



**COUNTY SANITATION DISTRICT NO. 2-3
OF SANTA CLARA COUNTY**

**COUNTY SANITATION DISTRICT NO. 2-3
SEWER SYSTEM MANAGEMENT PLAN**

(Certified: March __, 2019)

Document Version Control

This Sewer System Management Plan (SSMP) is a living document that is anticipated to change over time. This version control sheet is intended to support County Sanitation District No. 2-3's efforts to keep the copies of the SSMP that have been assigned to District Staff current. Please contact Benjamin Porter prior to making copies for use by others, initiating changes, or for information regarding the current version of this document.

SSMP Copy Number: _____

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SSMP Section	Original Version Certified Date	Current Version Date
Introduction		
1. Goals	March 2014	March 2019
2. Organization	November 2018	March 2019
3. Legal Authority	March 2014	March 2019
4. O&M Program	March 2015	March 2019
5. Design and Performance Provisions	March 2014	March 2019
6. Overflow Emergency Response Plan	November 2015	March 2019
7. FOG Control Plan	March 2014	March 2019
8. System Evaluation and Capacity Assurance Plan	March 2014	March 2019
9. Monitoring, Measurement, and Program Modifications	March 2014	March 2019
10. SSMP Program Audit	March 2014	March 2019
11. Communications Plan	March 2014	March 2019

INTRODUCTION

This Sewer System Management Plan (SSMP) has been prepared in compliance with the State Water Resources Control Board (SWRCB) Order No. 2006-0003-DWQ: Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, as revised by Order No. WQ 2008-0002-EXEC on February 20, 2008.

The general Waste Discharge Requirements (WDR) prescribed by Order No. 2006-0003-DWQ prohibit sanitary sewer overflows (SSOs), require reporting of SSOs using the statewide electronic reporting system, and require the preparation of an SSMP. The overall goal of the SSMP is to provide a plan and schedule to manage, operate, and maintain all parts of the sanitary sewer system to help reduce and prevent SSOs and to mitigate any SSOs that do occur. All public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey wastewater to a publicly owned treatment facility in California are subject to the WDRs. County Sanitation District No. 2-3 of Santa Clara County (District) is such an entity.

The SWRCB issued Order No. WQ 2013-0058-EXEC, Amending Monitoring and Reporting Program (MRP) for the Statewide General Waste Discharge Requirements for Sanitary Sewer systems by letter dated July 30, 2013. This Order changed the definitions for SSO spill designations and added a third (Category 3) spill designation. It also defined new procedures for notification, reporting, monitoring and record keeping. The required changes to the MRP became effective on September 9, 2013.

Pursuant to Order No. 2006-0003-DWQ, public entities must update their SSMPs every five years, including with significant program changes. Recertification by the entity's governing body is required when significant updates to the SSMP are made. This SSMP updates all elements in accordance with findings in the District's annual audit reports, including by adding clarifications and additional requirements/details to improve the SSMP.

This document has been prepared with the awareness that the District is one of a number of stakeholder agencies within a local watershed area of Santa Clara County each accountable by permit to the SWRCB under the Clean Water Act. These additional stakeholders include:

- San Jose/Santa Clara Regional Wastewater Facility
- Santa Clara Valley Water District
- City of San Jose, Department of Transportation and Public Works.
- Santa Clara County Roads and Airports and Public Works Departments

Other stakeholders include the Santa Clara County Environmental Services Department, California Department of Fish and Wildlife (CDFW), and several privately organized environmental groups.

This SSMP contains all elements required by both the SWRCB and San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB) and is organized following the outline set forth in Order No. 2006-0003-DWQ. Both SWRCB and San Francisco Bay RWQCB requirements are addressed in each element. Each requirement is shown as stated in Order No. 2006-0003-DWQ SSO-WDR and the San Francisco Bay RWQCB SSMP Development Guide.

BACKGROUND INFORMATION

County Sanitation District No. 2-3, while a component unit of Santa Clara County, is a separate governmental entity established as a special district of the State of California. Being a dependent Special District, the County Board of Supervisors sits as the District's governing Board of Directors, and the District is overseen by the Office of the County Executive, which has assigned oversight for the management of the District to a Deputy County Executive. The Deputy County Executive provides guidance and direction to the District Manager-Engineer and acts as the conduit between the District Manager-Engineer and the Board of Supervisors. Under the Supervision of the Deputy County Executive, the District Manager-Engineer is responsible for the day-to-day management and operation of the District.

The District was consolidated in December 1977 by the merger of Districts 2 and 3, which were originally formed in May 1948 and May 1953, respectively. The District serves the unincorporated areas of East San Jose near the Alum Rock area (District 2) and other unincorporated areas including the County Fairgrounds themselves and the area south of them (District 3). The Alum Rock area lies within the Watershed basins of Penitencia Creek (a habitat for steelhead trout) and seasonal creeks Miguelito (tributary to Penitencia Creek) and Babb (tributary to Silver Creek, which feeds into Coyote Creek). The County Fairgrounds area lies within urban improved areas whose storm water collection systems ultimately feed into Coyote Creek.

The District provides sewage collection treatment and disposal services for these areas comprising approximately 3.8 square miles with nearly 46 miles of sewer lines to maintain. The collected wastewater from both areas is conveyed to the San Jose-Santa Clara Regional Wastewater Facility through mains and interceptor lines shared with the City of San Jose in a joint use agreement that expired in 2009; the terms of the new agreement are being negotiated. The District contracts with Cities of San Jose and Santa Clara, the co-owners of the San Jose-Santa Clara Regional Wastewater Facility, for the wastewater treatment and disposal.

REQUIRED ELEMENTS OF AN SSMP

In summary, the required elements of an SSMP include:

1. Goal
2. Organization
3. Legal Authority
4. Operation and Maintenance Program

5. Design and Performance Provisions
6. Overflow Emergency Response Plan
7. Fats, Oils, and Grease Control Program
8. System Evaluation and Capacity Assurance Plan
9. Monitoring, measurement and program modifications
10. SSMP Program Audits
11. Communication program

DEFINITIONS, ACRONYMS, AND ABBREVIATIONS

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

California Office of Emergency Services (Cal OES) – Refers to the agency responsible for overseeing and coordinating emergency preparedness, response, recovery and homeland security activities within the state. The agency was created in 2008, superseding both the Office of Emergency Services (OES) and Office of Homeland Security (OHS).

Calendar Year (CY) – Refers to the 12-month period from January 1 through December 31.

California Department of Fish and Wildlife (CDFW)

California Integrated Water Quality System (CIWQS) – Refers to the State Water Resources Control Board online electronic reporting system that is used to report SSOs, certify completion of the SSMP, and provide information on the sanitary sewer system.

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

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

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

County Health – Refers to the Santa Clara County Public Health Department.

County Sanitation District No. 2-3 of Santa Clara County (District) – Refers to the Sanitation District formed by combining the former County Sanitation Districts Number 2 and Number 3 into one district.

District Operations Code – Refers to the Operations Code for County Sanitation District No. 2-3, as adopted by Ordinance No. 35 on October 7, 1997 and amended by Ordinance No. 44 on January 10, 2012.

Environmental Protection Agency (U.S. EPA) – Refers to the United States Environmental Protection Agency.

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 GWDRs, and that has submitted a complete and approved application for coverage under SWRCB Order No. 2006-0003-DWQ.

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

First Responder – Refers to the District employee who provides the District's initial response to a sewer system alarm, emergency, or other event.

Field Report – Refers to the Sanitary Sewer Overflow Report, a document used to provide the basis for entering an overflow report into CIWQS.

Fiscal Year (FY) - Refers to the 12-month period from July 1 through June 30.

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

Gallons per Acre per Day (GPAD)

Gallons per Day (gpd)

Gallons per Minute (gpm)

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

Geographic Information System (GIS) – Refers to the District's system that it uses to capture, store, analyze, and manage geospatial data associated with the District's sanitary sewer system assets.

Global Positioning System (GPS) – Refers to the handheld unit used to determine the longitude and latitude of sanitary sewer overflows for use in meeting the CIWQS Online SSO Reporting System reporting requirements. Google maps can be used in lieu of a GPS unit to obtain this information.

House Connection Sewer (Upper Lateral) – Refers to that portion of the horizontal sewer piping from the building or structure to the property line of the public right of way or easement.

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

Lateral – See sewer service lateral.

Legally Responsible Official (LRO) – Refers to the individual who has the authority to certify reports and other actions that are submitted through the Online SSO Reporting System.

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

Millions of Gallons per Day (MGD)

Monitoring and Reporting Plan (MRP)

Monitoring, Measurement, and Program Modification (MMPM)

National Pollutant Discharge Elimination System (NPDES)

Not Applicable (NA)

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

Office of Emergency Services (OES) – See California Office of Emergency Services.

Online SSO Reporting System – Refers to the California Integrated Water Quality System (CIWQS).

Operations and Maintenance (O&M)

Overflow Emergency Response Plan (OERP)

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

Private Lateral Sewage Discharges – Sewage discharges that are caused by blockages or other problems within a privately-owned sewer service lateral.

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

Public Sewer – As stated in the District Operations Code, public sewer refers to any mainline sewer constructed in any street, highway, alley, place, or right of way dedicated for public use.

Regional Water Board – Refers to the San Francisco Bay Regional Water Quality Control Board – Region 2 .

Regional Water Quality Control Board (RWQCB) – Also refers to the San Francisco Bay Regional Water Quality Control Board – Region 2.

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

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

Sanitary Sewer System – Refers to the portion of the sanitary sewer facilities that are owned and operated by County Sanitation District No. 2-3. The sanitary sewer system consists of collection sewers and trunk sewers.

Sensitive Area – Refers to areas where an SSO could result in a fish kill or pose an imminent or substantial danger to human health (e.g. parks, aquatic habitats, etc.).

Sewer Service Lateral – For the purposes of this SSMP, the sewer service lateral includes both the upper lateral (house connection sewer) and the lower lateral (sewer lateral).

Sewer Lateral (Lower Lateral) – Refers to the portion of the pipe from upper lateral (house connection sewer) to the sewer main, including the connection to the sewer main. The property owner is responsible for repairing any failure or damage in the upper sewer lateral. The District is responsible for repairs, including the connection to the sewer main; unless it is determined that another party caused the failure or damage for the sewer lateral (Lower Lateral).

Sewer System Management Plan (SSMP)

Sewer System Management Plan Development Guide – Refers to the guidance document developed by the San Francisco Bay Regional Water Quality Control Board and published in 2005.

Santa Clara County Public Health Department (County Health)

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

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

Surface Waters – See *waters of the State*

System Evaluation and Capacity Assurance Plan (SECAP)

Trunk Sewer or Main Interceptor System – The terms trunk sewer, gravity trunk line, and main interceptor sewer are used interchangeably to refer to the main branches of the sanitary sewer system, which carry flows from the collector sewers to the treatment plant.

Volume Captured – The amount of spilled sewage that is returned to the sanitary sewer system. When recording the volume that is captured, the volume of water used for flushing and/or cleaning should not be included.

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

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

Work Order (WO) – Refers to the document (paper or electronic) that is used to assign work and to record the results of the completed work.

ELEMENT 1: GOALS

SWRCB Requirements:

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.

RWQCB Requirements:

Each wastewater collection system agency shall, at a minimum, develop goals for the Sewer System Management Plan as follows:

- ***To properly manage, operate, and maintain all parts of the wastewater collection system***
- ***To provide adequate capacity to convey peak flows***
- ***To minimize the frequency of SSOs***
- ***To mitigate the impact of SSOs***

The purpose of the SSMP is to provide guidance to the District in the operation, management, and maintenance of its sewer collection system to comply with SWRCB Order No. 2006-003-DWQ and RWQCB requirements as revised by Order No. WQ 2008-0002-EXEC on February 20, 2008 and by Order No. WQ 2013-0058-EXEC on July 30, 2013 and as outlined in the Sewer System Management Plan Development Guide. The District is charged with collecting sewage waste within its service boundaries and conveyance to the San Jose/Santa Clara Regional Wastewater Facility. The District's goals are 1) to carry out maintenance and operation of the sewer collection system with no adverse impact to the public health or environment, 2) to promote continuous improvement of our services through the optimization of the maintenance and capital improvement programs, and 3) to enhance collaboration and communication to continuously improve the District's understanding and responsiveness to our customers and stakeholder agencies.

The provisions of the SSMP were developed and updated to ensure that the District is able to meet its goals by:

- Implementing a collection system maintenance program to minimize the frequency of sanitary sewer overflows.
- Responding to sanitary sewer overflows quickly to mitigate the impact of the SSO.
- Mitigating the impact of SSOs that do occur as well as conducting follow up investigations to identify the cause of the overflow event and using that information to either adjust the maintenance schedule or to schedule a repair/replacement.
- Properly managing, operating and maintaining all elements of the wastewater collection system to better allocate resources and manpower.

- Cost effectively minimizing infiltration/inflow, analyzing the existing capacity, and developing a plan to provide adequate capacity for future development and to convey peak dry weather flows.
- Developing and maintaining design construction standards and specifications for the installation and repair of the collection system and its associated infrastructure.
- Maintaining comprehensive and up-to-date maps of the wastewater collection system.
- Coordinating with the City of San Jose and Santa Clara County to maintain storm water maps.
- Providing training on a regular basis for staff in collection system maintenance and operations.
- Encouraging and supporting participation in the quarterly meetings with the neighboring collection system agencies and the partners to the wastewater treatment plant.
- Maintaining a Fats, Oils, and Grease program to limit fats, oils, and grease, and other debris that may cause blockages in the sewage collection system.
- Developing a closed-circuit televising program for the collection system.

The District has implemented policies and procedures for the systematic inspection and continued maintenance of its infrastructure and engages contracted, competent, trained personnel to carry out the scheduled tasks. The District personnel and contractors are utilizing the procedural training available through organizations such as California Association of Sanitation Agencies (CASA) and California Water Environment Association (CWEA).

ELEMENT 2: ORGANIZATION

SWRCB Requirements:

The SSMP must identify:

- a. The name of the responsible or authorized representative as described in Section J of SWRCB Order No. 2006-0003-DWQ;***
- 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 Health and Regional Water Board and other agencies if applicable (such as County Health Officer, County Environmental Health Agency, Regional Water Board, and/or Cal OES).***

RWQCB Requirements:

Each wastewater collection system agency shall, at a minimum, provide the following information regarding organization:

- Identify agency staff responsible for implementing, managing, and updating the SSMP;***
- Identify chain of communication for responding to SSOs; and***
- Identify chain of communication for reporting SSOs.***

The District Organization Chart below indicates the chain of responsibility for the management, operation, and maintenance of the District's collection system. The District contracts its management, engineering, and operation with Mark Thomas and Company Inc.

Persons responsible are:

Benjamin Porter, District Manager-Engineer (408) 497-3933 – Primary person responsible for implementing, managing, and updating the SSMP.

Richard Tanaka, Senior Engineer (408) 253-7071 – A legally responsible officer, responsible for supporting Benjamin Porter and Frank Quach.

Frank Quach, Operations Manager (510) 299-0917 – Primary person responsible for responding to SSOs, reporting to Benjamin Porter and Richard Tanaka.

Chain of Communication for Reporting SSOs:

- County Sanitation District 2-3 (408) 253-2137; after business hours/holidays (408) 299-2507 receives call of SSO from public or other agencies.***

- First Responder dispatched to spill site requests response crew to meet at scene.
- SSO report form completed by First Responder with GPS Coordinates to define location.
- Category 1 spill: one of the above staff will be at the site.
- Category 2 and 3 spill: Field staff will be at the site to respond and document, and report findings and actions to Quach, Tanaka, and Porter.
- SSO form forwarded to Richard Tanaka/ Benjamin Porter.
- Benjamin Porter or Frank Quach inputs SSO into statewide SSO database via CIWQS website.
- Benjamin Porter or Richard Tanaka makes report “Ready to Certify,” followed by one of the two certifying the report.

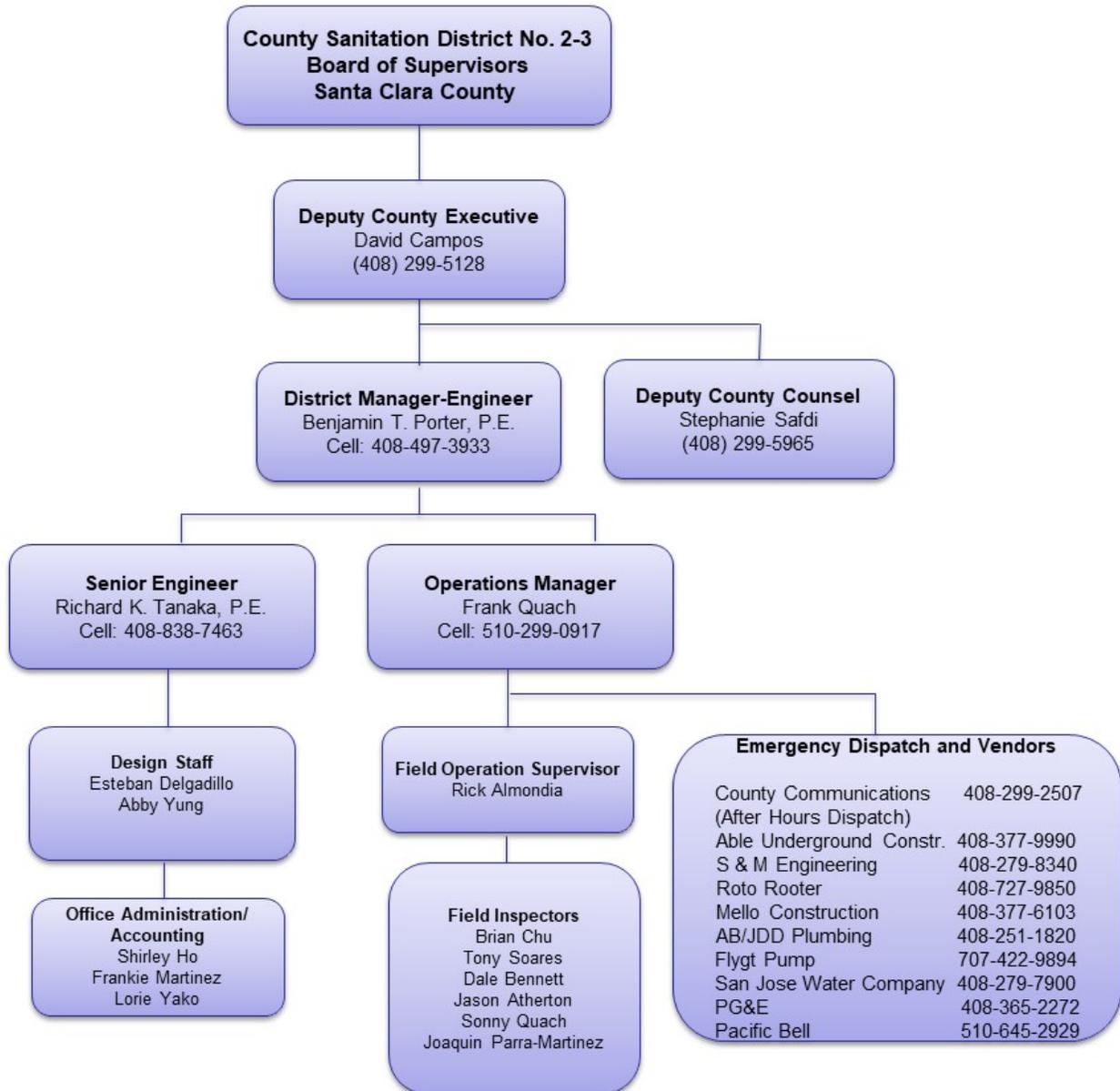
Authorized Representative

The District’s Authorized Representatives in all sanitary sewer system matters are Benjamin Porter (District Manager-Engineer), Richard Tanaka (Senior Engineer), and Frank Quach (Operations Manager). Porter, Tanaka, and Quach are authorized to submit verbal, electronic, and written spill reports to the RWQCB, SWRCB, County Health, and Cal OES. Benjamin Porter and Richard Tanaka are the District’s designated LROs and are authorized to certify electronic spill reports submitted to the SWRCB.

Responsibility for SSMP Implementation

Benjamin Porter is responsible for developing, implementing, and maintaining all elements of the District’s SSMP.

District Organization



ELEMENT 3: LEGAL AUTHORITY

SWRCB Requirements:

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.***

RWQCB Requirements:

Each wastewater collection system agency shall, at a minimum, describe its legal authority through sewer use ordinances, service agreements, or other legally binding procedures to:

- Control I/I from satellite wastewater collection systems and laterals;***
- Require proper design and construction of new and rehabilitated sewers and connections; and***
- Require proper installation, testing, and inspection of new and rehabilitated sewers.***

The powers of and the execution of Legal Authority provided by and through the governing body of the County Sanitation District No. 2-3 (District) and directed by the District Manager-Engineer, for sewer use, services, construction, permits and procedures are applicable to all industrial, business or residential entities and are cited in the General Provisions, Article II, Sections 2.01 – 2.15 of the District Operations Code.

Legal authority regarding the following District functions is set forth in the District Operations Code.

1. Control of infiltration and inflow from satellite wastewater collection systems and laterals:
 - A. Construction of Sewers – Article III, Main Sewer and Trunk Sewer, Sections 3.01 – 3.03 and Article IV, Side Sewers, House Laterals and House Sewers, Sections 4.01 – 4.04.

- B. Illegal Discharges – Article V, Use of Public Sewers/Sewer Use Regulations, Section 5.06 – Protection from Accidental Discharge and Section 5.35 – Federal Pretreatment Regulations.
 - C. Permits and Fees – Article III, Main Sewer and Trunk Sewer, Section 3.01; Article IV, Side Sewers, House Laterals and House Sewers, Section 4.03; Article VI: Waste Water Discharge Permits, Sections 6.01 – 6.16; Article VII, Sewer Service Charges, Sections 7.01 – 7.09, and Article VIII, Fees, Sections 8.01 – 8.06.
 - D. Enforcement – Article V, Use of Public Sewers/Sewer Use Regulations, Section 5.37 – Responsibility and Article VI, Wastewater Discharge Permits, Section 6.01 – Civil Penalties.
2. Require Construction Design for new and rehabilitated sewers and connections:
- A. Construction of Sewers –Article II, Use of Public Sewers/Sewer Use Regulations, Section 2.08 – Construction and Article III, Main Sewers and Trunk Sewers, Section 3.02 – Profiles, Plans Specifications.
3. Installation, Inspection and Testing of new and rehabilitated sewers and connections:
- A. Construction of Sewers – Article II, Use of Public Sewers/Sewer Use Regulations, Section 2.09 – Trenches – Inspection and Section 2.11 – Inspection – Previous Notice and Article IV, Side Sewers, House Laterals and House Sewers, Section 4.02 – Sewer Connections.
 - B. Use of Sewers –Article V, Use of Public Sewers/Sewer Use Regulations, Section 5.39 – Power to Inspect.

The foregoing procedures are established as a means of enforcement of the terms and conditions of the District Operations Code. The Government Code of the State of California, Health and Safety Code of the State of California, Code of Federal Regulations, City Health Department, County Health Department, Environmental Protection Agency, Civil Code of the State of California, County of Santa Clara, NPDES, Plumbing and Electrical Codes are referenced within the District's Operations Code.

The primary responsibility for enforcement of the provisions of the District Operations Code is vested in the District Manager-Engineer or District agents as designated, field inspectors or other representatives of the District and the San Jose-Santa Clara Regional Wastewater Facility authorized to act on behalf of the District Manager-Engineer, having the power to inspect and issue notices for violations.

ELEMENT 4: OPERATIONS AND MAINTENANCE PROGRAM

SWRCB Requirements:

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 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 sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventive Maintenance 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 of ranking the condition of the 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 replacements 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.*

RWQCB Requirements:

- **Collection System Map** – Each wastewater collection system agency shall maintain up-to-date maps of its wastewater collection system facilities.*
- **Resources and Budget** - Each wastewater collection system agency shall allocate adequate resources for the operation, maintenance, and repair of its collection system.*
- **Prioritized Preventive Maintenance** – Each wastewater collection system agency shall prioritize its preventive maintenance activities.*
- **Scheduled Inspections and Condition Assessment** - Each wastewater collection system agency shall identify and prioritize structural deficiencies and implement a program of prioritized short-term and long-term actions to address them.*

- ***Contingency Equipment and Replacement Inventories - Each wastewater collection system agency shall provide contingency equipment to handle emergencies, and spare/replacement parts intended to minimize equipment/facility downtime.***
- ***Training – Each wastewater collection system agency shall provide training on a regular basis for its staff in collection system operations, maintenance, and monitoring.***
- ***Outreach to Plumbers and Building Contractors – Implement an outreach program to educate commercial entities involved in sewer construction or maintenance about the proper practices for preventing blockages in private laterals. This requirement can be met by participating in a region-wide outreach program.***

Operations and Maintenance Activities

The District's sewage flows are collected by the District's nearly 46 miles of service laterals and mains and then transmitted through joint use mains, interceptors and trunk lines by contractual agreement with the City of San Jose to their Regional Wastewater Facility for treatment and disposal.

The cost for wastewater treatment and disposal are based upon the terms of a Master Agreement between the Cities of San Jose and Santa Clara, owners of the Water Pollution Control Plant, and County Sanitation District No. 2-3, dated January 1, 1985. The Master Agreement provides for treatment capacity rights and appropriate allocation of capital, operations, and maintenance costs.

The District's management is provided by contractual agreement with Mark Thomas & Company Inc., a private consultant responsible for day-to-day administration and oversight of the District's facilities and operations. Repairs and maintenance activities are provided as scheduled or needed with outside contractors and overseen by Mark Thomas and Company field inspection personnel.

Outside Contractors providing routine maintenance and emergency response services are required by the District's Operations Code to be registered annually with the District providing evidence of current insurance coverage in force at the limits set forth by the District. In addition, current workman's compensation insurance coverage must be verified prior to authorization for a contractor to perform District work in the public right-of-way. The contractors must also demonstrate professionalism and competency to carry out the assigned tasks of maintenance and repairs of the District's facilities. A contractor's safety record is considered as well as observed safe practices and well-established workmanlike performance.

Maintenance activities are overseen by District inspection staff and findings of existing condition of sewer mains are logged and evaluated on a priority of needed attention or repair. Attention can range from increased frequency of cleaning to video inspection to determine extent of needed spot repairs or eventual replacement of a significant section of sewer main. Mains found to be significantly in disrepair or undersized are placed on a

prioritized list on the District's Capital Improvement Program to be rehabilitated by pipe-bursting or replacement to increase capacity, eliminate sources of I & I and/or improve integrity of the system.

The major elements of the District's Operation and Maintenance Program are:

1. Resource and Budget Allocation
2. Collection System Mapping
3. Computerized Sewer Management System
4. Annual Routine Maintenance
5. Rehabilitation and Replacement Plan
6. Capital Improvement Program
7. Staff Training and Certification
8. Maintenance Equipment

Resource and Budget Allocation

The District's FY 2018-19 budget is \$4.25 million for its operations and \$3.7 million for its capital project. With this approved O&M budget, the District will be adequately staffed and equipped to provide routine maintenance, operations, and emergency services.

Collection System Maps and Description of Existing Facilities

The District's map records consist of three systems.

Records of permitted, connected parcels are keyed to the County's Assessor Maps which are utilized to show addresses and permit numbers issued. These are electronically retained and updated annually to keep current with ongoing record map changes within the District's Service Area. The maps also include schematic diagrams of the District's mains and service laterals with references for users to As-Built map sources.

Assessment diagrams for Local Improvement District projects and the associated As-built plans are maintained on file and available electronically as well. Maps of other District funded projects, federally funded trunk lines and the District's outfall interceptor through the City of San Jose leading to the San Jose-Santa Clara Regional Wastewater Facility are also maintained at the service counter and are accessible electronically as well. Subdivision Maps and associated developer installed As-built plans are maintained as the balance of the District's infrastructure construction history and are also available electronically.

The District also maintains 100 scale maps that show the total boundaries of the areas served and the related Service Area Boundaries established by the Local Agency Formation Commission of Santa Clara County (LAFCO). The District's conversion to a website accessible, GIS compatible, database for public access to maps and District records online is a work in progress. The District's 100 scale maps are Computer Aided Design (CAD) generated and include scale, north arrow, date of last version, service

area boundaries, property lines, manholes and other access points, street names, main sewers, trunk sewers, easement lines and dimensions, pipe IDs, pipe diameter, and flow direction. Sanitary sewer laterals are not included in the maps due to visibility issues.

The City of San Jose has provided their storm sewer base map for the areas adjacent to the District boundaries. The storm sewer base map from the County of Santa Clara has not been made available to the District.

Computerized Sewer Management System

The District's database has been converted to MS Access and is updated continually. Work orders are generated based on the database for the maintenance operation and scheduling is developed using the database information. The primary functions of the District's database are to:

- Maintain service request and maintenance history information for each individual collection system asset.
- Produce and regularly update the maintenance schedule based on feedback information from the cleaning operations.
- Generate reports that support data analysis and decision-making.
- Provide documentation for use in regulatory compliance reporting.
- Indicate line segment or structures that may be candidates for replacement or rehabilitation under the capital improvement program.

Annual Preventive Maintenance

The District's preventive maintenance includes scheduled and planned maintenance of the entire collection system on a 36-month cycle. The main goal of the preventive maintenance is to ensure that the collection lines, manholes, and other sewer infrastructure are free of any obstacles. For scheduling purposes, the collection system is divided into 6 basins.

Outside Contractors provide preventive maintenance and emergency response services as required by the District through a work order system. The contractors utilize hydroflush, VacCon, or a continuous rodder to clean and maintain the District sewer mains. After each line cleaning, the District Inspector uses the work order to document the field activities. Upon completion of the daily field work, the District Inspector enters the information from the work orders into the database. Sewer laterals are being cleaned with rodders or snake machines.

The District also proactively services lower laterals for properties that have accessible property line clean outs and have historical stoppage data. The problematic laterals are rodded on a regular schedule and evaluated for repair or replacement.

Annual Preventive Maintenance Prioritization List

The annual preventive maintenance program prioritization is based on the following factors of the sanitary sewer collection system:

Structural Condition - The District is implementing a pipeline assessment program using CCTV inspections to analyze the areas that require a higher maintenance frequency. Pipeline sections that are Grade 3 are scheduled for higher cleaning frequency with follow-up CCTV inspections. Pipeline sections that are Grade 4 and Grade 5 (Significant and Most Significant Defects) and are within 200-feet of surface water are placed in a high-priority replacement/rehabilitation queue; funding permitting and repairs to all Grade 5 defects are planned to be repaired/replaced within two years after discovery of the defect. Significant defects that are found to be the cause of an SSO are scheduled for repair as soon as practical. Frequency of maintenance is returned to the normal cycle once the pipeline has been repaired or replaced.

Root Control - Established neighborhoods and pipe segments located within easements with a history of root intrusion are maintained with power rodding and high-pressure rodding cleaning. Pipeline assessment and historic analysis determines if the cleaning frequency of the maintenance for these lines should be adjusted based on the 36-month cycle.

Grease Conditions - Sewers with a history of repeated calls for grease stoppages are maintained at a higher frequency that is intended to prevent repeat stoppages or SSOs. Pipeline assessment and historic analysis determine if the cleaning frequency for these lines should be adjusted based on the 36-month cycle. The District not only performs maintenance of these lines, but it also implements the Fats, Oils, and Grease reduction program by educating food establishments on Best Management Practices and performing regular inspections.

Rehabilitation and Replacement Plan

The District implemented a condition assessment and CCTV inspection program in 2013 to prioritize long-term rehabilitation and sanitary sewer main replacement projects. These projects are programmed into the Capital Improvement Program with the first CIP completed in FY 2016-17 and the second CIP to be completed in FY 2018-19.

The condition assessment and prioritization are as shown below:

a) Sewer Main Condition Assessment and Prioritization

The District is implementing a sewer main condition assessment program which consists of CCTV inspection of the District trunk lines. The CCTV inspection will identify the overall condition of the sanitary sewer system. Based on these data, the District will identify the level of effort and budget required to maintain and improve the sanitary sewer system. The goal of the CCTV program is to complete CCTV of all sewer mains within 7 years.

Sewer mains will be prioritized for replacement or rehabilitation based on the NASSCO PACP rating as a result of the CCTV inspection. Pipeline sections that are Grade 4 and Grade 5 (Significant and Most Significant Defects) and are within 200' of surface water are placed on high-priority replacement/rehabilitation queue; funding, permitting and all Grade 5 defects are planned to be repaired/replaced within 2 years after discovery of the defect. Also, Significant Defects that are found to be the cause of an SSO are scheduled for repair as soon as practical. All other Significant Defects are placed on the annual replacement/rehabilitation queue.

b) Lower Lateral Condition Assessment and Prioritization

The District has been implementing a lower lateral condition assessment program which consists of CCTV inspection of the District-maintained lower laterals that have a service history or has been inspected for a property line cleanout installation within the District boundary.

Lower laterals will be prioritized for replacement or rehabilitation based on the NASSCO LACP rating as a result of the CCTV inspection. Lower laterals that are Grade 5 are scheduled for immediate repair/replacement.

c) Manhole Condition Assessment and Prioritization

The District is implementing a manhole condition assessment program which consists of visual inspection of the District manholes during the preventive maintenance of the sewer mains.

Manholes will be prioritized for replacement or rehabilitation based on the NASSCO MACP rating as a result of the visual inspection.

The District also utilizes the operation maintenance records as a key indicator to develop a priority list for the CIP plan. Identified structural deficiencies are high priority items and areas with a high risk of overflows are ranked higher on the project's priority list.

The District has established an annual budget for the Sewer Main Rehabilitation and Replacement Project as part of the annual CIP Program.

Anticipated Capital Improvements and Maintenance Needs

Program Priority and Objectives

The majority of funds in the Sanitary Sewer System CIP are used to construct sewer improvement projects. Construction projects in the Proposed CIP meet one of two goals:

1. Enhance sewer capacity to meet economic development;
2. Rehabilitate existing sewers, with higher priority given to those with extensive, severe deterioration.

A project that will enhance capacity and rehabilitate existing sewers is considered a rehabilitation project.

Inflow and Infiltration Reduction Program

The District is developing an Inflow and Infiltration Reduction Program. Flow monitoring was completed in June 2009. The District is currently performing CCTV inspection and ongoing analysis to develop a rehabilitation and CIP program. In addition to the CCTV program, the District will also continue to investigate the possible I/I issues identified by the flow monitoring along Alum Rock Avenue and East Hills Drive.

Safety Training and Certification

The District uses a combination of in-house classes, on-the job training, conferences and seminars, and other training opportunities to train its District Personnel. Staff regularly participate in technical seminars, conferences, and meetings with the following:

1. California Water Environment Association (CWEA)
2. Bay Area Clean Water Agencies (BACWA)
3. California Association of Sanitation Agencies (CASA)

All District Personnel are provided copies of the Standard Operating Procedures and trained on every piece of equipment assigned for the task including but not limited to:

1. SSO and Backup Response
2. Sewer Cleaning Equipment O&M
3. Pump Station O&M
4. CCTV Operation and Maintenance
5. Lock Out/Tag Out

On-the job training is also received through mentoring by senior staff. Regular safety trainings are held to develop and maintain qualified staff.

The CWEA Technical Certification Program provides certification in a variety of wastewater disciplines to promote and enhance the education and effectiveness of the wastewater professional. The District encourages its maintenance staff to obtain CWEA certification to demonstrate their level of competency in the area of collection system maintenance. By providing adequate staff training and establishment of certain grade level requirements as a condition of career advancement, the District reinforces the importance it places on certification.

County Sanitation District No. 2-3
Sewer System Management Plan

Staff Member	Title	CWEA Certification	CCTV	Confined Space	Traffic Control	CPR/ First Aid/AED	Water Sample Collection
Benjamin Porter, PE	District Manager/Engineer						
Frank Quach	Operations Manager	Grade 1	PACP, LACP, MACP	Yes	Yes, MUTCD	Yes	
Esteban Delgadillo	Design Engineer		PACP, LACP, MACP	Yes	Yes, MUTCD		
Abby Yung	Design Engineer		PACP, LACP, MACP	Yes	Yes	Yes	Yes
Brian Chu	Sewer Inspector	Grade 3	PACP, LACP, MACP	Yes	Yes	Yes	Yes
Tony Soares	Sewer Inspector	Grade 1	PACP, LACP, MACP	Yes	Yes	Yes	Yes
Rick Almondia	Sewer Inspector		PACP, LACP, MACP	Yes	Yes	Yes	Yes
Dale Bennett	Sewer Inspector	Grade 1	PACP, LACP, MACP	Yes	Yes	Yes	Yes
Shirley Ho	Senior Design Technician						

Equipment

The District does not own any equipment.

Outreach to Plumbers and Building Contractors

The District communicates with plumbers and building contractors involved in sewer construction or maintenance about proper practices for preventing blockages in private laterals in three ways

1. Communication with District Vendors: District staff regularly communicate with the vendors who perform the preventive maintenance for the District. The maintenance is overseen by District staff to ensure that proper methods are

followed to prevent blockages in laterals and mains. These vendors are often the same plumbers and contractors who respond to private backups in the District.

2. Education of plumbers and contractors in the District office: Performing sewer work or internal plumbing modifications typically requires plumbers and contractors to obtain a permit or permits from the District. District staff uses this opportunity to educate the plumbers and contractors on proper construction methods and provides them with standard details to prevent sewer blockages.
3. Site Visits: District Inspectors are regularly driving throughout the performance of their regular duties and are on the lookout for any work that could impact sewer mains or laterals. When plumbers and contractors are observed, the District inspector ensures that a proper permit has been obtained. If the work does not require a permit, the inspector educates the plumber or contractor on proper procedures that may impact the sewer mains or laterals.

4. ELEMENT 5: DESIGN AND CONSTRUCTION STANDARDS

SWRCB Requirements:

- 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.*

RWQCB Requirements:

- *Each wastewater collection system agency shall identify procedures and standards for inspecting and testing the installation of new sewer systems, and for rehabilitation and repair projects.*

Design Guidelines

The District has developed its own design and construction standards to ensure that new construction, replacement, and rehabilitation work in the collection system utilizes the most current and relevant standards in the industry. The enforcement of these standards, through design review, construction inspection, and material testing provides assurance and confidence that the District's collection system will effectively provide a long service life and cost-effective system the District's rate payers. The District's Standard Details are as follows:

- Manhole
- Flushing Inlet
- Concrete Encasement
- Lateral Sewer Boring & Jacking
- Lateral Sewer
- Synthetic Rubber Wedged Insert Tee
- Banded Wye Installation
- Solvent Weld Wye Installation
- Backflow Prevention Device Installation
- Property Line Cleanout for Lateral Sewer

The District has minimum design standards that address such issues as design criteria for hydraulics, minimum pipe diameter, installation, material, location, slope and manholes along with the District adopted Standard Specifications, which are based on the "Greenbook Standard Specifications for Public Works Construction" and Caltrans Standard Specifications.

Sanitary Sewer Design Procedures

The current District Sanitary Sewer Design Procedures are being updated as needed. The Design Procedures have been followed by District staff for in-house and consultant designed projects. Additional design procedures include:

- Preliminary Engineering includes planning, scheduling, budgeting, requesting for services or information from utility companies, material testing, survey, hydraulic analysis, preliminary design, and environmental clearance applications such as a California Environmental Quality Act exemption, negative declaration, or environmental impact report.
- Initial Design and Plan Check distribution to utility companies, impacted agencies and involved departments and divisions including material testing labs, surveying departments, and City Public Works Departments for review.
- Final Design includes property acquisition, request for insurance specification, request for encroachment permits, construction quantities and cost estimates, preparation of final plans and specifications, final review and approval, and bid and award.

The procedures ensure the communication, coordination, and collaboration with the involved parties in the design review process.

The complete District Standard Details are available at the District's office at 20863 Stevens Creek Blvd., Suite 100, Cupertino, CA 95014 and will be available on the District's website in Adobe PDF format at <http://www.csd2-3.org>.

Other Design Standards Used

When alternative techniques for pipeline rehabilitation are used on an existing system, the design must conform to ASTM International (formerly American Society for Testing and Materials) and appropriate industry standards. Some of the potential techniques that may be considered for District rehabilitation are:

- Cured-in Place Pipe Lining
- Sliplining
- Fold and Form Lining
- Spirally Wound Pipe Lining
- Directional Drilling
- Pipe Bursting
- Micro-tunneling

The engineering analysis during the design phase must include factors such as:

- Pipe size, length, and depth
- Existing pipe condition
- Capacity requirement
- Access conditions

- Right of way requirements
- Soil condition and cover
- Groundwater conditions
- Project locations
- Traffic conditions
- Environmental impacts

Inspection Guidelines

The District has prepared sewer inspection guidelines for the following:

- Lateral Maintenance Inspection
- Trunk Main Maintenance Inspection
- Pump Station Maintenance Checklist
- Final Inspection for Property Line Cleanout and CCTV
- Inspection Checklist for Sewer Lateral Capping
- Pre and Post Construction Checklist and Punch List
- Contract Change Orders
- Reporting and Documentation
- Miscellaneous and Testing

Construction Management

The District's construction management includes continuous onsite inspection. Inspections are performed during the progress of the work and at the completion of construction. All acceptance testing for gravity sewers is performed in the presence of the District sewer inspectors. The project will not be accepted until all results of the testing of sewers meet the requirements of the project plans and specification and/or the established standards. If the acceptance testing fails, the District will require the contractor to submit a repair plan and conduct the repair per the approved repair plan. Acceptance testing is performed again until the testing results meet the District's requirement.

A full-time District sewer inspector is assigned to CIP projects. The inspector will follow the project until its acceptance. Inspectors are under the supervision of the District Manager-Engineer and should report any discrepancy directly to the supervisor. All communications between the contractor and District Manager-Engineer should be through the project inspector.

The inspector will mark any changes to the design plan in his/her working plans. At the acceptance of the project, the inspector will provide the marked working plans to the engineer for the marking of the "record-drawings" by updating all changes from the original plan drawing.

ELEMENT 6: OVERFLOW EMERGENCY RESPONSE PLAN

SWRCB Requirements:

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.***

RWQCB Requirements:

Each wastewater collection system agency shall develop an overflow emergency response plan with the following elements:

- Notification – Provide SSO notification procedures.***
- Response – Develop and implement a plan to respond to SSOs.***
- Reporting – Develop procedures to report and notify SSOs per SSO Monitoring and Reporting Program.***
- Impact Mitigation – Develop steps to contain wastewater, to prevent overflows from reaching surface waters, and to minimize or correct any adverse impact from SSOs.***

Sewer Overflow Response Plan

I. SSO Detection

- A. Public Observation
- B. Receipt of a Pump Station Alarm
- C. District Personnel Observation

II. SSO Response and Procedure

- A. Safety
- B. Initial Response
- C. Containment
- D. Restoration of Flow
- E. SSO Volume Estimation
- F. Estimating of Recovery Volume of Spilled Sewage
- G. Cleanup
- H. Public Notification
- I. Water Quality Sampling and Testing

III. Weekly SSO Meetings (Failure Analysis Investigation)

IV. SSO Documentation and Reporting

- A. SSO Categories
- B. Internal SSO Reporting Procedures
- C. External SSO Reporting Procedures
- D. Internal SSO Documentation
- E. External SSO Record Keeping Requirements

V. Equipment

- A. Closed Circuit Television (CCTV) Inspection Unit
- B. Camera
- C. GPS (Global Positioning System) Unit
- D. Portable Generators, Portable Pumps, Piping and Hoses

VI. SSO Response Training

- A. Initial and Annual Refresher Training
- B. SSO Response Drills
- C. SSO Training Record Keeping
- D. Contractors Working on District Facilities

INTRODUCTION

The purpose of the Overflow Emergency Response Plan is to support orderly and effective response to SSOs. The OERP provides guidelines and Standard Operating Procedures for District staff to follow in responding to SSOs. This OERP satisfies the SWRCB Statewide General Discharge Requirements.

The District's staff are required to report all wastewater overflows found and to take the appropriate action. The District's goals with respect to responding to SSO's are to:

- Respond quickly to minimize the volume of the SSO;
- Provide work and public safety with adequate posting of notices;
- Eliminate the cause of the SSO;
- Contain the wastewater to the extent feasible;
- Prevent sewage system overflows from entering the storm drainage system or receiving waters to the maximum extent practicable;
- Minimize public contact with the spilled wastewater'
- Mitigate the impact of SSO;
- Meet the regulatory reporting requirements; and
- Evaluate the causes of failures and revise response procedures and this OERP from the debrief and failure analysis.

This plan provides courses of actions for SSO detection, response, containment, volume estimation, recovery, clean up, analysis, documentation, and reporting.

I. SSO Detection

A. Public Observation

Public observation is the most common way that the District is notified of blockages and spills. Contact information for reporting sewer spills and backups are in the phone book and on the District's website: <http://www.csd2-3.org>. The public is instructed to call the District offices at (408) 255-2137 between 8:00 am and 5:00 pm weekday and County Communication at (408) 299-2507 on weekends, holidays and after hours. County Communication then dispatches sewage related called to the first responder.

When a report of a sewer spill or backup is made, District staff receives the call, takes the information from the caller, and fills out the first section of a Service Request.

The person who receives the call will verbally communicate the service request to the Sewer Inspector for follow up.

B. District Personnel Observation

District personnel conduct periodic inspections of its sewer system facilities as part of their routine activities. Any problems noted with the sewer system facilities are reported to appropriate District personnel who in turn respond to emergency situations. Work orders are issued to correct non-emergency conditions.

II. SSO Response and Procedures

A. Safety

The first responder is responsible for following safety procedures at all times. Special safety precautions must be observed when performing sewer work to protect and restore public health, environment, and property from sewage spill events.

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

B. Initial Response

All sanitary sewer system calls require a response to the reported location of the event to minimize or eliminate an overflow. The first responder must arrive at the site of the reported problem immediately and visually check for potential sewer stoppages or overflows.

Response Time – It is the goal of the District to respond to an SSO within 30 minutes of the first call during regular business hours (Monday thru Friday between 8:00 am and 5:00 pm), and within 60 minutes after hours and during weekends and holidays.

First Responder's (First Person at SSO site) Role is to:

- Identify and clearly assess the affected area and extent of spill and note arrival time at spill site.
- Establish perimeters and control zones with traffic cones, barricades, vehicles, or terrain.
- Document conditions upon arrival with photographs.
- Promptly notify the Authorized Representative in the event of a Category 1 SSO or when the spill appears to be large, in a sensitive area, or there is doubt regarding the extent, impact, or how to proceed, and request additional resources (e.g. people, equipment, etc.)
- Contain and control the sewage discharged to the maximum extent possible.
- Make every effort to prevent the discharge of sewage into waterways.
- Restore the flow as soon as practicable and contact the caller for additional information. Depending on the situation, utilize the combination sewer cleaning truck and/or spill response vehicle.
- Return the spilled sewage to the sewer system.
- Restore the area to its original condition (or as close as possible).

Note: Containment is a higher priority than restoring flow, but this depends on the circumstances.

If the problem is in a private sewer lateral and the flow has entered public right of way, then the first responder should:

- Request the resident cease activities that are causing continuation of the sewer spill (e.g. flushing toilets, washing laundry, etc.).
- Request the resident call a plumber to correct the problem with their lateral and stand by until the plumber arrives.
- Contain any spilled sewage that has entered the public right of way and return it to the sanitary sewer system.

C. Containment

Decide whether to proceed with clearing the blockage to restore the flow or to initiate containment measures. The guidance for this decision is as follows:

- Small Spills (less than 50 gallons) – proceed with clearing the blockage.
- Moderate spill where containment is anticipated to be simple (greater than 50 gallons to 999 gallons) – proceed with containment measures.
- Large spills where containment is anticipated to be difficult (greater than 1000 gallons) – proceed with clearing the blockage; however, call for additional assistance after 15 minutes if unable to clear the blockage and implement containment measures.

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

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

D. Restore Flow

Attempt to remove the blockage from the system and observe the flows to ensure that the blockage does not recur downstream.

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

E. SSO Volume Estimation

A variety of approaches exist for estimating the volume of a sanitary sewer spill. It should be noted that the person preparing the estimate should use the method most appropriate to the sewer overflow in question and use the best information available. Below are three commonly used methods:

Measured Volume – The volume of most 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.

- Step 1 Sketch the shape of the contained sewage.
- 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 to gallons.

Duration and Flowrate – Calculating the volume of 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. Duration time for an SSO does not include the time required to perform cleaning efforts.

Flow Rate: The flowrate is the average flow that left the sewage system during the time of the spill. The San Diego Manhole Flowrate Chart is used to estimate the manhole overflow rate. Photographs showing the actual measurement should be taken in documenting the basis for the flowrate estimate.

SSO Start Time: The start time is sometimes difficult to establish. Below are suggestions for determining spill start times:

1. Nearby Witnesses: Witnesses can be used to establish start time. Contact and interview the reporting party, nearby residents, business owners or any witnesses that may have observed the incident. Inquire as to their observations. Spills that occur in public right of 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. Site Conditions: Conditions at the spill site change over 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 information. Taking photographs to document the observations can be helpful if questions arise later in the process.

3. Accounting for Flow Variations: 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.
4. Spill Volume/Flowrate: Start time can be calculated using estimated flowrate and estimated spill volume. District personnel will use the San Diego Manhole Flowrate Chart to estimate the flow rate and to estimate the spill volume using approved methodology (please see method 2 calculation above). The start time then is calculated by using both the estimated flow rate and the estimated spill volume.

SSO Stop Time: The stop time is usually much easier to establish. The stop time is determined when field crews confirm that the SSO has stopped. This typically is the time when the blockage has been removed.

Spill Volume Calculation Using Flow Rate: One duration and flow rate have been estimated the volume of the spill is the product of the duration in hours or days and the flow rate in gallons per hour or gallons per day.

Example: Spill Start Time: 14:00
 Spill Duration: 3 Hours
 Flow Rate: 3.3 gallons per minute

gallons per minute x 60 minutes per hour x 3 hours = 594 gallons

F. Estimating of Recovery Volume of Spilled Sewage

The following methods can be used, depending on the circumstances, for estimating recovered sewage volume:

Two Truck Sewage Recovery Method: The sewage recovery and cleanup effort often requires fresh de-chlorinated water to clean the affected area or storm pipe lines. The collected liquid in the tank would not represent the actual spill sewage volume if water is introduced for cleanup. By using this method, District inspectors will require the contractor to use two Vactor trucks, one with an empty tank at a downstream storm drain manhole or inlet and one with filled fresh de-chlorinated water at an upstream storm drain manhole or inlet where fresh de-chlorinated water is introduced. The total recovered volume will include cleanup water and sewage which can be used to calculate the sewage spill volume. The total amount of the collected water less the cleanup water introduced would provide the actual sewage spill/recovered.

Pipe Volume Calculation: Using this method, before vacuuming the sewage from the storm pipe line into a tank, the contractor will block the storm pipe line downstream, video the storm main and measure the level of liquid standing in the pipe. By knowing the pipe size, level of liquid in the pipe, and the length of pipe filled, the spill sewage volume can be calculated.

G. Water Quality Monitoring

In accordance subsection D.7(v) of the GWDRs, water quality monitoring program to assess impacts from SSOs to surface waters in which 50,000 gallons or greater are spilled into surface water shall include the following:

1. Protocols for water quality monitoring shall include, at minimum, visual inspection, determination of volume of total spills and estimated volume entering the surface water, and/or spill travel time in the surface water where monitoring may not be possible due to safety, access restrictions, etc. concerns.
2. Within 48 hours, water quality sampling for, at a minimum, the following constituents:
 - a. Ammonia
 - b. Appropriate bacterial indicators per the applicable Basin Plan water quality objectives, which may include total and fecal coliform, enterococcus and e-coli.

Water quality analysis shall be performed by an accredited or certified laboratory and instruments/devices used to implement the SSO Water Quality Monitoring Program shall be properly maintained and calibrated, as necessary, to ensure their continued accuracy.

H. Water Quality Sampling and Testing

Water quality sampling and testing is required when 50,000 gallons or greater are spilled to surface water to determine the extent and impact of the SSO. Water quality samples will be taken whenever adverse impacts to surface waters (i.e. fish kill) is visually observed, the sampling can be safely obtained from the impacted water body, and the act of sampling does not prevent the District from completing the necessary SSO response actions.

Conduct water quality sampling within 48 hours after initial SSO notification for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters. Water quality results are required to be uploaded into CIWQS in which 50,000 gallons or greater are spilled to surface waters.

The following steps should be taken to collect water quality samples:

- a) Samples should be collected from upstream of the spill, from the spill area, and downstream of the spill (e.g. creeks).

- b) Samples should be collected near the point of entry of the spilled sewage and every 100 feet along the shore of stationary water bodies.

The City of San Jose Environmental Services Department laboratory will analyze the sample to determine the nature and extent of impact from the discharge. Additional samples will be taken to determine if posting of warning signs should be discontinued. The basic analyses should include pH, temperature, total coliform, fecal coliform, biochemical oxygen demand (BOD), dissolved oxygen, and ammonia nitrogen.

In addition to the above, effective August 28, 2013, the District will take water quality sampling and testing whenever it is estimated that an SSO of fifty (50) gallons or more enters surface waters. The District will collect and test samples from three (3) locations: the point of discharge, upstream of the point of discharge, and downstream of the point of discharge. Constituents tested for shall include Ammonia, Fecal Coliform, E.Coli, Total Coliform, Dissolved Oxygen, and BOD. District will also conduct CAM-17 toxic metal analysis for at least two Category 1 SSO events per year.

I. Clean Up

The recovery and clean up phase begins when the flow has been restored and the spilled sewage has been contained to the extent possible. Clean up and disinfection procedures should be implemented to reduce the potential for human health issues and adverse environmental impacts that are associated with an SSO event. The procedures described are for dry weather conditions. The contractor under the direction of the District Inspector shall follow the following guidelines:

Hard Surface Areas

- Collect all signs of sewage solids and sewage related material either by hand or with the use of rakes and brooms.
- Wash down the affected area with clean de-chlorinated water until the water runs clear. They should take all reasonable steps to contain and vacuum up the wastewater which should be returned to the sanitary sewer system.
- Disinfect all areas that were contaminated from the overflow using the disinfectant solution of household bleach diluted 10:1 with water. Apply minimal amounts of disinfectant solution using a hand sprayer.
- Document the volume and application method of disinfectant that was employed.
- Allow the area to dry and repeat as necessary.

Landscaped and Unimproved Natural Vegetation

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

- Wash down the affected area with clean de-chlorinated water until the water runs clear. The flushing volume should be approximately three times the estimated volume of the sewer spill.
- Either contain or vacuum up the wash water so that none is released.
- Allow the area to dry and repeat as necessary.

Natural Waterways

The California Department of Fish and Wildlife should be notified in the event an SSO impacts any creeks or natural waterways. CDFW will provide the professional guidance needed to effectively clean up spills that occur in these sensitive environments. Contact CDFW at:

(707) 944-5500 Monday-Friday, 8 AM – 5 PM

(888) 334-2258 After Hours

If there is no immediate response, follow up with Cal OES and request CDFW call back.

Clean up should proceed quickly to minimize negative impact.

Wet Weather Modifications

Omit flushing and sampling during storm events wherein flushing and sampling may be impractical and unsafe as well as provide meaningless results.

Follow-Up Activities

- If sewage has reached the storm drain system, the combination sewer cleaning truck should be used to vacuum/pump out the catch basin and any other portion of the storm drain that may contain sewage. District Inspectors may require the contractor to use two Vactor trucks, one with an empty tank at a downstream storm drain manhole or inlet and one with filled fresh de-chlorinated water at an upstream storm drain manhole or inlet where fresh de-chlorinated water is introduced.
- In the event that an overflow occurs at night, the location should be re-inspected first thing the following day. The inspector should look for any signs of sewage solids and sewage-related material that may warrant additional cleanup activities.

J. Public Notification

Post “Raw Sewage” signs and place barricade/cones with caution tape to keep vehicles and pedestrians away from contact with spilled sewage. Do not

remove the signs until directed by the Santa Clara County Health Department.

Creeks and streams that have been contaminated as a result of an SSO will have signs posted at visible access locations until the risk of contamination has subsided to acceptable levels.

Warning signs, once posted, will be inspected every day to ensure that they are still in place.

Major spills may warrant broader public notice. The District Manager-Engineer will authorize contact with local media when significant areas may have been contaminated by sewage.

III. Weekly SSO Meetings (Failure Analysis Investigation)

The objective of the failure analysis investigation is to determine the “primary cause” of the SSO and to identify corrective actions needed that will reduce or eliminate future potential for the SSO to recur. Every SSO event is an opportunity to evaluate the response and reporting procedures. Each overflow event is unique, with its own elements and challenges including volume, cause, location, terrain, and other parameters.

All relevant participants meet weekly to review the procedures used and to discuss what worked and where improvements could be made in responding to and mitigating future SSO events. The results of the debriefing should be recorded and tracked to ensure the action items are completed.

The investigation should include:

- Reviewing and completing the Sanitary Sewer Overflow Report
- Reviewing past maintenance records
- Reviewing available photographs
- Viewing a CCTV inspection video to determine the condition of the line segment immediately following the SSO and reviewing the inspection reports and logs.
- Reviewing input from District personnel who responded to the spill.

IV. Weekly SSO Meetings (Failure Analysis Investigation)

All SSOs should be thoroughly investigated and documented for use in managing the sewer system and meeting established reporting requirements. Reporting and documentation requirements vary based on the type of SSO.

SSO Categories

The SWRCB has established guidelines for classifying and reporting SSOs. There are three categories of SSOs as defined by the SWRCB:

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:

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 ground water infiltration basin (e.g., infiltration pit, percolation pond).

Category 2 – Discharges of any untreated or partially treated wastewater of 1,000 gallons or greater resulting from an enrollee’s sanitary sewer system failure or flow condition that do not reach surface water, a drainage channel, or a MS4 unless the entire SSO discharged to a storm drain system is fully recovered and disposed of properly.

Category 3 – All other discharges of any untreated or partially treated wastewater from an enrollee’s sanitary sewer system failure or flow condition.

Private Lateral Sewage Discharge (PLSD) – Discharges of any 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 sewer assets. PLSD’s that the enrollee becomes aware of may be voluntarily reported to the California Integrated Water Quality System Online SSO Database.

A. Internal SSO Reporting Procedures

Internal Reporting Category 1 or 2 SSOs

- The first responder will, immediately following the SSO event, notify the Authorized Representative.
- The first responder will fill out the SSO Report Form and make the report available to the Authorized Representative. The Authorized Representative will meet with the District inspector at the site of the SSO event to assess the situation and to document the conditions with photos immediately after the SSO event.
- In the event of a Category 1 or 2 SSO or an overflow in a sensitive area, the Authorized Representative will notify the District Manager-Engineer accordingly.

Internal Reporting Category 3 SSOs

- The first responder will notify the Authorized Representative immediately after confirming the SSO event.
- The first responder will fill out the SSO Report Form and make the report available to the Authorized Representative.

B. External SSO Reporting Procedures

- The California Integrated Water Quality System electronic reporting system will be used for reporting SSO information to the SWRCB when required. If there are no SSOs during the calendar month, the Legally Responsible Officer will certify a no-spill report. The LRO will add a “to do task item” on his/her calendar as a reminder to submit timely No Spill Certification.
- If CIWQS is unavailable, the Authorized Representative will forward all required information to the Region 2 Water Quality Control Board (RWQCB) office in accordance with the time schedules identified above. In such event, the District will submit the appropriate reports using CIWQS as soon as practical.

External Reporting Category 1 or 2 SSOs

- Within two hours of becoming aware of any Category 1 SSO greater than or equal to 1,000 gallons discharged to surface water or spilled in a location where it probably will be discharged to surface water, notify the California Office of Emergency Services (Cal OES, (800) 852-7550) and obtain a notification control number. The District will also notify the Santa Clara County Department of Environmental Health of the Category 1 SSO event within this time period.
- The District shall provide updates to Cal OES regarding substantial changes to estimated volume of untreated or partially treated sewage discharged and any known change to impact.
- Within 3 business days of being notified of the Category 1 or 2 spill event, the LRO or Authorized Representative will submit the draft SSO report using CIWQS.
- Within 15 calendar days of the SSO end date, the LRO will certify the final report using CIWQS after it is reviewed for accuracy by the First Responder and Authorized Representative. The LRO will update the certified report as new or changed information becomes available. The updates can be submitted at any time and must be certified.

External Reporting Category 3 SSOs

- Within 30 calendar days of the end of the month in which the SSO occurred, the Authorized Representative will certify the electronic report in CIWQS. The report will include the information to meet the GWDR requirements.
- External Reporting Private Lateral Sewage Discharges
- The LRO may report private lateral SSO using CIWQS and specifying that the sewage discharge occurred and was caused by a private lateral and identifying the responsible party, if known.

C. Internal SSO Documentation

- Category 1 and 2 SSOs
- The following steps are taken to document both Categories 1 and 2 SSOs for internal documentation:

- The first responder will complete the Sanitary Sewer Overflow Report Form and provide copies to the Authorized Representative.
- The Authorized Representative will prepare a file for each individual SSO. The file should include the following information:
 - Initial service call information
 - Sanitary Sewer Overflow Report form
 - Copies of the CIWQS report forms
 - Volume estimates
 - Weekly SSO meetings

D. External SSO Record Keeping Requirements

- The GWDRs require that individual SSO records be maintained by the District for a minimum of 5 years from the date of the SSO. This period may be extended when requested by the Regional Water Board Executive Officer. All records shall be made available for review upon State or Regional Water Board staff's request. Records shall be retained for all SSOs, including but not limited to the following when applicable:
 - Copy of Certified CIWQS report(s);
 - All original recordings for continuous monitoring instrumentation;
 - Service call records and complaint logs of calls received by the District;
 - SSO calls;
 - SSO records;
 - Steps that have been and will be taken to prevent the SSO from recurring and a schedule to implement those steps;
 - Work orders, work completed, and any other maintenance records from the previous five years which are associated with responses and investigations of system problems related to SSOs;
 - A list and description of complaints from customers or others from the previous five years; and
 - Documentation of performance and implementation measures for the previous five years.
- If the SSO water samples are taken for water quality results, the records of monitoring information shall include the following:
 - The date, exact place, and time of sampling or measurements;
 - The individual(s) who performed the sampling or measurement;
 - The date(s) analyses were performed;
 - The individual(s) who performed the analyses;
 - The analytical technique or method used; and
 - The result of such analyses.

E. Other Reporting/SSO Record Keeping Requirements

- SSO Technical Report shall be submitted within 45 calendars after the end date of any Category 1 SSO in which 50,000 gallons or greater are spilled to surface waters.
- “No Spill” certification shall be completed within 30 calendar days of the end of the month.
- Collection System Questionnaire shall be updated and certified every 12 months.

V. Equipment

The District maintains or can access specialized equipment that is required to support this Overflow Emergency Response Plan including:

Closed Circuit Television Inspection Unit – A CCTV Inspection Unit is required to determine the primary cause for all SSOs from gravity sewers.

Camera – A digital, disposable, or cell phone camera is required to record the conditions upon arrival, during clean up, and upon departure.

Portable Generators, Portable Pumps, Piping, and Hoses – Portable generators, pumps, piping, and hoses are needed to pump around failed sewers, force mains, or pump stations.

VI. SSO Response Training

Initial and Annual Refresher Training

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

SSO Response Drills

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

SSO Training Record Keeping

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

Contractors Working on District Sewer Facilities

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

ELEMENT 7: FATS, OILS, AND GREASE (FOG) CONTROL PROGRAM

SWRCB Requirements:

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.***

RWQCB Requirements:

- Each wastewater collection system agency shall evaluate its service area to determine whether a FOG control program is needed. If so, a FOG control program shall be developed as part of the SSMP. If an agency determines that a FOG program is not needed, the agency must provide justification for why it is not needed.***

County Sanitation District No. 2-3 Pretreatment Program works closely with the Watershed Protection Division of the City of San Jose Environmental Services Department. This division manages the FOG program for the City of San Jose Environmental Services Department.

Fats, oils, and grease are produced from residential and commercial food preparation activities and are pollutants of concern due to their potential clogging impact on the sanitary sewer collection system. The goal of the District's FOG Control Program elements is to reduce the number of SSOs caused by FOG in the collection system by minimizing FOG discharged into the sanitary sewer system. CSD 2-3 FOG Control Program includes the following elements as appropriate:

- 1) An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;
- 2) The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;
- 3) Requirements to install grease removal devices (Such as traps or interceptors) design standards for the grease removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements;
- 4) Authority to inspect grease producing facilities, enforcement authorities, and enforce the FOG ordinance; and
- 5) An identification of sewer system sections subject to FOG blockages and establish a cleaning maintenance schedule for each section

Public Education and Outreach

The goal of FOG public education and outreach is to educate grease producing facilities about preventing grease blockages through proper handling and disposal of FOG. When a grease related issue occurs in a residential area, District staff distributes educational materials to nearby residents. These door hangers notify the resident there was a grease issue in their area and include information on proper disposal of FOG.

In addition, CSD 2-3 staff visits recently opened restaurants to distribute educational material providing information of proper disposal of FOG and best management practice. Also, District uploads an annual report on their website that educates the community of FOG.

Fog Disposal

FOG is collected from commercial food service establishments (FSEs) by private grease haulers.

Best Management Practices (BMP)

District inspectors educate FSE staff on BMPs that protect the collection system and maximize removal efficiency of grease control devices and strongly encourage their use. BMPs are available in multiple languages and are given to the FSEs during inspections.

Grease Control Devices (GCD)

GCD Installation Requirements

District Operations Code Article V, Section 5.25 states “Any Food Service Establishment, or other type of business or establishment where Grease or other viscous, obstructing, or objectionable materials may be discharged into a public or private sewage main or disposal system, shall have a Grease Control Device and related plumbing of a size and design approved by the District manager.”

GCD Design Standards

An FSE’s potential for discharging grease into the sanitary sewer determines the size and type of GCD required to treat their waste stream. Some of the factors considered to determine the required GCD size include the size of the restaurant, the type and amount of cooking and cleaning equipment installed, and the number of meals served. GCD requirements range from a small grease trap installed inside the facility to a large in ground grease interceptor. The District has a variance procedure for these requirements available by request on a case by case basis for facilities where implementing the typical requirements are not physically feasible.

GCD Installation

FSEs receive their GCD requirements through the process for applying for building permits for new construction or remodeling of existing facilities. FSEs submit their plans for Planning, Building, and Code Enforcement for review, and are given a list of clearances to obtain which must be completed prior to issuance of building permits.

The plans are reviewed by the District engineers, who determine if and what type of GCD will be required. The size and type of GCD required is determined based upon the facility’s potential for discharging grease in the wastewater. Requirements range from a small grease trap installed inside the facility to a large in ground grease interceptor.

After the plan-check, a letter is generated summarizing the requirements. The applicant and the building department are given a copy of the letter. District inspectors verify the installation and connection of the GCD. More details of GCD installation can be found in District Operations Code Article V, Section 5.25.

GCD Maintenance Requirements

More details of GCD installation can be found in District Operations Code Article V, Section 5.25. District inspectors review records during FOG inspections to verify compliance with these requirements. Dischargers shall maintain records on site for a period of at least 3 years as follows:

- 1) Dischargers with an installed Grease Control Device shall maintain records showing that the Grease Control Device has been properly maintained and cleaned as required by subsections A and B.

- 2) Food service Establishments shall maintain records showing the following related to all Grease hauled off site: date and time material removed off site; volume removed; hauler name: truck license number, type of Grease removed, and final destination of material collected.

Inspection and Enforcement Procedures

District Operations Code Article VI, Section 6.02 grants the authority to manage and/or prohibit discharges to the sanitary sewer collection system through termination of service and permit revocation, and District Operations Code Article V, Section 5.39 grants authority to inspect facilities connected to the sanitary sewer collection system.

District Operations Code Article V, Section 5.39(A) reads as follows “The District Manager and the Director and other duly authorized employees and agents of the district or the City of San Jose bearing credentials and identification shall have the right to access upon all properties for the purpose of inspecting any sewer or storm drain connection, including all discharge connections of roof and surface drains and plumbing fixtures; inspecting, observing, measuring, photographing, sampling, and testing the quality, consistency, and characteristics of sewage and industrial wastewaters being discharged into any public sewer or natural outlet; and inspecting and copying any records relating to quantity and quality of wastewater discharges, including but not limited to water usage and effluent discharged, chemical usage, and hazardous waste records.”

Staffing

CSD 2-3 has approximately 5 active food service establishments as of 2019. The District has one FOG inspector assigned to inspect FSEs and enforce FOG ordinances.

GCD Inspections

The District conducts GCD inspections at all the Districts FSEs with GCDs. The district inspects all GCDs (traps, interceptors, powered grease control devices) at a minimum of once per year. GCD inspection frequencies may increase based upon site-specific findings. Basic steps of a GCD inspection include the following:

Basic steps of an FSE inspection include the following

- FSE Pre-Inspection
 - CSD 2-3 Engineer will assign annual workload to district inspector
 - Although FSE inspections are unannounced, plan inspections to accommodate FSE specific scheduling issues, such as avoiding busy lunch hours.
 - Determine if the facility has a plan check requirement, and what they are. Identify whether the facility has a GCD, type of GCD, if the facility is the responsible party for the GCD, any variance to GCD cleaning frequencies issued, previous violations, previous MNPs distributed, etc. Review violation history, previous GCD inspection information, and other pertinent information.
 - Gather and prepare any educational materials and documentation...etc.

- FSE Inspection
 - Introduce and identify yourself to CSD 2-3, typically to the owner or manager on duty.
 - Explain the purpose of the inspection, what areas and documentation need inspecting, and request permission to inspect facility.
- GCD records review
 - Request to review self-maintenance logs and/or pumping receipts.
 - Review available records for compliance with applicable ordinance; it is the facility's responsibility to keep three (3) years of records on-site and available for inspection.
- GCD review
 - Locate and identify GCD. Confirm type, size and connected equipment, including plumbing fixtures discharging to the sanitary sewer and compare them to the wastewater plan check information (if available) in the pre-inspection report.
 - Check the parking lot and perimeter to look for GCDs.
 - Document if the pre-inspection report has incomplete information needs to be updated (e.g. GCD found to be a different size, different fixtures connected to GCD, more fixtures discovered, untreated grease waste streams identified, etc.).
 - Conduct GCD inspections, if needed, and record information needed to require adjustments to minimum GCD cleaning frequencies.
- Kitchen grease control BMP review
 - Inspect floor drains and floor sinks. Are grates/screens present and secure? Is there excessive food waste or debris? Are they flowing freely?
 - Are there floor mats? Where are they cleaned?
 - Is there a mop sink? Is it being used for anything other than intended purpose? Are grates/screens present and secure? Is there excessive food waste or debris?
 - Is there a grinder? If yes, is it plumbed to grease trap? If there is no grinder, where is food waste scraped or rinsed?
 - Are there screens for the sinks? Are employees using them properly?
 - Is there a dishwasher? Is it plumbed to grease trap?
 - Any signs of drain problems? Is there a plumbing snake? Are there drain cleaners?
 - Are there hoods and/or exhaust ducts? If the facility self-cleans vent filters, ask about the emulsified grease (detergents, caustic, acid, etc.) disposal method and document.
- FSE inspection report
 - Document findings and generate FSE Inspection Report (in field) detailing violations, corrective actions, and due dates (if any), as well as recommendations.
- Exit interview
 - Give a copy of the FSE Inspection Report to the responsible party.
 - Educate the Responsible Party on the importance of kitchen BMPS.

- Present and review BMPs with the Responsible Party. When appropriate, give BMPs in English as well as other languages.
- Follow-up inspections and case completion
 - If needed, conduct follow-up FSE inspections to ensure corrective actions are completed and the facility is back in compliance.
 - Upload FSE Inspection Report(s) into Lucity.

FOG Blockages and Maintenance Schedule

The District is responsible for the identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section. In addition, each SSO is thoroughly reviewed to determine if changes to the maintenance frequency of the sanitary sewer segment(s) are needed.

ELEMENT 8: SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

SWRCB Requirements:

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 sizes, 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 requirement as described in Section D.14 of Order No. 2006-0003-DWQ.***

RWQCB Requirements:

- Capacity Assessment: Each wastewater collection system agency shall establish a process to assess the current and future capacity requirements for the collection system facilities.***
- System Evaluation and Capacity Assurance Plan: Each wastewater collection system agency shall prepare and implement a capital improvement plan to provide hydraulic capacity of key sewer system elements under peak flow conditions.***

(A) Scheduled Inspections and Condition Assessment

Historically, from 1948 to the mid-1990s, an understanding of the serviceability of the District's system was determined from maintenance records. Beginning in 1998, condition assessment of the District's collection system was based on maintenance and repair records confirmed by follow up video inspections. These data were then used to determine frequency of maintenance cycles to schedule, whether annually, as a minimum, or more frequently as dictated by observed conditions.

In 2006, the District implemented a 5-Year CIP. One of the main functions of the CIP is to administer and conduct planning efforts that include capacity and condition assessments along with recommendation and prioritization of sewer repair and rehabilitative construction projects. In addition, the Risk Assessment Plan has been a useful tool to identify those locations where inclusion in the CIP of improvements to the system will eliminate or greatly minimize incidents of SSOs that might flow directly to a creek. The 5-Year CIP program is annually updated, and the District anticipates that additional CIP projects will be identified once the remaining mains are CCTVed and I/I analysis is completed.

(B) Risk Assessment Plan

Another aspect of an agency's system evaluation must include an understanding and awareness of exposure to the potential of sewage overflows entering waterways that lead to receiving waters of fishable creeks and, ultimately for this District, the San Francisco Bay. To address or reduce these potential risks the District's personnel must have knowledge of the locations of drainage channels and storm water collection facilities that are in close proximity to sewer manholes or lift stations. Locations, which are recognized as most vulnerable, are noted on maps of the storm water collection infrastructure and the pertinent sewer system maps.

Next, strategies must be developed to prevent or contain effluents that enter those facilities from reaching a fishable creek or protected habitat in the event of a spill. Effective strategies include use of containment devices, installation of by-pass systems, high-water sensing devices and organized mobilization of responders trained to contain the overflow, control the cause and clean-up contaminants.

Prioritization of funding for the implementation of permanent prevention devices must be given to those circumstances where violation of the environment and loss of agency monetary assets due to imposed fines are most at risk. Projects thus identified must be given highest priority in the District's annual CIP allocations.

(C) Capacity Assurance Plan

The District is considering installing some "Smart Covers" to alert District staff when high water levels indicate the likelihood of a sewer overflow. These devices may also be used to help obtain flow measurement in the mains. The flow measurements derived in this manner may be further validated by comparison with flow meter data obtained by portable flow meters.

If necessary to pinpoint I/I sources, the District will issue service orders to appropriate companies to perform general I/I reconnaissance work, smoke testing, and sewer and manhole condition assessment for unwanted inflow and infiltration. The sources of inflow may be down spouts, driveway, or yard drains from illegal private property connections. The occasion for groundwater infiltration or sewage ex-filtration in the District's sewer mains and service laterals, due to offsets, separated joints or other structural failure, may be discovered by video inspections, air testing or hydrostatic testing techniques. The most recent Flow Monitoring was completed in June 2009. Additional CCTV inspection and Inflow/Infiltration Study has been performed to assess the exact location of the I/I source.

As a means of assuring adequate capacity, staff will review historic and real time flow monitoring data, engineering/inspection reports, and sewer maintenance records to identify areas of high groundwater infiltration, and rainfall inflow and infiltration. Through flow monitoring data, the District Engineer will also identify abnormal sewer flow behavior that might be related to capacity or condition problem. In such case, the District engineer and sewer maintenance staff will work closely together to find the cause and develop solutions to correct the condition.

(D) Capital Improvement Plan Schedule

The District has developed a 10-Year CIP Master Plan, which is subject to completion of the video inspection and I/I analysis. The Master Plan is modified regularly as additional information is gained related to condition assessment, risk, and capacity issues. It is also considered annually as the District develops each fiscal year budget.

ELEMENT 9: MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS

SWRCB Requirements:

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.***

RWQCB Requirements:

Each wastewater collection system agency shall monitor the effectiveness of each SSMP element and update and modify SSMP elements to keep them current, accurate, and available for audit as appropriate.

Monitoring of the District's SSMP focuses on each element of its implementation and measurement, ensuring that stated objectives are valid and achievable, tasks cited in each element are met and being implemented, and the responsibility for implementation is identified.

Monitoring the measurement criteria ensures that:

- 1) Performance standards are effective.
- 2) Performance standards are quantifiable.
- 3) Measurement used is comparable to established industry standards.
- 4) Trending to improve and compare to performance history.
- 5) Measurement used for all elements results in a net SSO reduction or stabilization.

An assessment can be made by establishing specific performance indicators for each element. The quantitative performance indicators that are monitored include:

- Total number of SSOs;
- Spill response times;
- Number of SSOs for each cause (roots, grease, debris, pipe failure, capacity, pump station failure, and others);
- Portion of sewage contained compared to total volume spilled;
- Volume of spilled sewage discharged to surface water;
- Miles of sanitary sewer lines cleaned; and

- o Number of capital projects completed and their effectiveness.

The SSMP shall be reviewed monthly by the Authorized Representative to ensure all the provisions are implemented. The effectiveness shall be discussed during regularly scheduled field inspectors and safety training meetings. These meetings include field inspectors, administrative and engineering staff. Although the evaluation of these measurements on a monthly basis is important, the trending analysis of these measurements has the most value for measuring the SSMP's overall success. The selected trending data include:

	SSMP Element	Performance Parameters	
		Monitoring	Measurement
1	Collection System Management Goals	<ul style="list-style-type: none"> • Goals reflect District goals and priorities 	<ul style="list-style-type: none"> • Degree of goal achievement
2	Organization	<ul style="list-style-type: none"> • Current staff and positions are reflected 	<ul style="list-style-type: none"> • Adequate staffing levels to achieve SSMP goals
3	Legal Authority	<ul style="list-style-type: none"> • Legal authorities are properly cited 	<ul style="list-style-type: none"> • Adequate legal authority
4	Operation and Maintenance Program	<ul style="list-style-type: none"> • Maintenance measures reflect current program and best current practices • Maintenance measures are being implemented • Are maintenance measures positively affecting measurement criteria • Resources are adequate to achieve success • CIPs address rehabilitation priorities and needs 	<ul style="list-style-type: none"> • Number and volume of main/lateral SSOs • Trend of main/lateral SSOs • Number of pump station failures • Length of lines cleaned • Length of lines CCTV'd • Number of capital projects completed • Mapping is accurate and current • Equipment and tools are adequate to perform work • Staff has adequate training and properly certified
5	Design & Construction	<ul style="list-style-type: none"> • Design and construction QA measures in place • Current standards are utilized and are appropriate • New technology and methods are considered 	<ul style="list-style-type: none"> • Number of design errors found during construction • Number of construction deficiencies found after construction • Design and construction standards are current <ul style="list-style-type: none"> • Design incorporates the use of new technologies

SSMP Element		Performance Parameters	
		Monitoring	Measurement
6	Overflow Emergency Response Plan	<ul style="list-style-type: none"> • Emergency response measures reflect current procedures • Response actions reflect best and current practice 	<ul style="list-style-type: none"> • Staff follows steps identified in program • Response times • Percent of SSO captured • Reporting compliance to RWQCB/SWRCB
7	Fats, Oils, and Grease (FOG) Control Program	<ul style="list-style-type: none"> • Description matches current program • Implementation of all FOG related actions • Timeline for FOG actions 	<ul style="list-style-type: none"> • Number of grease related blockages and SSO's • Number of inspections performed • Percentage of businesses in compliance
8	System Evaluation and Capacity Management	<ul style="list-style-type: none"> • Capacity analysis study reflects actual conditions and utilizes accepted design standards and approaches • Capacity issues are investigated in further detail or addressed as CIP in accordance with District priorities • CIP reflects current priorities • Progress of CIP projects 	<ul style="list-style-type: none"> • Number of study identified capacity issues • Number of SSOs caused by capacity limitations • Number of CIP projects completed • On-schedule record of CIP projects • Development of medium- and long-term CIP
9	Monitoring, Measurement, and Program Modifications	<ul style="list-style-type: none"> • Monitoring, measurements, and modifications result in continuous improvement of SSMP 	<ul style="list-style-type: none"> • Monitoring and validation of SSMP Elements • Measurements are appropriate and meaningful
10	SSMP Program Audits	<ul style="list-style-type: none"> • SSMP and elements are being evaluated for effectiveness • Successes highlighted and challenges addressed through modifications 	<ul style="list-style-type: none"> • Audits performed annually • Results reported with SSO report to the County Executive Office by 3/15 • Modifications are made as necessary

SSMP Element		Performance Parameters	
		Monitoring	Measurement
11	Communication Program	<ul style="list-style-type: none"> • Complete and accurate stakeholder information • Communication modes are being utilized 	<ul style="list-style-type: none"> • Activity on website access • Number of public/private inquiries

The following table will be utilized to assess effectiveness to reduce SSOs.

Cause of SSO	Number		Percent of Total	
	Laterals	Mains	Laterals	Mains
Blockage:				
Roots				
Grease				
Debris				
Debris from Laterals				
Vandalism				
Animal Carcass				
Construction Debris				
Multiple Causes				
Infrastructure Failure				
Inflow & Infiltration				
Electrical Power Failure				
Flow Capacity Deficiency				
Natural Disaster				
Bypass				
Cause Unknown				
Total				

SSMP Updates

The SSMP and its elements shall be updated in accordance with current regulatory guidelines and as a result of monitoring recommendations by District staff. Performance evaluations are on-going because daily operations of the District include all the elements of the SSMP program. The District shall revise and update its CIP program each year to include upgrades to its infrastructure in compliance with SSMP requirements. Allocation of funds for such upgrades shall be identified in the CIP program and annual budget submitted to the District's Board of Directors for approval.

The District will determine the need to update its SSMP more frequently based on the results of the bi-annual audit as required by the GWDR and the performance of its sanitary sewer system. The process to complete the update will be identified if the District determines that an update is warranted. The update will be completed within one year following identification of the need for an update.

The authority for approval of changes such as employee names, contact information, or minor procedural changes is delegated to the District Manager-Engineer.

ELEMENT 10: SSMP PROGRAM AUDITS

SWRCB Requirements:

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 subsection D.13 of SWRCB Order No. 2006-0003-DWQ, including identification of any deficiencies in the SSMP and steps to correct them.

RWQCB Requirements:

Each wastewater collection system agency shall conduct an annual audit of their SSMP which includes any deficiencies and steps to correct them (if applicable), appropriate to the size of the system and the number of overflows and submit a report of such audit.

The District shall perform internal audits evaluating its SSMP and its compliance with the GWDR every two years. A report shall be prepared and kept on file at the District office. The report shall include an evaluation of the effectiveness of the SSMP along with recommendations and suggested improvements to the governing body.

The intent of the SSMP Audit is to provide controls to ensure that all elements within the SSMP are being implemented and properly managed. The SSMP Audit is a critical process that promotes continuous improvement, ultimately resulting in the most effective and efficient SSMP possible for the District. The most recent SSMP Audit was performed and completed by the required deadline of March 18, 2017.

The audit process is a self-assessment of the District's SSMP that will include the examination of events, experiences, and data from the time period since the last audit. The audit will highlight successes and challenges from this time period and attempt to correlate the degree to which the SSMP had influenced that outcome.

A comprehensive audit should address all elements of the SSMP to properly demonstrate the degree of effectiveness being achieved. The following are some of the proposed areas to be addressed in the audit:

- a. The stated purpose or goals are valid and reflects current regulation and District Policy
- b. The executable actions reflect current processes and procedures
- c. All other information shown is correct and current
- d. The status of actions or improvements that were previously proposed in the SSMP
- e. All unplanned actions or improvements that were implemented

- f. Modifications made to the SSMP since the last audit
- g. The monitoring and measurements identified in Section IX
- h. Overview of the SSMP's effectiveness in achieving the stated goals
- i. Proposed changes to the SSMP

A summarized report of the SSMP Audit will be made public through the District's website and the full SSMP Audit is kept on file.

The audit shall checklist consists of the following elements:

		YES	NO
ELEMENT 1 – GOALS			
A.	Are the goals stated in the SSMP still appropriate and accurate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ELEMENT 2 -- ORGANIZATION			
A.	Is the District Services Key Staff Telephone List current?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
B.	Is the Sanitary Sewer Overflow Responder Telephone List current?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
C.	Is Figure 1 of the SSMP, entitled "District Organization Chart," current?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
D.	Are the position descriptions and accurate portrayal of staff responsibilities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
E.	Is Table 2 of the SSMP, titled "Chain of Communication for Reporting and Responding to SSOs," accurate and up-to-date?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ELEMENT 3 – LEGAL AUTHORITY			
Does the SSMP contain excerpts from the current County Sanitation District No. 2-3 Operations Code documenting the District's legal authority to:			
A.	Prevent illicit discharges?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
B.	Require proper design and construction of sewers and connections?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
C.	Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the District?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
D.	Limit discharges of fats, oil and grease?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
E.	Enforce any violation of its sewer ordinances?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ELEMENT 4 – OPERATIONS AND MAINTENANCE			
Collection System Maps			
A.	Does the SSMP reference the current process and procedures for maintaining the District's wastewater collection system maps?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

		YES	NO
B.	Are the District's wastewater collection system maps complete, current, and sufficiently detailed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Resources and Budget			
C.	Does the District allocate sufficient funds for the effective operation, maintenance and repair of the wastewater collection system and is the current budget structure documented in the SSMP?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Prioritized Preventive Maintenance			
D.	Does the SSMP describe current preventive maintenance activities and the system for prioritizing the cleaning of sewer lines?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
E.	Based upon information in the Annual SSO Report, are the District's preventive maintenance activities sufficient and effective in minimizing SSOs and blockages?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Scheduled Inspections and Condition Assessments			
F.	Is there an ongoing condition assessment program sufficient to develop a capital improvement plan addressing the proper management and protection of infrastructure assets? Are the current components of this program documented in the SSMP?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Contingency Equipment and Replacement Inventory			
G.	Does the SSMP list the major equipment currently used in the operation and maintenance of the collection system and document the procedures of inventory management?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
H.	Are contingency equipment and replacement parts sufficient to respond to emergencies and properly conduct regular maintenance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Training			
I.	Is the training calendar current?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
J.	Does the SSMP document current training expectations and programs within the District's Wastewater Division?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Outreach to Plumbers and Building Contractors			
K.	Does the SSMP document current outreach efforts to plumbers and building contractors?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

ELEMENT 5 – DESIGN AND PERFORMANCE STANDARDS			
A.	Does the SSMP contain current design and construction standards for the installation of new sanitary sewer systems, pump stations and other appurtenances and for the rehabilitation and repair of existing sanitary sewer systems?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ELEMENT 6 – OVERFLOW AND EMERGENCY RESPONSE PLAN			
A.	Does the District's Sanitary Sewer Overflow and Backup Response Plan establish procedures for the emergency response, notification, and	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	reporting of sanitary sewer overflows (SSOs)?		
B.	Are District staff and contractor personnel appropriately trained on the procedures of the Sanitary Sewer Overflow and Backup Response Plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
C.	Considering performance indicator data in the Annual SSO Report, is the Sanitary Sewer Overflow and Backup Response Plan effective in handling SSOs in order to safeguard public health and the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ELEMENT 7 – FATS, OILS, AND GREASE (FOG) CONTROL PROGRAM			
A.	Does the Fats, Oils, and Grease (FOG) Control Program include efforts to educate the public on the proper handling and disposal of FOG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
B.	Does the District’s 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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
C.	Are requirements for grease removal devices, best management practices (BMP), record keeping and reporting established in the District’s FOG Control Program?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
D.	Does the District have sufficient legal authority to implement and enforce the FOG Control Program?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
E.	Is the current FOG program effective in minimizing blockages of sewer lines resulting from discharges of FOG to the system	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ELEMENT 8 – SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN			
A.	Does the County Sanitation District No. 2-3 Sanitary Sewer Master Plan evaluate hydraulic deficiencies in the system, establish sufficient design criteria and recommend both short and long term capacity enhancement and improvement projects?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
B.	Does the District’s Capital Improvement Plan (CIP) establish a schedule of approximate completion dates for both short and long-term improvements and is the schedule reviewed and updated to reflect current budgetary capabilities and activity accomplishment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ELEMENT 9 – MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS			
A.	Does the SSMP accurately portray the methods of tracking and reporting selected performance indicators?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
B.	Is the District able to sufficiently evaluate the effectiveness of SSMP elements based on relevant information?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ELEMENT 10 – SSMP AUDITS			
A.	Will the SSMP Audit be submitted with the SSO Annual Report to the Regional Water Board by March 15 th of the year following the end of the calendar year being audited?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ELEMENT 11 – COMMUNICATION PROGRAM			
A.	Does the District effectively communicate with the public and other agencies about the development and implementation of the SSMP and continue to address any feedback?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	<p><i>The District provides an Annual Report to the public which details the District's maps, FOG related issues, sanitary sewer overflows, preventing sewer blockages, handling grease waste and pharmaceuticals. Any feedback that the District receives on the material in the report is followed up by Staff. The District's SSMP will be posted to the website by November 30, 2011.</i></p>		
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ELEMENT 11: COMMUNICATION PROGRAM

SWRCB Requirements:

Each 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.

Communications with and outreach to residential, commercial, and industrial customers and the general public

County Sanitation District No. 2-3's communications program involves mailing the District's Annual Report to the public. The District will post on its website the SSMP components and other related information for input by the public as well as dissemination of important SSMP requirements. The District will also be conducting public outreach and education to residents and businesses related to sanitary sewer overflows, preventing grease blockages and Best Management Practices for the handling of grease waste. Additional links such as the Association of Bay Area Governments' (ABAG) "Sewer Smart," the Santa Clara Valley Water District's "Best Management Practices" for storm water discharges, and the District's Standard Design Details are available for residential and commercial customers.

Communication with other local sanitary sewer agencies

The District is a tributary agency to the City of San Jose's and City Santa Clara's Water Pollution Control Plant. Other tributary agencies include the City of Milpitas, West Valley Sanitation District, Cupertino Sanitary District and the Burbank Sanitary District. Collectively, these agencies along with the District have been included in a communication program initiated by the City of San Jose to establish a collaborative approach during the development and implementation of, and future improvements, to the SSMP.

Wastewater collection agencies share the same watershed basins with storm water collection agencies or cities and Santa Clara Valley Water District. Since all are subject to State WDR and/or NPDES permitting, it is imperative that open communication be maintained which acknowledges a partnership of stakeholders with the common interest of keeping the South Bay, creeks and their tributaries free of pollutants. Specifically, this District shares the Watershed basins, defined by Penitencia Creek, Miguelito Creek, a tributary to Penitencia Creek, and Babb Creek, a tributary to Silver Creek which feeds into Coyote Creek with the cities of Milpitas and San Jose. The County Fairgrounds area lies within an urban improved area adjacent to the City of San Jose, whose storm water collection systems ultimately feed into Coyote Creek.

The District has developed a Risk Assessment Plan which identifies areas most vulnerable to impacting receiving waters within the watershed in the event of an SSO. Steps have been proposed to contain overflows, divert by cross-connections. These measures provide additional time to respond and eliminate blockages before they become a major spill event.

The District will be communicating with the above agencies to note the identified areas at risk in the event of SSOs and working to develop strategies for joint response, when practical, to contain and prevent SSOs from reaching fishable creeks or receiving waters to the Bay.

Communication with other local Watershed Stakeholders

California Water/Wastewater Agency Response Network (CalWARN) was established with a mission to support and promote statewide emergency preparedness and mutual assistance for member public and private water and wastewater utilities, has been active for approximately 12 years. The organization is divided into six regions within the state. County Sanitation District No. 2-3 is within Coastal OES Region II. Of the tributary agencies to San Jose-Santa Clara WPCP only the Cities of Milpitas and Santa Clara are currently members of CalWARN. Within Santa Clara County the City of Sunnyvale, California Water Service Company, San Jose Water Company, San Jose Municipal Water System and Santa Clara Valley Water District are also members. Membership in this organization of all the tributary agencies and others having common watershed interests, would be a first step toward accomplishing the stated objectives above described and is encouraged. Additional information for CalWARN can be found at its website www.calwarn.org.