices. Grease Removal Devices shall be equipped with a device to control the rate of flow through the unit. The rate of flow shall not exceed the manufacturer's rated capacity recommended in gallons per minute for the unit.

(c) Venting. The flow-control device for the Grease Removal Device shall be vented in accordance with the Uniform Plumbing Code's most current edition, when required. The vent shall terminate not less than six inches above the flood-rim level or in accordance with the manufacturer's instructions.

Section 5 - Grease Trap Inspection, Cleaning and Maintenance..

5.1 Grease Trap Inspection, Cleaning and Maintenance. Each Food Service Establishment shall be solely responsible for the cost of Grease Trap installation,

inspection, cleaning and maintenance. Each Food Service Establishment may contract with a licensed grease hauler for cleaning services or it may develop a written protocol and perform its own grease trap cleaning and maintenance procedures. Cleaning and maintenance must be performed when the total volume of captured grease and solid material displaces more than twenty-five percent of the total volume of the unit. Each Food Service Establishment shall determine the frequency at which their Grease Trap shall be cleaned, but all Grease Traps shall be opened, inspected, cleaned and maintained at a minimum of once per week.

5.2 Inspection. Grease Traps shall be inspected by the District Engineer as necessary to assure compliance and to assure proper cleaning and maintenance schedules are being adhered to.

5.3 Repairs. The Food Service Establishment shall be responsible for the cost and scheduling of all repairs to its Grease Trap(s). Repairs required by the District Engineer shall be completed within thirty calendar days after the date of written notice of required repairs is received by the Food Service Establishment, unless the District Engineer approves a different schedule in writing.

5.4 Disposal. Grease and solid materials removed from a Grease Trap shall be disposed of in the solid waste disposal system.

5.5 Recordkeeping. The Food Service Establishment shall maintain complete and legible records of the date and time of all cleaning and maintenance of each Grease Trap in a bound logbook and shall make this book available for inspection by the District Engineer on demand. Records shall be retained for a period of not less than three years. The Food Service Establishment shall also maintain the written protocol concerning Grease Trap cleaning and maintenance procedures and shall make this available to the District Engineer on demand.

Section 6 - Grease Interceptor inspection, maintenance, cleaning.

6.1 Grease Interceptors Inspection, Pumping and Maintenance. Each Food Service Establishment shall be responsible for the costs of installing, inspecting, pumping, cleaning and maintaining its Grease Interceptor. All Food Service Establishments that have Grease Interceptors shall utilize a licensed grease hauler. Pumping services shall include the initial complete removal of all contents, including floating materials, wastewater and bottom sludge and solids from the Grease Interceptor. Grease Interceptor cleaning shall include scraping

excessive solids from the walls, floors, baffles and all pipe work. It shall be the responsibility of each Food Service Establishment to inspect its Grease Interceptor during the pumping procedure to ensure that the Grease Interceptor is properly cleaned out and that all fittings and fixtures inside the Grease Interceptor are in working condition and functioning properly.

6.2 Grease Interceptor Pumping Frequency. Each Food Service Establishment shall have its Grease Interceptor(s) pumped at a minimum frequency of once every three calendar months. In addition to required quarterly pumping, each Food Service Establishment shall determine an additional frequency at which its Grease Interceptor(s) shall be pumped according to the following criteria:

- (a) When the floatable grease layer exceeds six inches in depth as measured by an approved dipping method;
- (b) When the settleable solids layer exceeds eight inches in depth as measured by an approved dipping method;
- (c) When the total volume of captured grease and solid material displaces more than twenty-five percent of the capacity of the interceptor as calculated using an approved dipping method;
- (d) When the interceptor is not retaining/capturing oils and greases; or the removal efficiency of the device, as determined through sampling and analysis, is less than eighty percent.

6.3 Variance Procedure. If a Food Service Establishment determines that monthly pumping of their Grease Interceptor is unnecessary in order to remain in compliance with the criteria in subsection 6.2(d), the Food Service Establishment may make written application for a variance from the monthly pumping requirements to the District Engineer. The variance procedure shall be as follows:

- (a) The Food Service Establishment shall submit an application for a variance on a form provided by the District Engineer along with the appropriate application fee. The application shall include the next date and time the Food Service Establishment intends to have its interceptor pumped and cleaned.
- (b) If the Grease Interceptor is in good working condition during the initial inspection, the District Inspector shall reinspect the Grease

Interceptor approximately one month after the initial inspection. If there is less than four inches of surface grease and less than six inches of bottom solids at the time of reinspection, the Grease Interceptor will not need to be pumped out at that time.

(c) After the initial reinspection, the District Inspector shall inspect the Grease Interceptor at regular intervals to determine the grease and solids level using a dipping method approved by the District Engineer.

(d) At the re-inspection, when either the level of grease reaches six inches or the level of solids reaches eight inches, the District Inspector shall use the number of days from the initial pumping date to the final re-inspection date as the new pumping frequency requirement to be included in the variance granted.

(e) If, at a re-inspection, the level of grease exceeds six inches or the level of solids exceeds eight inches, the District Inspector shall use the number of days from the initial pumping date to the previous re-inspection date as the new pumping frequency requirement to be included in the variance granted.

(f) In any event, pump-out and cleaning of a Grease Interceptor shall be required at least once every ninety days.

(g) Any excessive staff time and/or excessive analytical sampling and analysis cost shall be paid by the Food Service Establishment to the vender or service provider.

6.4 Inspection. Grease Interceptors shall be inspected by the District Inspector as necessary to assure compliance and to determine if proper cleaning and maintenance schedules are being adhered to.

6.5 Repairs. Each Food Service Establishment shall be responsible for the cost and scheduling of all repairs to its Grease Interceptor(s). Repairs required by the District Inspector shall be corrected within thirty calendar days after the date of written notice of requiring the repairs is received by the Food Service Establishment, unless the District Inspector establishes a different compliance date.

6.6 Disposal of wastes removed from each Grease Interceptor shall be disposed of at a facility permitted to receive such wastes. Neither grease nor solid

materials removed from Grease Interceptors shall be returned to any Grease Interceptor, private sewer line or to any portion of the wastewater collection system.

Section 7. Recordkeeping.

Each Food Service Establishment shall maintain a bound logbook in which a record of all Grease Removal Device maintenance is entered, including the date and time of the pumping activities, details of any repairs required and dates of repair completion and any other records pertaining to the Grease Removal Device. This logbook shall be made available for review upon request by the District Inspector. Each Food Service Establishment shall also maintain a file on-site which contains the following information:

- (a) The (as-built) drawings of the plumbing system;
- (b) A copy of the current Grease Discharge Permit;
- (c) Hauler information, receipts, and disposal information;
- (d) The file shall be available at all times for inspection and review by the District Inspector.

Section 8. Abandoned Grease Removal Devices.

Abandoned Grease Removal Devices shall be emptied and filled as required for abandoned septic tanks.

Section 9. Notices, Reports, Forms and Instructions

Publication by the District Engineer of notices, reports, forms and instructions required by the implementation of this Ordinance are ministerial acts that do not require the amendment of this Ordinance.

Section 10. Effective Date.

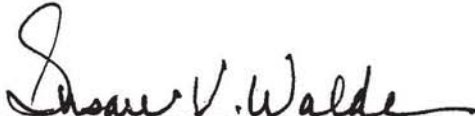
This Ordinance shall be effective on July 1, 2009. This order also designates the District Secretary to prepare and publish a 1/4 page display advertisement in accordance with California Health and Safety Code Section 6490.

I hereby certify that the foregoing is a full, true and correct copy of an ordinance and order duly passed and adopted by the Sanitary Board of the Ironhouse Sanitary District at a meeting thereof held on the 2nd day of June, 2009.

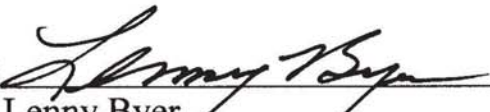
AYES, and in favor thereof, Members: L. Byer, D. Hardcastle, C. Lauritzen, D. Lew and M. Painter.

NOES, Members: None

ABSENT, Members: None



Susan V. Walde
Secretary to the Board
(SEAL)

APPROVED: 

Lenny Byer
President of the Board



Appendix D
Element 4 (Operations and Maintenance Program) Supporting Documents

Updated Pump Station Inspection
Schedule is available at the
District, and will be added to the
document in 2017.



Appendix E
Element 5 (Design and Construction Standard) Supporting Documents

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Standard Specifications *for* Design and Construction

**2014
EDITION**



**Central Contra Costa
Sanitary District**

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Appendix F
Element 6 (Overflow Emergency Response Plan) Supporting Documents

Sewer Maintenance Equipment List
is available at the District and will be
inserted in 2017



Sewer Maintenance Spill Calculation and Estimation Methods

Outlined in this document are three methods that are most often employed for estimating the volume of sanitary sewer spill. The City staff preparing the estimate should utilize the most appropriate method for the sewer overflow in question and use the best information available.

Method 1: Eyeball method

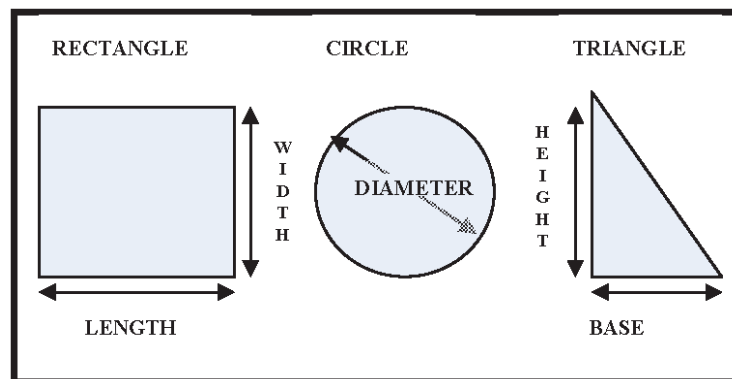
The volume of small spills can be estimated using an “eyeball estimate”. To use this method imagine the amount of water that would spill from a container listed on the table below. A jug contains 1 gallon, a bucket contains 5 gallons, and a drum contains 55 gallons. If the spill is larger than 55 gallons, try to break the standing water into 55 gal drums and then multiply by 55 gallons. This method is useful for contained spills up to approximately 220 gallons.

Size of container	How many of this size?	Size Multiplier (gal)	Total Volume Estimated (gal)
Water jug		X 1	
Bucket		X 5	
55 gal drum		X 55	
Total volume estimated			

Method 2: Measured Volume

The volume of most small spills that have been contained can be estimated using this method. The shape, dimensions, and the depth of the contained wastewater are needed. The shape and dimensions are used to calculate the area of the spills and the depth is used to calculate the volume.

Common Shapes and Dimensions



Steps for Volume Calculation

- Step 1 Sketch the shape of the contained sewage (see figure above).
- Step 2 Measure or pace off the dimensions.
- Step 3 Measure the depth at several locations and select an average.
- Step 4 Convert the dimensions, including depth, to feet.
- Step 5 Calculate the area in square feet using the following formulas:

Rectangle: $\text{Area} = \text{length (feet)} \times \text{width (feet)}$

Circle: $\text{Area} = \text{diameter (feet)} \times \text{diameter (feet)} \times 0.785$

Triangle: $\text{Area} = \text{base (feet)} \times \text{height (feet)} \times 0.5$

- Step 6 Multiply the area (square feet) times the depth (in feet) to obtain the volume in cubic feet.
- Step 7 Multiply the volume in cubic feet by 7.5 to convert it to gallons

Method 3: Duration and Flowrate

Calculating the volume of larger spills, where it is difficult or impossible to measure the area and depth, requires a different approach. In this method, separate estimates are made of the duration of the spill and the flowrate. The methods of estimating duration and flowrate are:

Duration

The duration is the elapsed time from the time the spill started to the time that the flow was restored.



Start Time: The start time is sometimes difficult to establish. Here are some approaches:

1. Local residents can be used to establish start time. Inquire as to their observations. Spills that occur in rights-of-way are usually observed and reported promptly. Spills that occur out of the public view can go on longer. Sometimes observations like odors or sounds (e.g. water running in a normally dry creek bed) can be used to estimate the start time.
2. Changes in flow on a downstream flowmeter can be used to establish the start time. Typically the daily flow peaks are “cut off” or flattened by the loss of flow. This can be identified by comparing hourly flow data during the spill event with flow data from prior days. This method will likely only be effective with consistent weather.
3. Conditions at the spill site change over time and can be used to establish the start time. Initially there will be limited deposits of toilet paper and other sewage solids. After a few days to a week, the sewage solids form a light-colored residue. After a few weeks to a month, the sewage solids turn dark. The quantity of toilet paper and other materials of sewage origin increase over time. These observations can be used to estimate the start time in the absence of other information. Taking photographs to document the observations can be helpful if questions arise later in the process. This method is valid for spills that have been occurring for a long time and may be used in conjunction with either of the above methods.
4. It is important to remember that spills may not be continuous. Blockages are not usually complete (some flow continues). In this case the spill would occur during the peak flow periods (typically 10:00 to 12:00 and 13:00 to 16:00 each day). Spills that occur due to peak flows in excess of capacity will occur only during, and for a short period after, heavy rainfall.

End Time: The end time is usually much easier to establish. Field crews on-site observe the “blow down” that occurs when the blockage has been removed. The “blow down” can also be observed in downstream flowmeters.

Flow Rate

The flowrate is the average flow that left the sewer system during the time of the spill. There are three common ways to estimate the flowrate:

1. **The San Diego Manhole Flowrate Chart:** This chart, included as at the end of this appendix, shows sewage flowing from manhole covers at a variety of flowrates. The observations of the field crew can be used to select the appropriate flowrate from the chart. If possible, photographs are useful in documenting basis for the flowrate estimate.



2. **Flowmeter:** Changes in flows in downstream flowmeters can be used to estimate the flowrate during the spill.

3. **Counting Connections:** Once the location of the spill is known, the number of upstream connections can be determined from the sewer maps. Multiply the number of connections by 200 to 250 gallons per day per connection or 8 to 10 gallons per hour per connection.

For example: 22 upstream connections * 9 gallons per hour per connection
 = 198 gallons per hour / 60 minutes per hour
 = 3.3 gallons per minute

Spill Volume

Once duration and flowrate have been estimated, the volume of the spill is the product of duration (hours or days) and the flowrate (gallons per hour or gallons per day).

For example: Spill start time = 11:00

Spill end time = 14:00

Spill duration = 3 hours

3.3 gallons per minute x 3 hours x 60 minutes per hour

= 594 gallons



Estimating Gallons per Minute from Sewer Manhole Overflows



Photos provided by City of San Diego Water Department during a demonstration using water from a hydrant.

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Water Quality Monitoring Program

Introduction

This Water Quality Monitoring Program provides the Ironhouse Sanitary District (District) response activities and standard operating procedures to be utilized in the Overflow Emergency Response Plan (OERP), in the event a sanitary sewer overflow (SSO) exceeds 50,000 gallons. This program is reviewed periodically and may be updated as necessary.

State Water Resources Control Board Order No. WQ 2013-0058-EXEC, Amending Monitoring And Reporting Program For Statewide General Waste Discharge Requirements For Sanitary Sewer Systems (Effective September 9, 2013), requires the following:

SSO WDR Section D. Water Quality Monitoring Requirements

To comply with subsection D.7(v) of the SSS WDRs, the enrollee shall develop and implement an SSO Water Quality Monitoring Program to assess impacts from SSOs to surface waters in which 50,000 gallons or greater are spilled to surface waters. The SSO Water Quality Monitoring Program, shall, at a minimum:

1. Contain protocols for water quality monitoring.
2. Account for spill travel time in the surface water and scenarios where monitoring may not be possible (e.g. safety, access restrictions, etc.).
3. Require water quality analyses for ammonia and bacterial indicators to be performed by an accredited or certified laboratory.
4. Require monitoring instruments and devices used to implement the SSO Water Quality Monitoring Program to be properly maintained and calibrated, including any records to document maintenance and calibration, as necessary, to ensure their continued accuracy.
5. Within 48 hours of the enrollee becoming aware of the SSO, require water quality sampling for, at a minimum, the following constituents:
 - i. Ammonia
 - ii. Appropriate Bacterial indicator(s) per the applicable Basin Plan water quality objective or Regional Board direction which may include total and fecal coliform, enterococcus, and e-coli.

Additionally, for spills greater than 50,000 gallons, an SSO Technical Report is required and must be submitted within 45 calendar days from the SSO end date. The SSO Technical Report requirements are described in Element VI of the OERP.



Safety

Be aware of safety issues and do not subject personnel to unsafe conditions in order to comply with this Water Quality Monitoring Plan. Scenarios where monitoring may not be possible may include, but are not limited to, heavy rain/storm events where access points have been compromised, flooding around low level areas, fast-moving water or wave action. Employ the buddy system as required to maximize employee safety when sample collection is required.

Estimation of Spill Travel Time

The follow methods are recommended to estimate spill travel time and direction:

- Method-1; use a velocity probe if available to determine the rate of flow in the surface water or
- Method-2; take visual ft/sec measurement from above, based on floating debris, to estimate the number of feet the debris has traveled in seconds.

Either method will provide a means to estimate the distance traveled and identify where the SSO may be headed within the waterway.

Water Quality Sampling Procedures

- In the event an SSO reaches a surface water or (flowing) drainage channel tributary, take samples for spills less than 50,000 gallons as appropriate and within 48 hours for spills greater than 50,000 gallons. The purpose of water quality sampling is to determine the nature and extent of the impact of the SSO.
- When sampling an SSO, take a minimum of three separate sample sets as conditions allow. Water quality sampling should not be given precedence over stopping the spill or protection of public health.
- One sample shall be located approximately 100' upstream of the discharge location. The second sample shall be taken at the downstream location. A third sample shall be taken at the discharge location. Actual distances from the discharge location will depend on the nature of the SSO and must consider safety and access.
- Sample for Fecal Coliform and Ammonia as a minimum.
- Additional follow-up samples are recommended to confirm the extent that the impact reverts back to baseline levels. Follow-up samples may be used to determine if posting of warning signs should be discontinued (if signs were posted).
- Collaboration with the County Health Department should continue until closure is obtained.
- Take into account Spill Travel Time.



Water Quality Sampling Equipment

The following list describes equipment that should be stocked and readily available for each water quality sampling event.

- Personnel protective equipment including latex/nitrile gloves and eye protection
- 3 – 120 mL sterile plastic containers for coliform analysis.
- 3 – 500 mL Poly containers preserved with H₂SO₄ for Ammonia analysis.
- 3 – sterile funnels
- 1 – Sample Collection Container
- Cooler with ice packs
- Chain of Custody forms

Ensure that there are adequate quantities of sample containers-kits if there are more than three sample locations.

Water Quality Sampling Equipment

1. Put on all required protective equipment including latex/nitrile gloves and eye protection
2. Use the 120 mL sterile container for coliform, and 120mL poly container for ammonia. Ammonia sample requires preservation with H₂SO₄.
3. Collect three sets of samples for each incident:
 - a. 100 feet upstream
 - b. 100 feet downstream
 - c. At the SSO entry point
4. Collect all grab samples approximately 3' - 6" below the surface (or if shallower, as close as possible to this depth) to avoid sampling debris or scum from the surface.
5. Collect the sample in a safe manner in the middle of the flow, against the direction of water flow.
6. Rinse the sample collection container.
7. Collect sample in sample collection container and photo-document the locations.
8. Transfer sample from sample collection container to individual sample bottle(s).
9. Leave approximately one inch of head space in individual sample bottles. Do not overfill.
10. Once the lid is opened for the individual sample bottle, do not touch the inside surface of the bottle or lid.
11. For the sample bottles that contain a preservative, take care to keep the preservation material in the container.
12. Immediately place all sample bottles on ice.
13. Complete Chain of Custody form and take samples to contracted environmental laboratory as described in the OERP.



Following are allowable hold times for the sample bottles:

- Ammonia - 28 days (preserved and cooled)
- Bacterial Indicator (enterococcus or fecal/total coliform) - 8 hours (preserved and cooled)

ON LETTERHEAD

Date

State Water Resources Control Board
1001 I Street
Sacramento, CA 95814

Subject: Technical Report for Sanitary Sewer Overflow Greater than 50,000 Gallons
Event ID: XXXXXX

This submittal comprises the Sanitary Sewer Overflow (“SSO”) Technical Report (“Report”) that is required by State Water Resources Control Board (“SWRCB”) Order No.WQ 2013-0058-EXEC (“Order”). The Order requires each enrollee to submit an SSO Technical Report in the California Integrated Water Quality System (“CIWQS”) online SSO database within 45 calendar days of the SSO end date for any SSO in which 50,000 gallons or greater are spilled to surface waters.

This Report comprises the following sections:

1. Causes and Circumstances of the SSO
2. Ironhouse Sanitary District (ISD) Response to SSO
3. Water Quality Monitoring

1.0 CAUSES AND CIRCUMSTANCES OF THE SSO

A. Description of how and when the SSO was discovered.

B. Figure 1 shows the SSO failure point, appearance point(s), and final destination(s).

C. Methodology and data used to calculate the volume of the SSO and any SSO volume recovered.

D. Detailed description of the cause(s) of the SSO.

E. Copies of original field crew records used to document the SSO are included at the end of this Report.

F. The Order requests historical maintenance records for the failure location. The associated pipe segment cleaning and CCTV history is provided in Table 1.

Table 1. Maintenance Results for Pipe Segment XXXXX-XXXX

Date	Action: Clean or CCTV	Summary of Findings

2.0 DISTRICT RESPONSE TO SSO

A. The following presents a chronology of all actions taken to terminate the SSO.

B. The actions described in 2A, above, followed the agency's Sewer System Management Plan ("SSMP") Overflow Emergency Response Plan. Specifically, the activities related to initial response, reporting, notifications and posting, and corrective measures were followed. The District completed water quality sampling within 48 hours after the end of the SSO, and submitted these samples for bacteriological and ammonia testing as required by the Order.

C. Final corrective action(s) completed and/or planned to be completed, including a schedule for actions not yet completed are described below.

3.0 WATER QUALITY MONITORING

A. Water quality sampling activities conducted, including analytical results and evaluation of the result, are as follows.

B. Figure 2 shows a location map showing water quality sampling points.

If you have further questions or would like additional information about this Technical Report, please contact me by phone at (925) 809-3001 or by email at davisson@isd.us.com.

Sincerely,

Chad Davisson,
General Manager

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SSO BACKUP RESPONSE

First Responder:

1. Arrive on scene and determine if ISD is responsible for the SSO/Backup.
2. If ISD is not responsible inform the customer about their options and give them Page 3 (Customer Recommendations).
3. Call Lead person on duty. Lead will call a response crew.
4. If ISD is responsible for the SSO Backup take photographs of the spill inside and outside of the building/s. Photos inside should show water in affected area and unaffected area, to reduce the possibility of a fraudulent claim, the more photos the better of unaffected areas, with close-ups.
5. Determine cause and estimate the amount.
6. Post "warning raw sewage" signs outside in immediate area.
7. Maintain Historical Documentation of the response, record all your actions with times on the back of this sheet.
8. Photograph all SSO response activities.

Lead and Response Crew:

1. Call Jetter and Vac-Con crews.
2. Jetter crew clear the blockage, (if SSO has reached a storm drain do not divert or contain), wash down the area if needed and disinfect.
3. Vac-Con crew begin setup to vacuum the spill.
4. Call the Supervisor.
5. Ensure Cal OES and Regional Water Quality Board have been notified within **two hours**.

Supervisor:

1. Determine if other equipment or staff is needed---bypass pump---generators---backhoe---etc.
2. Determine if any follow on response/activities are needed.
3. Call the Maintenance Superintendent.
4. Give the residents the option of having a cleaning crew come in or have them sign the declination Form # 1. Give the residents the option of staying in a Motel or have them sign the declination Form # 2. If staying in a Motel use Form # 3. **Supervisor/Superintendent will explain Form # 4 and go with the residents to the Motel to pay for the first night lodging.**
5. Within **four hours** call Mauri McGuire at Office: 805 650 7020 ext. 1003 Cell: 805 509 1426 if residents are requesting restoration services and/or Hotel accommodations
6. Record GPS coordinates of spill location, talk to reporting person/s and others to determine the approximate spill start time. Complete the SSO Report page.

Maintenance Superintendent:

1. Call the General Manager.
2. Ensure the residents have all their options explained and either they have declined services or the cleaning crew is on the way and they are going to stay in one of the three pre-approved Motels (Form# 4). Ensure Supervisor or Superintendent goes with the residents to the Motel to pay the first night lodging.
3. Ensure Carl Warren and Co. have been contacted and are handling the residents after the first night in the Motel, and the restoration services to the building. Email information to mmcguire@carlwarren.com Carl Warren and Co. 707 732 6728. Carl Warren Company is CSRMA's claims administrator, they will handle restoration of damage and other claims.
4. FAX the Regional Water Board and the CCC Health Dept.
5. If Category 1 or 2 enter data into the CWIQS online SSO Database within **Three Days and Certify within Fifteen Days**.
6. If Category 3 submit certified report into the CWIQS online SSO Database within **30 calendar days** of the end of the month in which the SSO occurred.
7. If Category 1 SSO in which 50,000 gallons or greater are spilled to surface waters conduct water quality sampling according to the sampling protocol of the Water Recycling Facility Staff and the SSMP SSO Water Quality Monitoring Program **within 48 hours**. Call the Operations Superintendent for the WRF crew to do the sampling. Samples of the following constituents will be taken: Ammonia, and appropriate Bacterial indicators per the Basin Plan water quality objective or Regional Board direction which may include total and fecal coliform, enterococcus, and e-coli.
8. If Category 1 SSO in which 50,000 gallons or greater are spilled to surface waters submit within **45 calendar days after the end date**, a Technical Report.

General Manager:

1. Inform the Board of Directors of the Backup.

CUSTOMER RECOMMENDATIONS

To clean up the spill:

- Call a plumbing contractor to determine the cause of the spill.
- Keep pets and children out of the affected area.
- Wear rubber boots, rubber gloves, and goggles or safety glasses during cleanup of the affected area.
- Remove and discard items that cannot be washed and disinfected (such as: mattresses, rugs, cosmetics, baby toys, etc.).
- Remove and discard drywall and insulation that has been contaminated with sewage or flood waters.
- Thoroughly clean all hard surfaces (such as flooring, concrete, molding, wood and metal furniture, countertops, appliances, sinks and other plumbing fixtures) with hot water and laundry or dish detergent.
- To help with the drying process use room temperature fans, air conditioning units, and dehumidifiers only, **do not use hot air**.
- After completing cleanup, wash your hands with soap and tap water for a minimum of three minutes. OR use water that has been disinfected (solution of 1/8 to 1/4 teaspoon of household bleach per 1 gallon of water). Let it stand for 30 min.
- Wash all clothes worn during the cleanup in hot water and detergent (wash separately from uncontaminated clothes).
- Wash clothes contaminated with flood or sewage water in hot water and detergent. Use a Laundromat for washing large quantities of clothes and linens until your onsite wastewater system has been professionally inspected and/or repaired.
- Seek immediate medical attention if you become injured or ill.

IRONHOUSE SANITARY DISTRICT

SSO RESPONSE

First Responder:

1. Arrive on scene and determine if ISD is responsible for the SSO, if ISD is not responsible inform the customer about their options and give them page 3.
2. If it is an SSO take a photograph of the spill.
3. Call Lead person on duty. Lead person will call a response crew.
4. Determine cause of the SSO.
5. If spill is due to ISD's forcemain go to pump station causing SSO and up-stream pump stations and turn HOA's off.
6. If SSO is from a manhole, determine which manhole is downstream of blockage for the response crew to position Jetter truck.
7. Begin Diversion and Containment if practical, if flow has reached a storm drain do not sandbag street.
8. If sewage entered the storm drain determine where the Vac-Con should be positioned from the storm drain map.
9. Post "warning raw sewage" signs in immediate areas and estimate the amount of the spill.
10. Maintain Historical Documentation of the response, write down all your actions with times on the back of this sheet.
11. Photograph all SSO response activities.

Lead and Response Crew:

1. Call Jetter and Vac-Con crews.
2. Jetter Crew clear the blockage, wash down the area if needed and disinfect the affected area.
3. Vac-Con Crew setup and vacuum the spill.
4. Call the Supervisor.
5. Ensure Cal OES and Regional Water Quality Board have been notified within **two hours**.

Supervisor:

1. Determine if other equipment or staff is needed---bypass pump---generators---backhoe---etc.
2. Determine if any follow-up response/activities are needed.
3. Call the Maintenance Superintendent and explain the situation.
4. Record GPS coordinates of spill location, talk to reporting person/s and others to determine the approximate SSO start time. Complete the SSO Report Page information.

Maintenance Superintendent:

1. Call the General Manager and explain the situation.
2. FAX the Regional Water Board and the CCC Health Dept.
3. Supervisor or Superintendent enter data into the CWIQS online SSO Database if;

Category 1 or 2 within **Three Days** and Certify within **Fifteen Days**,

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

4. If a **Category 1 SSO in which 50,000** gallons or greater are spilled to surface waters conduct water quality sampling according to the sampling protocol of the Water Recycling Facility Staff and the SSMP SSO Water Quality Monitoring Program **within 48 hours**. Call the Operations Superintendent for the WRF crew to do the sampling. Samples of the following constituents will be taken: Ammonia, and appropriate Bacterial indicators per the Basin Plan water quality objective or Regional Board direction which may include total and fecal coliform, enterococcus, and e-coli.
5. If Category 1 SSO in which 50,000 gallons or greater are spilled to surface waters submit within **45 calendar days after the end date**, a Technical Report.

General Manager:

1. Inform the Board of Directors of the SSO.

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Ironhouse Sanitary District Sanitary SSO Report Page

This Report is (check one) ☐ Draft ☐ Revised ☐ Final Drawing of SSO Area on back with dimensions

Spill Physical Location Details:

Latitude: _____ degrees _____ minutes _____ seconds or _____ decimal degrees

Longitude: _____ degrees _____ minutes _____ seconds or _____ decimal degrees

Street number and name _____

Nearest cross street _____

City ☐ Oakley, 94561 ☐ Bethel Island, 94511 Contra Costa County

Spill location description _____

Spill appearance point ☐ Manhole ☐ Gravity Sewer ☐ Force Main ☐ Pump Station ☐ Building ☐ Other

If other specify _____

Did the spill reach surface waters ☐ Yes ☐ No Name of waters _____

Did the spill reach a ditch/drainage channel or storm drain ☐ Yes ☐ No

Was the spill fully recovered and returned to the sanitary sewer system ☐ Yes ☐ No

SSO from a private sewer lateral ☐ Yes--then name & phone _____

Final spill destination ☐ Street/curb & gutter ☐ Storm Drain ☐ Other paved surface ☐ Surface Water

☐ Building ☐ Unpaved Surface ☐ Beach ☐ Other-specify _____

Estimated spill volume _____ gallons

Estimated volume recovered _____ gallons

Estimated volume reaching surface waters not recovered _____ gallons

Method of calculation _____

Photos taken ☐ Yes—how many _____

Timeline: All Times are in 24 Hour Format

Estimated spill start date _____ time _____

SSO reported by _____ Phone _____

Reported to ISD date _____ time _____

Response crew arrival date _____ time _____

Spill ended date _____ time _____

Cause of spill ☐ Grease ☐ Debris/Blockage ☐ Roots ☐ Pipe Problem/Failure ☐ Pump station failure

☐ Vandalism ☐ Power failure ☐ Construction debris ☐ Other—specify _____

Diameter of pipe at point of blockage or spill _____ Pipe material _____

Spill Response:

Activities ☐ Restored flow ☐ Returned all spill to sanitary sewer ☐ Cleaned up ☐ Disinfected site

☐ Other—specify _____

Spill response completed date _____ time _____

Health warnings posted ☐ Yes Details _____

Samples of impacted waters ☐ Yes Analyses: ☐ DO ☐ Ammonia ☐ Bacti ☐ Other _____

Who collected samples and protocol _____

Notification Details:

CAL OES contacted date _____ time _____

Spoke to _____ Control Number _____

Regional Water Quality Board contacted date _____ time _____

Spoke to _____

CCC Environmental Health contacted date _____ time _____

Spoke to _____

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Appendix G
Element 7 (FOG Control Program) Supporting Documents

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ORDINANCE NO. 38

ORDER NO. 09-24

Whereas, the Board finds and determines that it is in the interest of Ironhouse Sanitary District (District) to adopt an Ordinance and Order establishing, prescribing and providing for the prevention of sanitary sewer blockages and obstructions from contributions and accumulations of fats, oils and greases into the sanitary sewer system from food preparation and serving establishments.

Whereas, the Board finds and determines there is no possibility that this Ordinance may have a significant adverse effect on the environment, and it is therefore exempt from CEQA pursuant to Section 15061(b)(3) of the State CEQA Guidelines.

Now, therefore, the Board of Directors of the District does ordain and order as follows:

Section 1. -- Establishment of a Fats, Oils, and Greases Control Ordinance.

This Ordinance is adopted to curb sanitary sewer overflows (SSOs) caused by the accumulation of fats, oils and greases in the District's sanitary sewer mains. A Food Service Establishment, as defined in Section 2, which is connected to the District's sanitary sewer and treatment system shall be subject to this Ordinance.

Section 2. – Definitions

2.1 Terms and Definitions. The following terms when used in this Ordinance shall have the following respective meanings:

- (a) "District Engineer" shall mean the District Engineer of Ironhouse Sanitary District, or her or his designee.
- (b) "District Inspector" shall mean the person appointed by the District Engineer to perform various inspection, enforcement and related duties under this Ordinance, or her or his designee.
- (c) "Effective Date" shall mean July 1, 2009, the date set forth in Section 10, below.

(d) “Fats, Oils, and Greases (FOG)” shall mean organic polar compounds derived from animal and/ or plant sources that contain multiple carbon chain triglyceride molecules. These substances are detectable and measurable using analytical test procedures established in the United States Code of Federal Regulations 40 CFR 136, as may be amended from time to time. All are sometimes referred to herein as “grease” or “greases”.

(e) “Food Service Establishment” shall mean an establishment engaged in activities of preparing, serving, or otherwise making a food related product available for consumption by the public, such as, but not limited to, a restaurant, fast-food outlet, commercial kitchen, caterer, hotel, school, hospital, prison, correctional facility, and care institution. These establishments use one or more of the following preparation activities: cooking by frying (all methods), baking (all methods), grilling, sautéing, rotisserie cooking, broiling (all methods), boiling, blanching, roasting, toasting, or poaching. Also included are infrared heating, searing, barbecuing, and any other food preparation activity that produces a hot, non-drinkable food product in or on a receptacle that requires washing.

(f) “Grease Discharge Permit” shall mean a permit issued by the District Engineer certifying that a Food Service Establishment has installed a Grease Removal Device of a size and design approved by the District Engineer.

(g) “Grease Interceptor” shall mean a structure or device designed for the purpose of removing and preventing fats, oils, and greases from entering the sanitary sewer collection system. This device is often below-ground in an outside area and is built as a two or three chamber baffled tank.

(h) “Grease Removal Device” shall mean a Grease Trap, a Grease Interceptor, or both.

(i) “Grease Trap” shall mean a type I hydromechanical grease interceptor device for separating and retaining waterborne greases and grease complexes prior to the wastewater exiting the trap and entering the sanitary sewer collection and treatment system. Such traps are typically compact under-the-sink units that are near food preparation areas.

(j) “Minimum Design Capability” shall mean the design features of a Grease Removal Device and its ability or volume required to effectively intercept and retain greases from grease-laden wastewaters discharged to the public sanitary sewer.

(k) “User” shall mean any person, including those located outside the jurisdictional limits of Ironhouse Sanitary District (District) who contributes, causes or permits the contribution or discharge of wastewater into sewers within the District’s boundaries, including persons who contribute such wastewater from mobile sources, such as those who discharge hauled wastewater.

Section 3 – Grease Discharge Permit Required for Food Service Establishments

3.1 Grease Discharge Permit Required. In accordance with Sections 3.2 and 3.3, respectively, New and Existing Food Service Establishments shall apply for and obtain from the District Engineer a Grease Discharge Permit certifying that the Food Service Establishment has installed a Grease Removal Device of a size and design approved by the District Engineer. The requirements of this section are in addition to any applicable requirements of the Uniform Plumbing Code and the District’s standard plans and specifications.

3.2 New Food Service Establishment. A Food Service Establishment which is constructed on or after the Effective Date of this Ordinance shall be classified for the purpose of this Ordinance as a New Food Service Establishment and shall install, operate and maintain a Grease Removal Device according to the requirements contained in this Ordinance. An Existing Food Service Establishment which will be expanded or renovated under a City or a County building permit, as applicable, that does not have a Grease Removal Device installed or the installed Grease Removal is determined to be inadequate by the District Engineer shall be deemed in its entirety to be a New Food Service Establishment and shall obtain a Grease Discharge Permit and shall install, operate and maintain a Grease Removal Device according to the requirements contained in this Ordinance. A Grease Removal Device shall be installed prior to the issuance of a certificate of occupancy for the New Food Service Establishment or for the expanded or renovated Existing Food Service Establishment. Grease Traps shall be prohibited for New Food Service Establishments, except for those establishments where inadequate space is available for the installation of a Grease Interceptor. The District Engineer must

approve the installation of a Grease Trap instead of a Grease Interceptor at a New Food Service Establishment.

3.3 Existing Food Service Establishment. A Food Service Establishment in existence as of the Effective Date of this Ordinance shall be classified for the purpose of this Ordinance as an Existing Food Service Establishment and shall be permitted to operate and maintain existing Grease Removal Devices, provided they are in efficient operating condition as determined by the District Engineer. On or after the Effective Date of this Ordinance and when the District Engineer determines the existence of any one or more of the conditions listed below, the District Engineer may require an Existing Food Service Establishment to either: (i) install, operate and maintain a new Grease Removal Device that complies with the requirements of this Ordinance, (ii) modify or repair any noncompliant Grease Removal Device or (iii) both. The Existing Food Service Establishment shall complete (i), (ii) or both to the satisfaction of the District Engineer within ninety days of delivery of written notification to the Existing Food Service Establishment that one or more of the conditions listed below applies and deliver an application for a Grease Discharge Permit.

(a) The Existing Food Service Establishment is found to be contributing oils and grease in quantities sufficient to cause line stoppages or necessitate increased maintenance on the wastewater collection system.

(b) The Existing Food Service Establishment does not have a Grease Removal Device.

(c) The Existing Food Service Establishment has an undersized, irreparable or defective Grease Removal Device.

(d) Remodeling of the food preparation or kitchen waste plumbing system of the Existing Food Service Establishment is performed which requires a permit to be issued by the City or the County, as applicable.

(e) The Existing Food Service Establishment is sold or undergoes a change of ownership.

(f) The Existing Food Service Establishment does not have plumbing connections to a Grease Removal Device which is in compliance with the requirements of this Ordinance.

(g) The Existing Food Service Establishment fails to submit a completed application form for a Grease Discharge Permit within sixty days after the date of the receipt of an application form by the District.

(h) The Existing Food Service Establishment has not been operated as a Food Service Establishment for twelve consecutive months.

Section 4 – Grease Removal Device Standards and Design Specifications.

4.1 Each Grease Removal Device shall be installed and connected so that it shall be at all times easily accessible for inspection, cleaning and removal of grease.

4.2 The Grease Removal Device shall be situated on the premises of the Food Service Establishment, except when such a location would be impractical or cause undue hardship on the Food Service Establishment, as determined by the District Engineer. In this circumstance and upon application by the Food Service Establishment, the City or the County, as applicable, may issue an encroachment permit to allow the Grease Removal Device to be installed in the public street or sidewalk area, provided it is located so that it will not be obstructed and will not at any time pose a hazard or obstruction to the public's use of the street or sidewalk area. The Food Service Establishment shall be solely responsible for obtaining all permits required by entities or agencies other than the District and shall bear all costs associated with installing the Grease Removal Device.

4.3 Waste discharge from fixtures and equipment in a Food Service Establishment which may contain grease or other objectionable materials including, but not limited to, scullery sinks, pot and pan sinks, food waste disposals, soup kettles, and floor drains located in areas where such objectionable materials may exist, may be drained into the sanitary waste through the Grease Removal Device when approved by the District Engineer provided:

(a) Toilets, urinals, wash basins and other fixtures containing fecal material shall not flow through the Grease Removal Device; and

(b) Grease Removal Devices shall be located upstream of any dishwashers or discharges exceeding one hundred ten degrees Fahrenheit.

4.4 Grease Removal Devices shall be maintained in efficient operating condition by periodic removal of the accumulated grease. The use of chemicals to dissolve grease is specifically prohibited. No accumulated grease shall be introduced into any drainage piping or public or private sewer. Users with Grease Removal Devices shall maintain them in good operating condition at all times.

4.5 Grease Removal Devices shall conform to the standards in the Uniform Plumbing Code (UPC), Chapter 10. Grease Removal Devices shall be installed in strict accordance with the manufacturer's instructions and shall be equipped with a cover that can be opened for inspection and sampling and a mechanism for a secure closing.

4.6 A Grease Removal Device shall conform to the following additional standards and design specifications:

(a) A Grease Removal Device shall have a minimum of two compartments and shall be capable of separation and retention of grease and storage of settled solids. Design shall conform with the most current requirements as published by the Uniform Plumbing Code and any District standard plans and specifications.

(b) A Grease Interceptor must have a manhole over each compartment or be designed in such a way for monitoring purposes.

(c) A Grease Removal Device cover shall have a gas-tight fit.

(d) A Grease Interceptor shall be designed, constructed and installed for adequate load-bearing capacity.

(e) A Grease Interceptor shall be installed in a location outside of the building which provides easy access at all times for inspections, cleaning and proper maintenance, including pumping.

4.7 Grease Removal Device Capacity. Grease Interceptor capacity calculations shall be performed by each Food Service Establishment.

(a) The correct Grease Removal Device will be based on size and type of operation according to the formula contained in Table 1003.4.1 and Table 1003.5.1 of the California Uniform Plumbing Code and the sizing

methods contained in the most current published Plumbing and Drainage Institute (PDI), where applicable.

(b) Minimum capacity of any one unit shall be as follows:

(i) A Grease Interceptor shall be seven hundred fifty gallons as required by the Uniform Plumbing Code and maximum capacity shall be one thousand five hundred gallons.

(ii) A Grease Trap shall be a minimum of forty pounds in size or as required by the Uniform Plumbing Code. Any deviation from this requirement shall be approved by the District Engineer.

(iii) Where sufficient capacity cannot be achieved with a single unit, installation of Grease Traps in series shall be required.

(iv) Grease Removal Device capacity calculations shall be approved by the District Engineer prior to the installation of the device.

4.8 Flow-through Rates and Control Devices.

(a) Flow-through Rates. Flow-through rates for Grease Removal Devices shall be calculated in accordance with the procedures in the Uniform Plumbing Code's most current edition.

(b) Flow-through Control Devices. Grease Removal Devices shall be equipped with a device to control the rate of flow through the unit. The rate of flow shall not exceed the manufacturer's rated capacity recommended in gallons per minute for the unit.

(c) Venting. The flow-control device for the Grease Removal Device shall be vented in accordance with the Uniform Plumbing Code's most current edition, when required. The vent shall terminate not less than six inches above the flood-rim level or in accordance with the manufacturer's instructions.

Section 5 - Grease Trap Inspection, Cleaning and Maintenance..

5.1 Grease Trap Inspection, Cleaning and Maintenance. Each Food Service Establishment shall be solely responsible for the cost of Grease Trap installation,

inspection, cleaning and maintenance. Each Food Service Establishment may contract with a licensed grease hauler for cleaning services or it may develop a written protocol and perform its own grease trap cleaning and maintenance procedures. Cleaning and maintenance must be performed when the total volume of captured grease and solid material displaces more than twenty-five percent of the total volume of the unit. Each Food Service Establishment shall determine the frequency at which their Grease Trap shall be cleaned, but all Grease Traps shall be opened, inspected, cleaned and maintained at a minimum of once per week.

5.2 Inspection. Grease Traps shall be inspected by the District Engineer as necessary to assure compliance and to assure proper cleaning and maintenance schedules are being adhered to.

5.3 Repairs. The Food Service Establishment shall be responsible for the cost and scheduling of all repairs to its Grease Trap(s). Repairs required by the District Engineer shall be completed within thirty calendar days after the date of written notice of required repairs is received by the Food Service Establishment, unless the District Engineer approves a different schedule in writing.

5.4 Disposal. Grease and solid materials removed from a Grease Trap shall be disposed of in the solid waste disposal system.

5.5 Recordkeeping. The Food Service Establishment shall maintain complete and legible records of the date and time of all cleaning and maintenance of each Grease Trap in a bound logbook and shall make this book available for inspection by the District Engineer on demand. Records shall be retained for a period of not less than three years. The Food Service Establishment shall also maintain the written protocol concerning Grease Trap cleaning and maintenance procedures and shall make this available to the District Engineer on demand.

Section 6 - Grease Interceptor inspection, maintenance, cleaning.

6.1 Grease Interceptors Inspection, Pumping and Maintenance. Each Food Service Establishment shall be responsible for the costs of installing, inspecting, pumping, cleaning and maintaining its Grease Interceptor. All Food Service Establishments that have Grease Interceptors shall utilize a licensed grease hauler. Pumping services shall include the initial complete removal of all contents, including floating materials, wastewater and bottom sludge and solids from the Grease Interceptor. Grease Interceptor cleaning shall include scraping

excessive solids from the walls, floors, baffles and all pipe work. It shall be the responsibility of each Food Service Establishment to inspect its Grease Interceptor during the pumping procedure to ensure that the Grease Interceptor is properly cleaned out and that all fittings and fixtures inside the Grease Interceptor are in working condition and functioning properly.

6.2 Grease Interceptor Pumping Frequency. Each Food Service Establishment shall have its Grease Interceptor(s) pumped at a minimum frequency of once every three calendar months. In addition to required quarterly pumping, each Food Service Establishment shall determine an additional frequency at which its Grease Interceptor(s) shall be pumped according to the following criteria:

- (a) When the floatable grease layer exceeds six inches in depth as measured by an approved dipping method;
- (b) When the settleable solids layer exceeds eight inches in depth as measured by an approved dipping method;
- (c) When the total volume of captured grease and solid material displaces more than twenty-five percent of the capacity of the interceptor as calculated using an approved dipping method;
- (d) When the interceptor is not retaining/capturing oils and greases; or the removal efficiency of the device, as determined through sampling and analysis, is less than eighty percent.

6.3 Variance Procedure. If a Food Service Establishment determines that monthly pumping of their Grease Interceptor is unnecessary in order to remain in compliance with the criteria in subsection 6.2(d), the Food Service Establishment may make written application for a variance from the monthly pumping requirements to the District Engineer. The variance procedure shall be as follows:

- (a) The Food Service Establishment shall submit an application for a variance on a form provided by the District Engineer along with the appropriate application fee. The application shall include the next date and time the Food Service Establishment intends to have its interceptor pumped and cleaned.
- (b) If the Grease Interceptor is in good working condition during the initial inspection, the District Inspector shall reinspect the Grease

Interceptor approximately one month after the initial inspection. If there is less than four inches of surface grease and less than six inches of bottom solids at the time of reinspection, the Grease Interceptor will not need to be pumped out at that time.

(c) After the initial reinspection, the District Inspector shall inspect the Grease Interceptor at regular intervals to determine the grease and solids level using a dipping method approved by the District Engineer.

(d) At the re-inspection, when either the level of grease reaches six inches or the level of solids reaches eight inches, the District Inspector shall use the number of days from the initial pumping date to the final re-inspection date as the new pumping frequency requirement to be included in the variance granted.

(e) If, at a re-inspection, the level of grease exceeds six inches or the level of solids exceeds eight inches, the District Inspector shall use the number of days from the initial pumping date to the previous re-inspection date as the new pumping frequency requirement to be included in the variance granted.

(f) In any event, pump-out and cleaning of a Grease Interceptor shall be required at least once every ninety days.

(g) Any excessive staff time and/or excessive analytical sampling and analysis cost shall be paid by the Food Service Establishment to the vender or service provider.

6.4 Inspection. Grease Interceptors shall be inspected by the District Inspector as necessary to assure compliance and to determine if proper cleaning and maintenance schedules are being adhered to.

6.5 Repairs. Each Food Service Establishment shall be responsible for the cost and scheduling of all repairs to its Grease Interceptor(s). Repairs required by the District Inspector shall be corrected within thirty calendar days after the date of written notice of requiring the repairs is received by the Food Service Establishment, unless the District Inspector establishes a different compliance date.

6.6 Disposal of wastes removed from each Grease Interceptor shall be disposed of at a facility permitted to receive such wastes. Neither grease nor solid

materials removed from Grease Interceptors shall be returned to any Grease Interceptor, private sewer line or to any portion of the wastewater collection system.

Section 7. Recordkeeping.

Each Food Service Establishment shall maintain a bound logbook in which a record of all Grease Removal Device maintenance is entered, including the date and time of the pumping activities, details of any repairs required and dates of repair completion and any other records pertaining to the Grease Removal Device. This logbook shall be made available for review upon request by the District Inspector. Each Food Service Establishment shall also maintain a file on-site which contains the following information:

- (a) The (as-built) drawings of the plumbing system;
- (b) A copy of the current Grease Discharge Permit;
- (c) Hauler information, receipts, and disposal information;
- (d) The file shall be available at all times for inspection and review by the District Inspector.

Section 8. Abandoned Grease Removal Devices.

Abandoned Grease Removal Devices shall be emptied and filled as required for abandoned septic tanks.

Section 9. Notices, Reports, Forms and Instructions

Publication by the District Engineer of notices, reports, forms and instructions required by the implementation of this Ordinance are ministerial acts that do not require the amendment of this Ordinance.

Section 10. Effective Date.

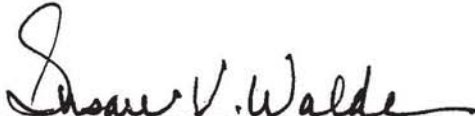
This Ordinance shall be effective on July 1, 2009. This order also designates the District Secretary to prepare and publish a 1/4 page display advertisement in accordance with California Health and Safety Code Section 6490.

I hereby certify that the foregoing is a full, true and correct copy of an ordinance and order duly passed and adopted by the Sanitary Board of the Ironhouse Sanitary District at a meeting thereof held on the 2nd day of June, 2009.

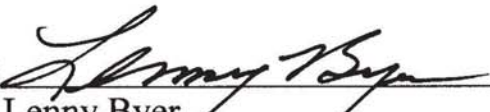
AYES, and in favor thereof, Members: L. Byer, D. Hardcastle, C. Lauritzen, D. Lew and M. Painter.

NOES, Members: None

ABSENT, Members: None



Susan V. Walde
Secretary to the Board
(SEAL)

APPROVED: 

Lenny Byer
President of the Board

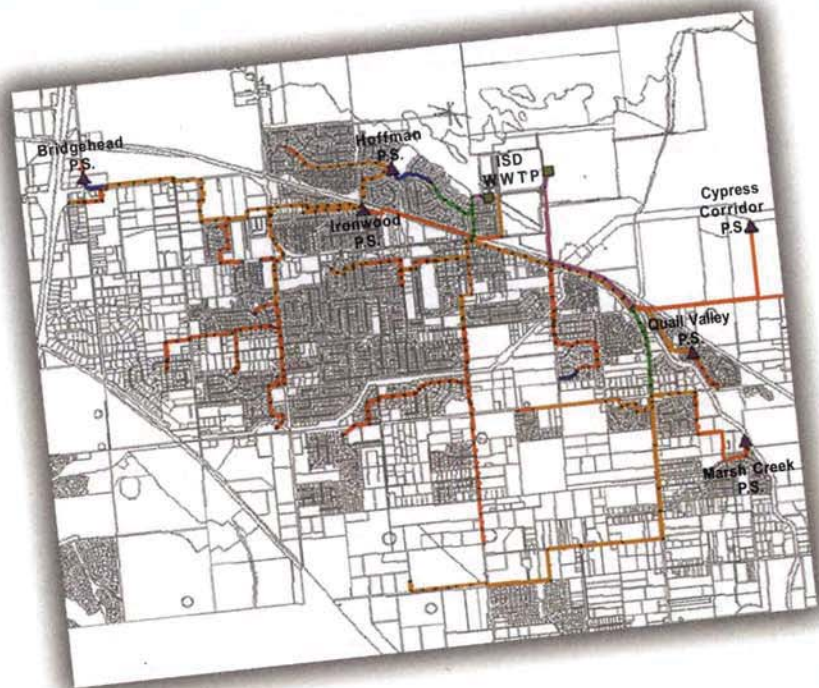


Appendix H
Element 8 (System Evaluation and Capacity Assurance) Supporting Documents

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Ironhouse Sanitary District



Sewer Master Plan

January 30, 2004
(Updated February 2007)

EXECUTIVE SUMMARY

The purpose of this Sewer Master Plan is to evaluate the capacity needs of the Ironhouse Sanitary District (ISD) sewer collection system and provide guidance for capital improvement projects. This Master Plan defines the sanitary sewer collection system improvements that are necessary to accommodate future development in ISD's service area at ultimate, build-out conditions.

The objectives of this project are to:

1. Identify collection system capacity problems that consider existing and long term conditions,
2. Develop a sewer collection system computer model, using H2OMAP Sewer Version 3.5, for the capacity assessment and future use by ISD.
3. Provide ISD with a recommended Capital Improvement Program (CIP)

The ISD collection system includes approximately 85 miles of gravity pipeline, 20 miles of pressure pipelines, and 27 pumping stations. The modeled trunk line system, as it exists in July 2003, is shown in Figure ES-1.

Land use in the ISD service area consists primarily of residential and commercial use. The current average dry weather wastewater flow for the ISD service area is 2.15 mgd. Projected average and wet weather flows to the plant are 8.63 and 10.7 mgd, respectively.

Data and information on the ISD collection system, land use, and wastewater flows were incorporated into a sewer system computer model (H2OMAP Sewer Version 3.5) to facilitate sewer system analysis. Existing and future scenarios were evaluated and capacity deficiencies were identified.

Capital Improvement Program

Current problem areas within the system are limited to the large diameter pipes leading to the WWTP, which experience various levels of surcharging during peak flow periods (typically between 7 and 9 p.m.), and several sections of low-sloped pipes on Ruby Street, Second Street and near the discharge of the Laurel Heights Pumping Station. Future problems associated with increased wastewater flows in these pipes are addressed in the proposed Capital Improvement Program.

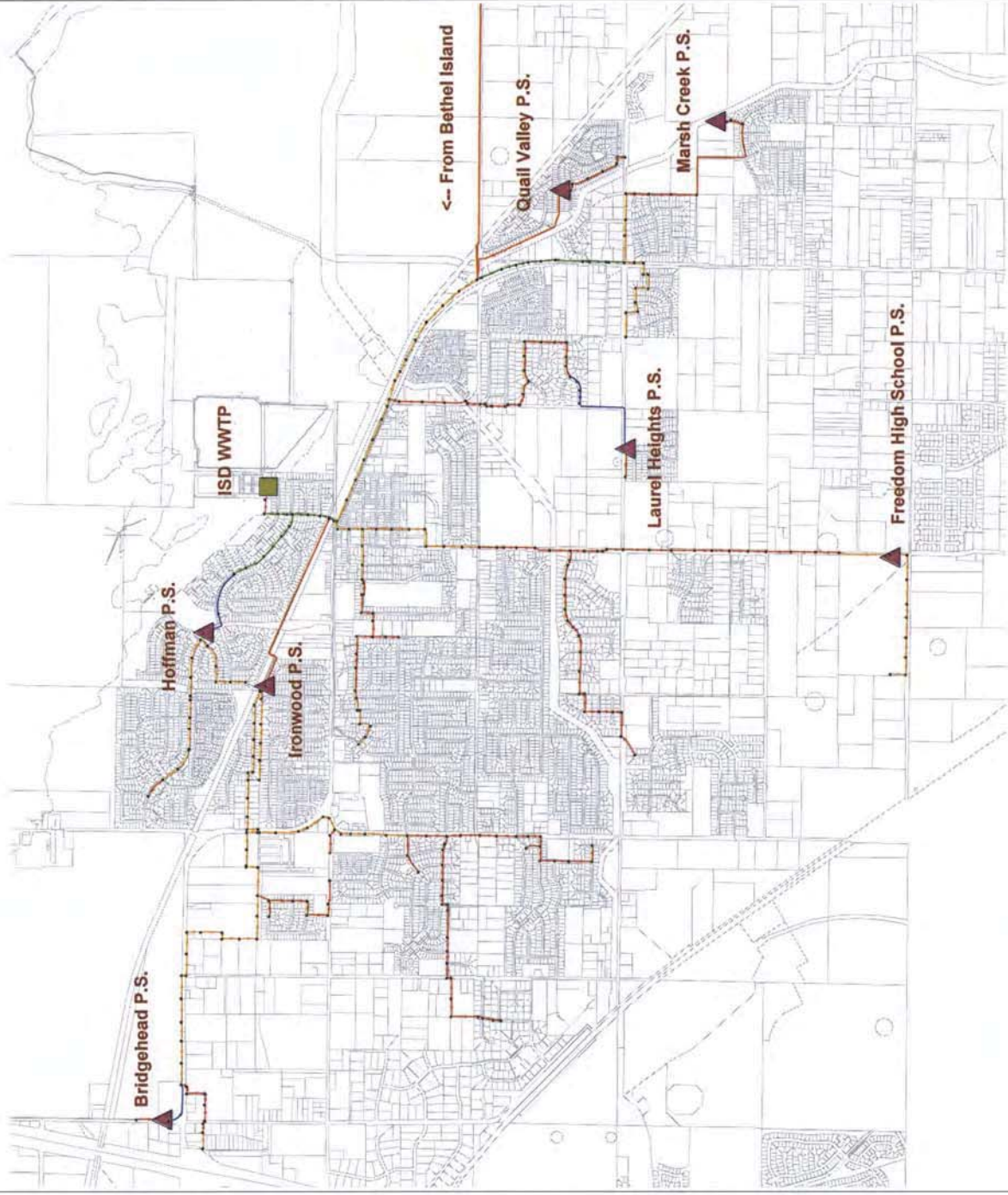
Capital improvements were developed based on the need to correct capacity deficiencies and to provide trunk line sewer service to future development within the ISD service area. The proposed Capital Improvement Program (CIP) project locations are shown in Figure ES-2 and presented in Table ES-1.

The time frames for implementation of the capital improvements are based on location and rate of growth within the ISD service area.

Figure ES-1 Existing System Modeled

Links (Diameter)

- 4" to 6"
- 8" to 14"
- 15" to 20"
- 21" to 28"
- Over 30"



**Figure ES-2 Recommended Capital Improvement Program
Project Locations (shown in orange)**

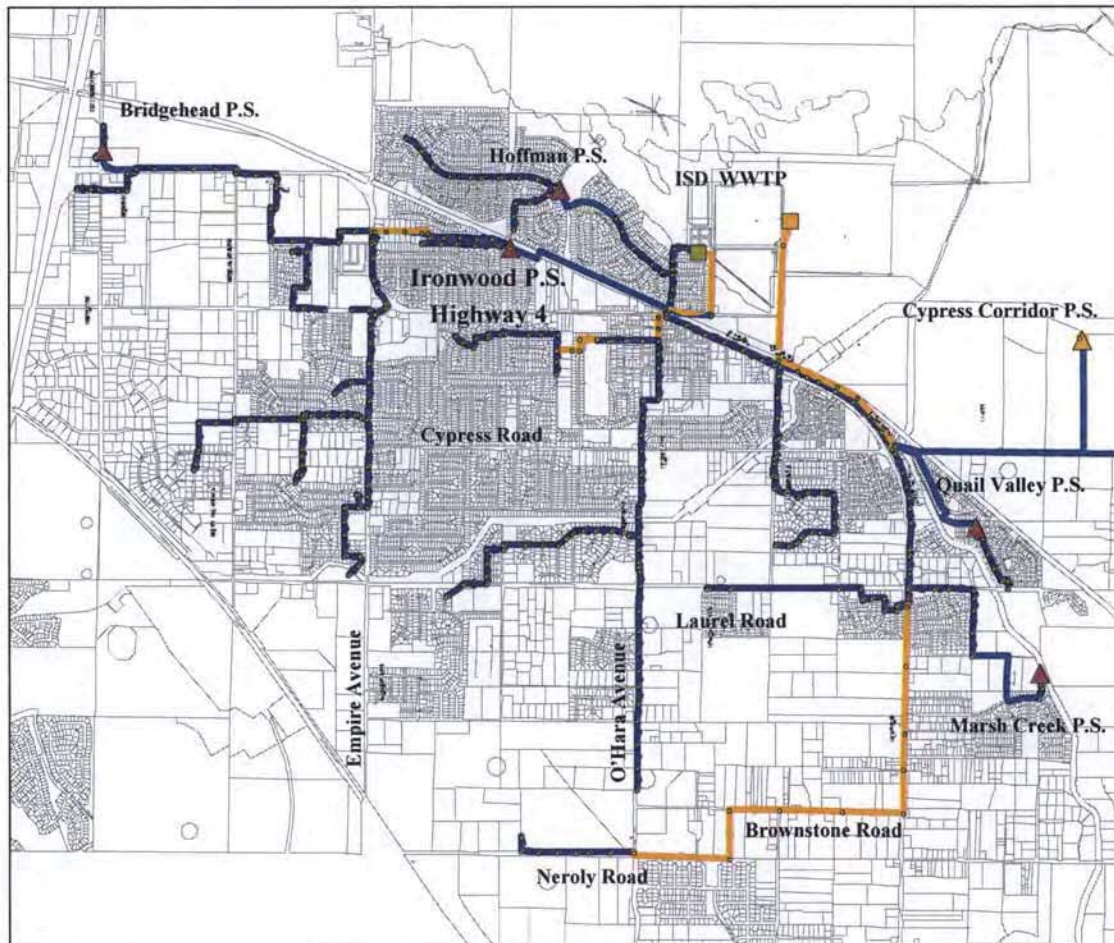


Table ES-1 Capital Improvement Program

Project Name	Total Estimated Project Costs
Neroly Road / Brownstone Road / Highway 4	\$3,118,000
Off-Island Regional Pumping Station	\$1,373,000
Cypress Corridor Pumping Station	\$1,137,000
Ruby Street / Duarte Avenue	\$304,000
Ironwood Forcemain Extension and Gravity Sewer	\$813,000
Carol Lane Relief Sewer	\$409,000
Second Street	\$257,000
Highway 4	\$5,089,000 (add \$1,134,000 for interim connection)
Ironwood, Quail Valley and Marsh Creek Pump Station Upgrades	\$378,000
WEB-14 Pump Station Upgrade	\$2,000,000
14-inch Forcemain	\$3,000,000
Total Capital Improvement Program Costs	\$17,878,000 (\$19,012,000 with interim connection)

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Appendix I
Element 9 (Monitoring, Measurement & Modifications
Placeholder for Future Supporting Documents

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Appendix J
Element 10 (SSMP Program Audits) Supporting Documents

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Ironhouse Sanitary District

SSMP Audit Report Form

Audit Period	<i>From:</i> January 1, 2014 <i>To:</i> December 31, 2015
Date of Audit	
Prepared By	

Introduction		Yes	No
Is the current system description complete and up to date? Are all infrastructure statistics current and complete?			X
Discussion: There is no introduction or system description in the current SSMP. Needs to be addressed in revision.			
Chapter 1 – Goal		Yes	No
A	Are the goals stated in the SSMP still appropriate and accurate?	X	
Discussion: Goals are clearly stated in Chapter 1.			

Chapter 2 -- Organization		Yes	No
A	Is the Contact Information current?	X	
B	Is the Sanitary Sewer Overflow Responder List current?		X
C	Is the Organization Chart in Figure 2-1 of the SSMP current?		X
D	Are the position descriptions an accurate portrayal of staff responsibilities?	X	
E	Is the chain of communication for reporting and responding to SSOs accurate and up-to-date?		X

Chapter 2 -- Organization	Yes	No
Discussion: Contact list (Table 1) needs to be updated. Currently Figure 2-1 is in the SSMP as Appendix-B. Appendix-B needs to be updated. Appendix C (Responder list) needs to be updated		

Chapter 3 – Legal Authority		Yes	No
Does the SSMP contain current references to the CCSD Ordinance documenting the District’s legal authority to:			
A	Prevent illicit discharges?	X	
B	Require proper design and construction of sewers and connections?	X	
C	Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by CCSD?	X	
D	Limit discharges of fats, oil and grease?	X	
E	Enforce any violation of its sewer ordinances?	X	
F	Were any changes or modifications made in the past year or since the last SSMP audit to District’s Ordinances, Regulations, or standards?	X	
Discussion: All Ordinances and relevant Sections are referenced in Chapter 3. SSMP was revised 10/09/2015.			

Chapter 4 – Operations and Maintenance Program		Yes	No
Collection System Maps			
A	Does the SSMP reference the current process and procedures for maintaining the CCSD sanitary sewer system maps?	X	
B	Are the wastewater collection system maps complete, current, and sufficiently detailed?	X	
Prioritized Preventive Maintenance			
C	Does the SSMP describe current preventive maintenance activities and the system for prioritizing the cleaning of sewer lines?		X

Chapter 4 – Operations and Maintenance Program		Yes	No
D	Based upon the SSO information in CIWQS and the Annual SSO Report, are the District's preventive maintenance activities sufficient and effective in minimizing SSOs and blockages?	X	
Rehabilitation and Replacement Plan			
E	Is there an ongoing condition assessment program sufficient to rank the condition of sewer pipes and schedule rehabilitation? Are the current components of this program documented in the SSMP?	X	
F	Does the rehabilitation and replacement plan include a capital improvement plan that addresses proper management and protection of the infrastructure assets? Does the plan include a time schedule for implementing the short and long-term plans plus a schedule for developing the funds needed for the capital improvement plan?	X	
Contingency Equipment and Replacement Inventory			
G	Does the SSMP list the major equipment currently used in the operation and maintenance of the collection system?		X
H	Are contingency equipment and replacement parts sufficient to respond to emergencies and properly conduct regular maintenance?	X	
Training			
I	Are the training records current?	?	?
J	Does the SSMP document current training expectations and programs?	X	
Discussion: In relation to point C, the SSMP does not describe how maintenance is prioritized nor what the maintenance activities are. In relation to point G, there is no mention of major equipment in chapter 4 of the SSMP. Section 4.5 of the SSMP states that the District's CMMS software allows for part tracking and automatic replacement procedures for low stock. Section 4.4 states that District's Safety Coordinator maintains all records, are these current? The SSMP vaguely discusses training expectations and programs. This section should be more thorough in discussing what the District's actual expectations are.			

Chapter 5 – Design and Performance Provisions		Yes	No
A	Does the SSMP reference current design and construction standards for the installation of new sanitary sewer systems, pump stations and other appurtenances and for the rehabilitation and repair of existing sanitary sewer systems?	X	
B	Does the SSMP document current procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and the rehabilitation and repair of existing sewer lines?	X	
Discussion:			

Chapter 6 – Overflow and Emergency Response Plan		Yes	No
A	Does the Overflow Emergency Response Plan (OERP) contain proper notification procedures so that the primary responders and regulatory agencies are informed of all sanitary sewer overflows (SSOs) as required by the WDR and MRP?	X	
B	Does the OERP have a program to ensure an appropriate response to all overflows?	X	
C	Does the OERP contain procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities of all SSOs that potentially affect public health or reach waters of the State in accordance with the MRP? Does the SSMP identify the officials who will receive immediate notification of such SSOs?	X	
D	Are staff and contractor personnel aware of and appropriately trained on the procedures of the OERP?	X	
E	Does the OERP contain procedures to address emergency operations such as traffic and crowd control and other necessary response activities?	X	
F	Does the OERP ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge?	X	

Chapter 6 – Overflow and Emergency Response Plan		Yes	No
G	Considering SSO performance data, is the OERP effective in handling SSOs in order to safeguard public health and the environment?	X	
H	Is the Water Quality Monitoring Plan current and has it been trained on and practiced by staff that would be involved in a SSO of large volume?		X
I	Was sampling conducted within 48 hours for all SSOs greater than 50,000 gallons and were results entered for these SSOs through the CIWQS website?		X
J	Has the District prepared a Technical Report for all SSOs larger than 50,000 gallons? Have all Technical Reports been filed on the CIWQS website as required?		X
Discussion: the SSOBRP (Overflow and Backup Response Plan) needs to be included in SSMP as appendix. The SSMP does not currently have a Water Quality Monitoring Plan described. There have been no SSOs over 50,000 gallons.			

Chapter 7 – FOG Control Program		Yes	No
A	Does the Fats, Oils, and Grease (FOG) Control Program include a description of public education outreach efforts that promote proper handling and disposal of FOG?	X	
B	Does the FOG program include a plan for the disposal of FOG generated within the sewer system service area?	X	
C	Does the District have sufficient legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG?	X	
D	Are there requirements to install grease removal devices (such as traps or interceptors), best management practices (BMP) requirements, record keeping, maintenance requirements and reporting requirements established in the FOG Control Program?	X	
E	Does the District have authority to inspect grease producing facilities and have sufficient staff to inspect and enforce the FOG ordinance?	X	
F	Does the FOG control program identify sections of the collection system subject to FOG blockages, establish a cleaning schedule and address source control measures to minimize these blockages?	X	

Chapter 7 – FOG Control Program		Yes	No
G	Does the FOG control program implement source control measures for all sources of FOG discharged to the collection system?	X	
H	Is the current FOG program effective in minimizing blockages of sewer lines resulting from discharges of FOG to the system?	X	
Discussion:			

Chapter 8 – System Evaluation and Capacity Assurance Plan		Yes	No
A	Does the System Evaluation and Capacity Assurance Plan evaluate hydraulic deficiencies in the system and provide estimates of peak flows associated with conditions similar to those causing overflow events, if applicable?	X	
B	Does the capital improvement program (CIP) establish a schedule of approximate completion dates for both short-term and long-term improvements and is the schedule reviewed and updated to reflect current budgetary capabilities and activity accomplishment?		X
C	Does the District take steps needed to establish a short and long-term CIP to address hydraulic deficiencies, including prioritization, alternatives analysis, and schedules? Are repair and replacement projects developed based upon condition assessment and/or field maintenance results?		X
Discussion: The SSMP did not provide estimated peak flows. The SSMP states that due to not having SSO spots, the CIP is development driven and changes as developments occur.			

Chapter 9 – Monitoring, Measurement, and Program Modifications		Yes	No
A	Does the District maintain relevant information that can be used to establish and prioritize appropriate SSMP activities?	X	
B	Does the District monitor the implementation and, where appropriate, measure the effectiveness of each Chapter of the SSMP?	X	
C	Does the District assess the success of the preventive maintenance program?	X	

Chapter 9 – Monitoring, Measurement, and Program Modifications		Yes	No
D	Does the District update program Chapters, as appropriate, based upon monitoring or performance evaluations?	X	
E	Does the SSMP identify and illustrate SSO trends, including frequency, location and volume of SSOs?		X
Discussion: The SSMP references a Sanitary Sewer Overflow Trends Record; however, the Trends record is kept in a documents room and not available to evaluate. Trends are not included in the SSMP.			

Chapter 10 – SSMP Program Audits		Yes	No
A	Does the audit focus on the effectiveness of the SSMP? If not, what needs to be changed to increase the effectiveness of the overall collection system program?	X	
B	Were the audit results shared with the Department Commissions and District Board? And the public, via the CCSD website?	X	
C	Will the SSMP Audit be completed, reviewed, and filed as an Appendix to the SSMP on a biennial basis?	X	
D	Do any proposed changes to the SSMP require Board approval as they have a substantial change in the policies and procedures for collection system operations and maintenance?	X	

Discussion: Chapter 10 of the SSMP does not address if audit results will be shared with the public.

Chapter 11 – Communication Program		Yes	No
A	Does the District communicate on a regular basis with the public and other agencies about the development and implementation of the SSMP? Does the communication system provide the public the opportunity to provide input as the program is developed and implemented? Were annual progress reports and metrics of implementation of the SSMP provided to the District Board?	X	

Discussion:

Plan Review and Revision Log		Yes	No
A	Is the SSMP Plan Review and Revision Log current and up to date?		
Discussion:			

Ironhouse Sanitary District SSMP Change Log

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Appendix K
Element 11 (Communication Plan) Supporting Documents

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THE IRONHOUSE INSIDER

www.ironhousesanitarydistrict.com

Emergency line: 925-625-2279

Winter 2017

RETHINKING WASTEWATER

RESOURCE RECOVERY BECOMES NEW GOAL AT IRONHOUSE

For many, our understanding of water and wastewater is rudimentary: turn on the tap, clean water comes out; flush the toilet, dirty water goes away. But for those in the industry, like Ironhouse Sanitary District, the technology behind the treatment, collection and distribution of water is both complex and ever changing.

Modern wastewater management is moving away from merely treating and disposing of wastewater to examining the assets of the process and resource recovery.

The ISD board and staff members are currently working to develop a vision of where the district will maximize the recovery of resources they provide. The most important change in this

Continues on page 3



Biosolids are collected for distribution at ISD's Water Recycling Facility.

THE CLEAN FACTS ABOUT BIOSOLIDS

➡ Biosolids are the nutrient-rich organic by-product of domestic wastewater treatment. Biosolids are a beneficial resource that contain essential plant nutrients and organic matter, and can be recycled and applied as a fertilizer and soil amendment, when properly treated and managed. Every person contributes to the production of biosolids — flushing toilets, doing laundry or washing

your hands in a sink. Wastewater treatment creates clean water and residual solid material. The residual material is treated to produce biosolids. Across the United States, thousands of municipalities currently recycle their biosolids and apply them to land. Agricultural and non-agricultural sites benefit from the nutrients and soil conditioning value of biosolids.

New faces join Ironhouse board

Two new directors will join the ISD board Dec. 14, the result of an uncontested election in which both incumbents whose seats were up decided not to run for another term.

The two new board members are Dawn Morrow and Peter Zirkle. Both are long-time Oakley residents and very excited to start their time on the board.

After serving as a board member since May 2011,

Continues on page 3

Got an overflow? Let us know

If you suspect a sewage overflow or spill, call ISD right away. There are two ways to reach emergency staff. One is to call ISD's office at 925-625-2279. Someone will be available to assist you 24 hours a day, seven days a week.

Another way is through the district's website at www.ironhousesanitarydistrict.com. Click the button that says "Report A Problem." Fill out the form and ISD staff will respond within 15 minutes. ☐



**"Help
is on
the
way!"**



Hidden below these steel tubes at the ISD Water Recycling Facility are hundreds of microfiltration membranes like the one seen below.

ISD filtration method may set standard for state regulators

On its surface, ISD's state-of-the-art Water Recycling Facility looks like a simple collection of buildings and structures, but hidden behind these walls is a complex of piping and processes designed to turn wastewater into a product that is safe to return to the environment for reuse.

After the technologically advanced facility opened in 2011, the district received an industry award for it, the combination of the membrane filtration system and ultraviolet light disinfection providing arguably some of the cleanest recycled water in the state.

A UNIQUE CLEANING PROCESS

Because of the unique cleaning process, ISD is taking part in a study that may help determine future state regulations.

Currently the district utilizes



both membrane filtration and ultraviolet light for cleaning, but the study questions whether UV light is necessary at all.

All water treatments involve the removal of solids, harmful bacteria, inorganic and organic compounds. Removal of solids is usually done by sedimentation and bacterial digestion. This disinfection process is important to remove harmful pollutants.

Membrane filtration removes contaminants other treatment technologies do not.

JUST PASSING THROUGH

A membrane, by definition, is a selective barrier allowing some things to pass through while not others. In its most basic form, it acts as a sieve, separating solids from the liquids forced through it.

Ultraviolet energy is used to change the DNA in microorganisms preventing reproduction. UV treatment does not alter water chemically. Nothing is added except energy from the UV light.

While UV light has many advantages, there may be a great cost savings for ISD and other districts if the regulators determine that this process is not needed when membrane treatment is utilized. □

BOARD

Continued from page 1

David Contreras has decided to enjoy his retirement and spend some time with his family. Contreras was appointed to the board mid-term when Director Don Lew passed away.

He was then elected to the board in 2012. As former general manager of the Mt. View Sanitary District in Martinez, Contreras drew from years of professional experience during his service on the ISD board.

Dr. Michael Painter will also be leaving the board this year. Currently the longest-serving board member, first elected to his seat in November 2000, Painter has worked on many ISD committees and previously served as a board president. A life-long member of the Oakley community, an avid Delta boater and local business owner, Painter has been an advocate for keeping the environment safe and worked to help build the District's Water Recycling Facility. □

WASTEWATER

Continued from page 1

vision is that recycled water is, most definitely, a renewable resource.

This means continuing to build on ISD's already technologically advanced treatment of wastewater, as well as moving further ahead in recycled water production and distribution, beneficial reuse of biosolids,

pollution prevention and exploring energy recovery.

Some of these goals have already been a focal point of ISD's mission for many years. In 2011 the district built the cutting-edge Water Recycling Facility. With room to grow, this membrane filtration plant produces exceptionally high-quality recycled water. Approximately half of the water that leaves the

facility is sent to ISD-owned Jersey Island, where it is used to irrigate the district's hay fields.

In 2015, ISD opened its commercial and residential recycled water fill stations to allow limited distribution of the district's recycled water for such uses as dust control on Highway 4 construction projects, new development

construction, as well as local residential use for irrigation of lawns, trees and gardens.

The district is looking for ways to turn these biosolids into a revenue asset.

One idea is to use Jersey Island for sustainable biosolids processing opportunities. Another is to establish a regional composting facility.

These programs

could also provide value to other agencies and a revenue stream to ISD. The district's visioning process is working to develop other revenue-based opportunities for Jersey Island.

Resource recovery isn't just a buzzword for ISD. It is a step toward better pollution prevention and keeping the health and welfare of our community first and foremost. □

STAFF PROFILE

Machinist finds island suits him

Having grown up in the bustling city of South San Francisco, it is hard for ISD machinist **Eduardo Cruz** to believe that there is a place as peaceful as Jersey Island to work. Just the same, every morning he gets up and takes the short drive to his new job on the district's rural 3,500-acre island located between Oakley and Bethel Island.

"Everything is so open space out here," Cruz said. "I've only worked here for a



ISD machinist Eduardo Cruz feels at home on Jersey Island.

month, but I wouldn't trade it for anything."

As a way to dispose of millions of gallons of recycled water that passes through ISD's Water Recycling Facility, the district disperses 51 percent of the water annually to irrigate hay fields that are tended by ISD

staff. The hay is then fed to approximately 2,500 head of Jersey Island cattle.

As part of ISD's maintenance staff, Cruz's job is to make sure the tractors, farm equipment and vehicles are all kept in safe and good working order. Even so, there are times he is called upon to help out tending to the cattle operation.

"I'm available wherever they need me," said Cruz, who also sees occasional duty working on equipment at the district's main headquarters in Oakley.

"Working out here beats working at a desk job any day," he said. □

Commitment to education opportunities is a top priority

Did you know that ISD strives to incorporate educational opportunities into everything we do?

As the general manager, I am very proud to be part of a district that values education and seeks out opportunities to support and influence education within our community and industry.

MORE THAN A FACILITY TOUR

ISD provided a tour of our award-winning facility to all 6th graders in the Oakley Union School District. This tour transcended being just a facility tour.

ISD staff worked with teachers to provide information that could be taken back to the classroom and incorporated into lesson plans allowing education about the environment and conservation to continue.

The district also participates in the Bay Area



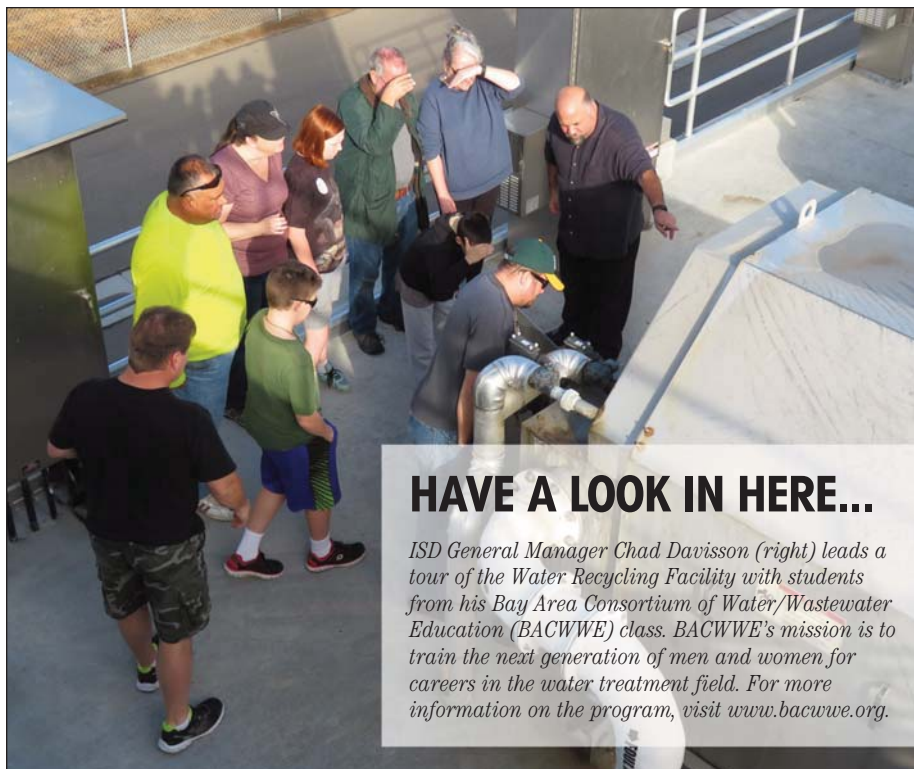
Consortium of Water and Wastewater Education and the Bay Area Consortium for Clean Water Education.

These consortiums establish partnerships with local community colleges and water/wastewater agencies to provide both the classroom and hands-on training required to create a qualified workforce.

COMMUNITY PARTNERSHIPS

Through participation with these organizations, the district helps to provide education and training for the next generation of industry professionals.

For more information about careers in the water and wastewater industry please contact ISD. □



HAVE A LOOK IN HERE...

ISD General Manager Chad Davisson (right) leads a tour of the Water Recycling Facility with students from his Bay Area Consortium of Water/Wastewater Education (BACWWE) class. BACWWE's mission is to train the next generation of men and women for careers in the water treatment field. For more information on the program, visit www.bacwwe.org.

Your toilet is not a trash can

Please don't treat your toilet like a trash can. It may be convenient to flush baby and adult wipes, but those and many other items (even if labeled "flushable") can clog sewer pipes,

damage treatment plant equipment, and contribute to water pollution. Please flush only human waste and toilet paper — and save everything else for disposal in a real trash can. □



THE BOARD

Doug Scheer/President
Susan Morgan/Vice President
David Contreras/Director
Chris Lauritzen/Director
Michael Painter/Director

ISD board meetings

Public meetings are held the first Tuesday of each month at 7 p.m.

IRONHOUSE SANITARY DISTRICT ADMINISTRATION

Chad Davisson/General Manager
Sue Walde/District Secretary
Chris Christean/Plant Manager
Louis Solana/Collections Supervisor
David Dal Porto/Ranches & Levees

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 Oakley, California 94561

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District Transparency
 Certificate of Excellence Recipient





Ironhouse Sanitary District
450 Walnut Meadows Drive
Oakley, CA 94561

Emergency 24/7 contact
number: 925-625-2279

ECRWSS

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IMPORTANT UPCOMING EVENTS

- Nov. 17: Thanksgiving. Offices closed.
- Dec. 6: ISD Board of Directors meets at 7 p.m. for regularly scheduled meeting.
- Dec. 20: ISD Board of Directors-Planning & Programs, 6 p.m. regularly scheduled meeting.
- Jan. 3: ISD Board of Directors meets at 7 p.m. for regularly scheduled meeting.



This newsletter is printed using recycled paper. Every ton of recycled paper saves 7,000 gallons of water.



Recycled water station remains open for winter

The Farmer's Almanac says it will be cold and snowy, the Weather Channel says it will be unseasonably warm. ISD can't predict the weather this winter, but in any event the district plans to keep the Residential Recycled Water Fill Station open just in case.

Beginning Nov. 28, however, the plan is to reduce hours at the fill station from the current six days a week to three days a week.

The new regular hours will change to Monday and Wednesday, 11 a.m. to 5 p.m., and Saturday from 8 a.m. to 3 p.m.

As always, on rainy days and for at least 24 hours after rainfall, the fill station will need to be closed due to state water regulations. It is a good idea to check the district's website for alerts about planned closures.

Do you have a picture of your favorite tree or garden that you watered using ISD's recycled water? Send us your success stories so we can share them on the district's website and social media.

Email pictures and comments to isd-outreach@isd.us.com. ☐



**IRONHOUSE SANITARY DISTRICT
FATS, OILS AND GREASE
(FOG) RECYCLING DAY**

Don't pour holiday grease down the drain. Recycle it at ISD.

**SATURDAY, DEC. 3
9 A.M. TO 12 P.M.**

MERCURY CFL BULB EVENT
How many people does it take to change this CFL light bulb? As it turns out, just you!

CFL (or compact fluorescent) light bulbs contain mercury vapors that can harm the environment. They require special disposal. When you come to ISD's FOG recycling day, bring your old CFL bulbs and you'll receive a discount coupon for Oakley ACE Hardware to replace your old CFL bulbs with new, energy-efficient LED bulbs.



**DROP-OFF LOCATED AT THE ISD FOG HOUSE, 450 WALNUT MEADOWS DRIVE, OAKLEY
(CROSS STREETS MAIN ST, ROSE AVE, DISTRICTS WAY) RAIN OR SHINE**