

SEWER SYSTEM MANAGEMENT PLAN

WDID No. 255010111

JUNE 2025

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Sewer System Management Plan General Organization

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NOTE: Section numbers are based on the State Water Resources Control Board's Order No. 2022-0103-DWQ "Statewide Waste Discharge Requirements General Order" dated December 6, 2022.

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ELEMENT 1: SEWER SYSTEM MANAGEMENT PLAN GOAL AND INTRODUCTION

The goal of the Sewer System Management Plan (SSMP or Plan) is to provide a plan and schedule to: (1) properly manage, operate, and maintain all parts of the Enrollee's sanitary sewer system(s); (2) reduce and prevent spills; and (3) contain and mitigate spills that do occur. The Plan must include a narrative Introduction section that discusses the following items:

1.1 Regulatory Context

The Plan Introduction section must provide a general description of the local sewer system management program and discuss Plan implementation and updates.

This Sewer System Management Plan (SSMP or Plan) is a compilation of the policies, procedures, and activities that are included in the planning, management, operation, and maintenance of the City of Mountain View's (City's) sanitary sewer system. The SSMP was first prepared by the City of Mountain View Public Works Department and approved by the City Council in 2008. It has been updated periodically to reflect organization changes, Master Plan updates, changes in monitoring requirements, and other relevant changes. The last SSMP update to City Council occurred in June 2018.

This SSMP is intended to meet the requirements of the State Water Resources Control Board (SWRCB) Statewide Waste Discharge Requirements General Order (Sanitary Sewer Systems General Order (SSSGO)) for Wastewater Collection Agencies, Order No. 2022-0103-DWQ dated December 6, 2022. The structure (section numbering and nomenclature) of this SSMP follows the SSSGO organization and its requirements in that each section corresponds to an "element" of the SSSGO Attachment D—Sewer System Management Plan—Required Elements. Each required element, and element subsection where applicable, provides SSSGO requirements in italics.

In support of the SSSGO requirement, the City of Mountain View has established the following detailed goals for this SSMP:

- Properly manage, operate, and maintain the wastewater collection system.
- Maintain design and construction standards and specifications for the installation of new wastewater systems.
- Verify the wastewater collection system has adequate capacity to convey sewage during peak flows.
- Minimize the frequency of sanitary sewer spills.

- Respond to sanitary sewer spills quickly and mitigate the impact of the spill.
- Provide training on a regular basis for staff in collection maintenance and operations.
- Encourage and support participation in the California Water Environment Association's Wastewater Certification Program and ongoing training programs.
- Maintain a fats, oil, and grease (FOG) program to limit fats, oils, grease, and other debris that may cause blockages in the sewage collection system.
- Develop a closed-circuit television (CCTV) program for the collection system.
- Identify and prioritize structural deficiencies and implement short-term and long-term maintenance and rehabilitation actions to address each deficiency.
- Meet all applicable regulatory notification and reporting requirements.
- Provide excellent customer service.

1.2 Sewer System Management Plan Update Schedule

The Plan Introduction section must include a schedule for the Enrollee to update the Plan, including the schedule for conducting internal audits. The schedule must include milestones for incorporation of activities addressing prevention of sewer spills.

The City will determine the need to update its SSMP based on the results of the audit and the performance of its wastewater collection system based on information from the Monitoring and Measuring Program Modifications Section of the SSMP. In the event that the City decides that an update is warranted, the process to complete the update will be identified. At a minimum, the SSMP will be updated every six years, as required by the SSSGO from December 2022. If updates are deemed to be significant, or when the SSMP is updated on the six-year cycle, the SSMP will be recertified by City Council.

1.3 Sewer System Asset Overview

The Plan Introduction section must provide a description of the Enrollee-owned assets and service area, including, but not limited to:

- Location, including county(ies);
- Service area boundary;
- Population and community served;

- System size, including total length in miles, length of gravity mainlines, length of pressurized (force) mains, and number of pump stations and siphons;
- Structures diverting stormwater to the sewer system;
- Data management systems;
- Sewer system ownership and operation responsibilities between Enrollee and private entities for upper and lower sewer laterals;
- Estimated number or percent of residential, commercial, and industrial service connections; and
- Unique service boundary conditions and challenge(s).

Additionally, the Plan Introduction section must provide reference to the Enrollee's up-todate map of its sanitary sewer system as required in Section 4.1 (Updated Map of Sanitary Sewer System) of this Attachment.

The City operates a sanitary sewer system that serves a population of approximately 86,000 in a 12 square mile service area. The sewer system service area includes all of the City of Mountain View and a portion of the federally owned lands adjacent to the City's northeast border. Mountain View sewer use is approximately 65% residential and 35% commercial/industrial. The sewer system consists of 156 miles of gravity sewers, five siphons, and two pump stations. The sewers range in size from 4" to 42" in diameter.

There are approximately 17,000 sanitary sewer laterals in the City. Maintenance and repair of sanitary sewer laterals within the City are the responsibility of the property owner; however, if a cleanout is available at the property line, the City provides maintenance and repair services for laterals located within the public right-of-way upon request as a courtesy service to the residents of Mountain View. The City does not own any portion of the service lateral.

Figure 1 is a map of the overall collection system. City Wastewater Section (Wastewater) staff use and maintain a set of highly detailed maps, physical maps as well as an ever-improving digital geographic information system (GIS) mapping system.



Figure 1: Mountain View Sanitary Sewer System Map

ELEMENT 2: ORGANIZATION

The Plan must identify organizational staffing responsible and integral for implementing the local Sewer System Management Plan through an organization chart or similar narrative documentation that includes:

- The name of the Legally Responsible Official as required in Section 5.1 (Designation of a Legally Responsible Official) of this General Order;
- The position titles, telephone numbers, and email addresses for management, administrative, and maintenance positions responsible for implementing specific Sewer System Management Plan elements;
- Organizational lines of authority; and
- Chain of communication for reporting spills from receipt of complaint or other information, including the person responsible for reporting spills to the State and Regional Water Boards and other agencies as applicable. (For example, County Health Officer, County environmental health agency, and State Office of Emergency Services.)

A. Legally Responsible Official

The Utilities Services Manager is the City's legally responsible official (LRO), authorized to certify electronic Sanitary Sewer Spill (SSS) reports submitted to California Integrated Water Quality System (CIWQS). The Assistant Public Works Director—Utilities is also an authorized LRO and serves as backup to the Utilities Services Manager.

B. Responsibility for SSMP Development, Implementation, and Maintenance

The Utilities Services Manager, Wastewater Supervisor, and Utility Systems Supervisor share primary responsibility for developing, implementing, periodically auditing, and maintaining the City's SSMP. Table A-1 in Appendix A lists individuals with responsibility for the specific SSMP elements along with job titles and contact information.

C. Organizational Lines of Authority

Figure 2 presents an organization chart for those of the City government involved in implementing the SSMP with their respective roles summarized at the bottom of the charts. Figures 2, 3, and 4 provide a more detailed view of the Public Works and Fire Departments with those areas associated with SSMP implementation highlighted. Responsibilities of key departments, sections, and staff as related to the SSMP are as follows:

The Fire Department's Environmental Safety Division is responsible for ensuring that facilities using or storing hazardous materials, or discharging wastewater into the sanitary

or storm sewer, comply with applicable federal, state, and local requirements. The Division inspects and monitors approximately 250 commercial and industrial grease generators discharging into the City's collection system and coordinates with Public Works Wastewater Operations to reduce grease-related sanitary sewer spills.

The Public Works Department plans, designs, reviews, constructs, operates, maintains, and improves the City's infrastructure, facilities, utilities, fleet, property, and equipment; administers the City's Solid Waste Management, Real Estate Management, and Grant programs; provides traffic engineering and transportation planning services and permits private developments in the public right-of-way. Two of the three divisions within the Public Works Department, Public Services and Engineering, are routinely involved in implementing the SSMP. Each of these divisions is headed by an Assistant Public Works Director.

The Utilities Services Section of the Public Services Division operates and maintains wastewater collection and discharge systems. The Wastewater Supervisor is responsible for day-to-day operations of the collection system and managing a crew of seven Wastewater Utility Workers who conduct sewer cleaning, SSS response, minor repairs, and other O&M activities. The Utility Systems Supervisor manages a staff of three, with responsibility for pump station O&M. Both the Wastewater Supervisor and Utility Systems Supervisor report to the Utility Services Manager, who, in turn, reports to the Assistant Public Works Director for the Public Services Division.

The Engineering and Environmental Compliance (EEC) Section of the Public Services Division is responsible for the engineering oversight and supports regulatory compliance of the City's sewer system. This includes leading the planning, design, and implementation of sewer main and pump station improvement projects as part of the City's Capital Improvement Program. The EEC section focuses on public sewer infrastructure and works closely with the Land Development Section of the Engineering Division to review and evaluate private development projects for their impacts on the City's sewer system. This coordination ensures that new developments meet City standards and do not adversely affect the existing sewer network. Each section reports to its respective Assistant Public Works Director for the Public Works Department.

The Community Development Department, Building Division, is responsible for enforcing building-related municipal codes, including the Uniform Building and Uniform Plumbing Codes, which are adopted by reference as part of the City Code on private property.

The IT Department (IT) manages the City's geographic information system (GIS) including the location and attribute data of all the City's sewer collection system infrastructure. This includes coordinating with Wastewater and Engineering staff to ensure sewer asset data is up to date and accurate. IT also supports the computer networking and software necessary to operate and maintain the sewer collection system.







FIRE DEPARTMENT



FISCAL YEAR 2024-25 POSITION TOTALS: 91.5 Full-Time 0.5 Regular Part-Time

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- * Position directly reports to the Police Department but supports the Fire Department.
- ** Authorization of 27 Paramedics includes Engineer, Engineer/Hazardous Materials, and Firefighter/Hazardous Materials levels.

*** Physically located in Community Development Department but budgeted in Fire Department.

Figure 4: Detailed Organization Chart for Fire Department

D. Chain of Communication for Reporting Spills

The City of Mountain View operates two communication centers. During normal business operations (Monday through Friday, 8:00 a.m. to 4:00 p.m.), calls are received by staff at the Municipal Operations Center, collectively referred to as Mountain View 3 (MV 3). During all other hours, calls are received by the Mountain View Communications Center. This is the City's 9-1-1 system and is staffed 24/7.

NOTE: For the purpose of this SSMP, both will be referred to as MV 3 Communications.

When MV 3 Communications receives notification of a possible spill during business hours, the Wastewater Duty Person is immediately contacted. After hours, the Wastewater Duty Person is provided a cell phone and utility truck and must have a response time of one (1) hour or less. The Wastewater Duty Person will evaluate the situation and determine if additional help is necessary.

The Wastewater Duty Person must notify the Wastewater Supervisor if:

- More than one employee is called to assist;
- The SSS is over 1,000 gallons;
- The SSS enters surface water or drainage channel;
- The SSS causes property damage or flooding in a home structure; or
- The SSS constitutes an imminent danger to the public or environment.

The Wastewater Duty Person completes a Wastewater Service Call Report for all SSSs. The report is forwarded to the Wastewater Supervisor for investigation and/or follow-up. A copy of the Wastewater Service Call Report is included in Appendix A.

The Wastewater and Utility Systems Supervisors have responsibility for preparing and submitting SSS reports to CIWQS and for written or verbal notifications to the County public health agency and California Governor's Office of Emergency Services (Cal OES). In the Supervisor's absence, crew members from the Wastewater and Utility Systems are authorized Data Submitters in CIWQS.

ELEMENT 3: LEGAL AUTHORITY

The Plan must include copies or an electronic link to the Enrollee's current sewer system use ordinances, service agreements, and/or other legally binding procedures to demonstrate the Enrollee possesses the necessary legal authority to:

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

A. Municipal Code

The Mountain View City Code (City Code), Chapter 35, describes the City's current legal authorities. The legal authorities provided by the City Code and other sources that address the regulatory requirements are summarized on Table 1.

The full City Code is available at the website below: <u>library.municode.com/ca/</u> <u>mountain view/codes/code of ordinances</u>.

Additions to the City Code are made on an as-needed basis. There is no regular schedule of Code review.

The City Code specifies that sewer laterals (both "upper" and "lower") are owned by the property owner. As a courtesy, the City voluntarily maintains the lower laterals (from property line to the main) if the lateral is equipped with a cleanout.

B. Agreements with Satellite Agencies

The City of Los Altos wastewater collection system and the City's sanitary sewer system discharges to one another's system in various locations. The City has an agreement with the City of Los Altos dated March 24, 1970.

Requirement	City Code Reference
General	
Prevent illicit discharges into the wastewater collection system.	Sec. 35.33.12
Require that sewers and connections be properly designed and constructed.	Sec. 35.32.17.A Sec. 35.37 Sec. 35.33.22
Require proper installation, testing, and inspection of new and rehabilitated sewers.	Sec. 35.32.17.A Sec. 35.37 Sec. 35.33.22
Laterals	
Clearly define City responsibility and policies.	Sec. 35.10 Sec. 35.29
Ensure access for maintenance, inspection, or repairs for portions of the service lateral owned or maintained by the City	Sec 35.2.1 Sec 35.35.40
Control infiltration and inflow (I&I) from private service laterals	Sec. 35.33.11(2)
FOG Source Control	
Limit the discharge of fats, oils, grease, and other debris that may cause blockages.	Sec. 35.33.12(11) Sec. 35.33.13(D)
Requirements to install grease-removal devices (such as traps or interceptors), design standards for the grease-removal devices, maintenance requirements, BMP requirements, record keeping, and reporting requirements.	Sec. 35.33.11(I) Sec. 8.30.1 (Adoption of Cal. Plumbing Code)
Authority to inspect grease-producing facilities.	Sec. 35.32.1
Enforcement	
Enforce any violation of its sewer ordinances.	Sec. 35.3 Sec. 35.30.1 Sec. 35.30.2 Sec. 35.30.3 Sec. 35.30.4 Sec. 35.30.5 Sec. 35.30.6 Sec. 35.32.3.6

Table 1: Summary of Legal Authorities in Municipal Code

ELEMENT 4: OPERATION AND MAINTENANCE PROGRAM

The Plan must include the items listed below that are appropriate and applicable to the Enrollee's system.

4.1 Updated Map of Sanitary Sewer System

An up-to-date map(s) of the sanitary sewer system, and procedures for maintaining and providing state and Regional Water Board staff access to the map(s). The map(s) must show gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable stormwater conveyance facilities within the sewer system service area boundaries.

The City utilizes a Geographical Information System (GIS) that includes information on its wastewater collection system assets. Information on the storm drain system is also maintained in the GIS. Data in the GIS is constantly being updated and is available to appropriate City staff.

The field crews use hard copy maps ("701 maps") that are produced from the GIS. An example sewer system 701 map is included in Appendix B. Map corrections are noted by Wastewater staff and submitted to GIS and other Wastewater staff. Map corrections are noted on the hard copy maps that are used until the flushing cycle has been completed and new 701 maps are printed. The map correction process occurs on an ongoing basis.

4.2 Preventive Operation and Maintenance Activities

A scheduling system and a data collection system for preventive operation and maintenance activities conducted by staff and contractors. The scheduling system must include:

- Inspection and maintenance activities;
- Higher-frequency inspections and maintenance of known problem areas, including areas with tree root problems;
- Regular visual and CCTV inspections of manholes and sewer pipes. The data collection system must document data from system inspection and maintenance activities, including system areas/components prone to root intrusion, potentially resulting in system backup and/or failure.

A. Inspection and Maintenance Activities

The City proactively cleans the City's entire sewer mainline system every two to three years. Proactive cleaning of sewer main lines (referred to as "701 cleaning") is scheduled by area, such that the entire collection system is cleaned from the top down

over the flushing cycle. Staff collects cleaning data (pipe size, footage, etc.) while 701 cleaning to document progress, to improve future cleaning efficiency, and to note any issues for follow up. The City's standard operating procedures for sewer cleaning are included in Appendix B.

All sewer-cleaning activities (701, hotspot) are planned and tracked on a large wall map in the Wastewater office, on the master sewer map book, and in the VacCon map books carried by field crews, using a highlighting color-coding system. Although the scheduling and tracking process is performed manually, it is highly effective and readily accessible to all staff.

Wastewater staff also documents problems identified during cleaning activities and findings from manhole inspections that are conducted as part of those activities. Information on cleaning activities and needed repairs is documented on a field log (Sanitary Sewer Flushing Sheet) and summarized by office staff in the Wastewater Daily Report. Examples of these forms are included in Appendix B. Repairs to be performed by City Wastewater Operations staff are tracked on an office wall board in the Wastewater office, and completed in priority order, as established by the Wastewater staff, crew leaders, and supervisor. Repairs that involve significant structural defects are repaired as they are identified.

Utility Systems staff inspects the operation of the City's lift stations. The Sewer Pump Station (SPS), the City's primary lift station, is inspected daily, and its performance is monitored 24/7 using the Supervisory Control and Data Acquisition (SCADA) system. A checklist for monthly inspections is included in Appendix B. The smaller Pastel Lane Lift Station, serving a single street, is inspected twice per week.

B. <u>Sewer Hotspot Maintenance</u>

Wastewater staff cleans sewers with a history of problems every one, three, six, or 12 months, depending on the severity of the problem. A schedule for the preventative cleaning is maintained by the Wastewater Supervisor in the Sewer Hotspot Flushing list. An example of the 12-month schedule is included in Appendix B. The listing includes the street or location name, map page, upstream/downstream manholes, cleaning date flushed, VacCon operator, pipe size, footage, and comments (field notes and special instructions). In addition, hotspot cleaning areas are highlighted in the GIS system and the individual map books using color coding.

Adding or removing areas from the hotspots listings (or changing frequencies) is managed by the Wastewater Supervisor, based on input from field crew's feedback and documentation from daily reports. Staff investigates and reviews root causes for hotspots and will prioritize repairs or operational changes to resolve the underlying issues to allow the pipeline to be removed from the hotspot list. Although informal, the process is effective, given the small size of the Wastewater Operations group and high level of communication among Section staff.

C. <u>Closed Circuit Television (CCTV) Inspections</u>

The City contracts main line CCTV inspection services for annual condition assessment and as needed for follow-up on sewer spill events. The City has organized the CCTV projects into eight zones (1-8) and three trunk line zones (1-3).

The City's current practice is to CCTV approximately 100,000 to 120,000 lineal feet per fiscal year, with the goal of covering all sewer mains every eight to nine years. The CCTV contactor provides a hard drive of all CCTV inspections along with a NASSCO condition rating for each segment using the PACP rating system. While inspections are occurring, Wastewater staff reviews the video and report files on a weekly basis to verify video quality and segment data details and may instruct the CCTV contractor to reclean or revideo a given section if the video clarity or segment data is inadequate.

4.3 Training

In-house and external training provided on a regular basis for sanitary sewer system operations and maintenance staff and contractors. The training must cover:

- The requirements of this General Order;
- The Enrollee's Spill Emergency Response Plan procedures and practice drills;
- Skilled estimation of spill volume for field operators; and
- Electronic CIWQS reporting procedures for staff submitting data.

The City uses a combination of in-house classes, on-the-job training as well as conferences, seminars, and other training opportunities to train its Wastewater staff. Field crew staff are required to acquire and maintain a CWEA Grade I Collection System Maintenance Certification and a California Commercial Class B driver's license with tanker endorsement within one year of employment. CWEA Grade I Certification is required for after-hours work and a Grade II Certification is required for all crew leaders. The hours spent by crew members on machinery is tracked in the Daily Work Order. The City also places a heavy emphasis on safety training. All training is documented.

Crew members also receive training specific to the SSMP and Spill Emergency Response Plan (SERP). Throughout the year, Wastewater staff will collectively review the SSMP and SERP to refresh on the individual requirements within. In addition, Wastewater staff hold mock spill events where staff get hands-on training on spill response, including spill volume estimation and reporting requirements.

The City's contract language will require the contractors working in the wastewater collection system to provide training for their employees in the activities that may cause

SSSs and in responding to contractor-caused SSSs. Contractors are required to file SERPs for the City's review.

4.4 Equipment Inventory

An inventory of sewer system equipment, including the identification of critical replacement and spare parts.

Wastewater Operations maintains an inventory of minor repair parts and supplies in the City Warehouse or Wastewater's covered storage area. Inventory of these repair parts is managed by the City's Warehouse staff to ensure parts are available for emergencies. The pump stations have gravity bypasses (which function up to a certain flow magnitude), and the City has informal agreements with neighboring agencies for equipment support in the event the sewer maintenance equipment fails.

ELEMENT 5: DESIGN AND PERFORMANCE PROVISIONS

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

5.1 Updated Design Criteria and Construction Standards and Specifications

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

The City's latest design criteria for new and rehabilitated sewers are specified in the City of Mountain View Standard Design Criteria for Sanitary Sewers, August 2002. A copy of the design criteria is included in Appendix C.

The City's Building Division may require installation of a backflow-prevention valve on sewer laterals in accordance with the Plumbing Code.

5.2 Procedures and Standards

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

The City's standards for construction and testing of sewer system components in the public right-of-way are specified in the City of Mountain View Standard Provisions and in the City's

Standard Details, C-1 through C-9. These documents are included in Appendix C and are also available on the City's website at: <u>MountainView.gov/depts/pw/standard.asp</u>.

There are only two sewer pump stations in the City's system, and no standard specifications for pump stations have been developed, other than the applicable sections of the City of Mountain View Standard Provisions. Any pump station construction/rehabilitation project (public or private) would be designed by a qualified engineering firm under a licensed professional engineer and subject to review by EEC and Wastewater Operations. Given the rarity of new pump station construction, the City does not believe that development of standard specifications for pump stations is warranted.

ELEMENT 6: SPILL EMERGENCY RESPONSE PLAN

The Plan must include an up-to-date Spill Emergency Response Plan to ensure prompt detection and response to spills to reduce spill volumes and collect information for prevention of future spills. The Spill Emergency Response Plan must include procedures to:

- Notify primary responders, appropriate local officials, and appropriate regulatory agencies of a spill in a timely manner;
- Notify other potentially affected entities (for example, health agencies, water suppliers, etc.) of spills that potentially affect public health or reach waters of the state;
- Comply with the notification, monitoring, and reporting requirements of this General Order, state law and regulations, and applicable Regional Water Board Orders;
- Ensure that appropriate staff and contractors implement the SERP and are appropriately trained;
- Address emergency system operations, traffic control and other necessary response activities;
- Contain a spill and prevent/minimize discharge to waters of the state or any drainage conveyance system;
- Minimize and remediate public health impacts and adverse impacts on beneficial uses of waters of the state;
- Remove sewage from the drainage conveyance system;
- Clean the spill area and drainage conveyance system in a manner that does not inadvertently impact beneficial uses in the receiving waters;

- Implement technologies, practices, equipment, and interagency coordination to expedite spill containment and recovery;
- Implement preplanned coordination and collaboration with storm drain agencies and other utility agencies/departments prior, during, and after a spill event;
- Conduct postspill assessments of spill response activities;
- Document and report spill events as required in this General Order; and
- Annually, review and assess effectiveness of the SERP and update the Plan as needed.

A. Sanitary Sewer Spill Response

The following describes procedures for responding to SSSs. Detailed procedures and supporting documents are contained in the City's SERP. The SERP is included in Appendix D.

1. Receipt of Information Regarding SSS

The City of Mountain View operates two communication centers. During normal daytime business operations (Monday through Friday, 8:00 a.m. to 4:00 p.m.), calls are received by the Utilities Section staff at the Municipal Operations Center (Mountain View 3). During all other hours, calls are received by Mountain View Communications staff at the Police/Fire Administration Building. This is the City's emergency 9-1-1 system and is staffed 24/7/365.

NOTE: For the purpose of this SSMP, both will be referred to as MV 3 Communications.

The MV 3 Communications Operator should obtain all relevant information available regarding the spill, including:

- Time and date call was received.
- Specific location.
- Description of problem.
- Time possible spill was noticed by caller.
- Caller's name and phone number.
- Observations of the caller (e.g., odor, back or front of property).

- Other relevant information that will enable the responding investigator and crews, if required, to quickly locate, assess, and stop the spill.
- 2. Responding to an SSS

MV 3 Communications records the information and contacts the designated Wastewater Duty Person. The response time is typically 15 to 30 minutes. A crew personnel list is updated on a daily basis.

If an SSS occurs during nonbusiness hours, the Wastewater Duty Person is contacted. This person's goal is to respond within one hour of receiving the information. (The Duty Program is staffed during nonbusiness hours.)

3. Responding Staff Responsibilities

The Wastewater Duty Person responding to a sewer backup has the immediate responsibility to protect people, the environment, and property from the effects of a sewage spill. To meet these objectives in a rapid, effective, and organized manner, staff will respond and fulfill the following duties as directed by this Plan.

- REDUCE or STOP the spill at its source.
- CONTAIN spilling sewage from entering waterways.
- CAPTURE the sewage where it can be recovered and returned to the sewer system.
- CONTAIN sewage in advantageous locations (i.e., vacant lots, plugged storm system, curb/gutter, etc.). Containment materials include sand, sand bags, etc.
- CONTROL the spill area and bypass the area if necessary.
- BYPASS the obstructed line by pumping the spillage into another nonrestricted line or vacuum with a VacCon.
- MITIGATE the affected public areas to ensure public safety. (The Wastewater Supervisor must approve cleaning on private property.)
- WASH DOWN and CONTAIN runoff, being careful not to wash sewage into storm drainage system.

B. SSS Response Procedures

This section describes the procedures to be followed in response to an SSS. Additional information is provided in the SERP. Because response procedures differ somewhat depending on the cause of the SSS, four potential causes are addressed: (1) pipeline blockage; (2) pipeline failure; (3) force main failure; and (4) pump station failures.

A flow diagram of the SSS response process is included as Figure 5. A flow diagram for use when there is private property damage is included as Figure 6.



Figure 5: SSS Response Flowchart

NOTE: For the purpose of the SERP, the Wastewater Supervisor is to be notified immediately when an SSS causes property damage or enters a storm system. If the Wastewater Supervisor is unavailable, the Wastewater Duty Person will contact the Utility Services Manager or Assistant Public Works Director.



Figure 6: Private Property Damage Flowchart

ELEMENT 6: SPILL EMERGENCY RESPONSE PLAN (cont'd)

B. SSS Response Procedures (cont'd)

1. <u>SSS Resulting from Pipeline Blockage</u>

Upon arrival at the scene, the Wastewater Duty Person will determine the source of the SSS.

Private SSS

If it is determined the SSS is originating from a private sewer main or cleanout, the property owner, resident, or manager must be notified and informed they are responsible for corrective action, cleanup, and any damages. Chronic spills at the same property shall be referred to the City's Fire Department - Environmental Safety Section.

If a private SSS is flowing into or threatens a private storm drain system or is a danger to the public, further City intervention will be necessary. If the Wastewater Duty Person must perform work on private property, they will notify the Wastewater Supervisor. If possible, they will inform the property owner, resident, or manager that work will be performed on private property and explain why. Follow the same procedures used when a property line sewer cleanout or sewer main spills. Upon completion, the Wastewater Duty Person must document the incident and complete a Wastewater Service Call Report (see Appendix D).

Property Line Cleanout SSS

If it is determined the SSS has originated from a property line sewer cleanout, City crews will contain the spill, remove the spilled sewage, and remove the blockage. A spill from a single-family home is typically small and easy to mitigate. A spill from a large apartment building or commercial building may require a response similar to a sewer main SSS. In these cases, staff will remove the blockage, clean with Liquid Alive, flush or rinse the affected area, and vacuum up all remaining liquid. Additional Wastewater crew members and a VacCon are available if the spill cannot be washed back into the cleanout. Upon completion, the Wastewater Duty Person will document the incident and complete a Wastewater Service Call Report.

City Sewer Main SSS

If it is determined the SSS has originated from a City sewer main, additional staff will be called in immediately and Duty personnel from Utility Systems and Water Distribution are available 24/7. The Wastewater Duty Person must estimate the level

of response necessary to resolve the incident. If necessary, the area/roadway will be closed to the public. Upon completion, the Wastewater Duty Person will document the incident and complete a Wastewater Service Call Report and fill out the SERP forms.

2. <u>SSS Resulting from Pipeline Failure</u>

An SSS resulting from a pipeline failure will require additional time and personnel to resolve. When a sewer lateral or sewer main pipeline failure is suspected, the Wastewater Supervisor or agent shall be notified immediately. The Wastewater Supervisor will determine the level of response necessary. It may be necessary to set up a sewer bypass with portable pumps or use VacCons to transport sewage downstream while a repair is being performed. If a pipeline failure occurs on a large diameter sewer main (12" or larger), or the pipe is over 12' deep, a contractor may be used to perform the repair. Additional staff and equipment may be requested in the form of mutual aid from neighboring cities.

3. <u>SSS Resulting from Force Main Failure/Blockage</u>

An SSS resulting from a force main failure is likely to be a serious threat to the environment and the public. The City of Mountain View operates approximately one mile of 42" sanitary force main. This 42" force main conveys an average of nine MGD to the PARWPCP. In the event of a force main SSS, Utilities Systems personnel will shut down the SPS to reduce the pressure in the force main. If it is determined a repair is necessary, the City of Mountain View will contract with an experienced large-diameter sewer main repair contractor. A list is provided as Appendix D with company names, employees, and emergency contact numbers. The information provided on this list should be checked for accuracy annually. City crews will do all that is possible to contain a spill of this type using pumps and VacCons. Due to the large volume of sewage the force main conveys, mutual aid would most likely be requested from neighboring cities.

4. <u>SSS Resulting from Pump Station Failure</u>

The City of Mountain View operates two sewage lift stations: SPS and Pastel Lane Lift Station.

The largest pump station is the SPS, located within the boundary of Shoreline at Mountain View. This station pumps an average of nine MGD of untreated sewage to the PARWPCP. The station is designed to transfer (bypass) to a gravity flow system in the event of a mechanical failure. A recent assessment of the pump station indicates that the gravity bypass will convey flows up to 12.3 MGD before spilling. History has demonstrated this station can operate in the bypass mode beyond 90 days. The pump station is checked daily. In addition, the station communicates with the SCADA system

at the Municipal Operations Center, where conditions are monitored by the Utilities System Duty Person on an ongoing basis.

The second pump station is the Pastel Lane Lift Station. The station is small and serves approximately 10 single-family homes. In the event of a station failure, the station will hold approximately two weeks of sewage. Past station failures have not resulted in an SSS. A VacCon would be used to maintain the system in the event of a station failure. This station is checked twice weekly.

C. SSS Recovery and Mitigation Procedures

This section provides guidelines and procedures for cleaning and disinfecting the area contaminated by a sanitary sewer spill.

1. <u>SSS on Public Property</u>

To minimize health effects to the public and to protect the environment:

- Start cleaning the wastewater spill area as soon as possible.
- Secure the affected area with cones, barricades, caution tape, etc.
- Take pictures to document the spill. This is very important if the spill causes property damage.
- Inspect the storm drain catch basins to determine whether wastewater has entered the storm system and to what extent.
- If necessary, install plugs, sandbags, sand/rock, etc., to contain the sewage. Flush the area with water and vacuum up all liquid and/or pump it back into the collection system.
- Remove all debris found in the spill area.
- If a disinfectant or cleaning product is used, it must be collected and deposited in the collection system.
- Thoroughly inspect the spill area before you leave.

2. <u>SSS on Private Property</u>

City crews are not to work on private property unless directed to do so by the Wastewater Supervisor. Cleaning on private property (outside) may be necessary

when there is imminent danger to the general public. An example would be a spill in a public parking lot or school.

If an SSS results in flooding/damage inside a building or residence, advise the owner/occupant to call a professional cleaning service for cleaning, sanitizing, placing of blowers, and/or dehumidifiers. The City does not recommend specific contractors or companies.

If it is necessary to perform an SSS mitigation on private property, follow the same procedure used for public property.

Forms and guidelines for handling sewer backups that affect private property are included in Appendix D.

3. <u>SSSs That Reach Surface Water</u>

If an SSS is confirmed to have entered a creek or waterway, determine the extent of the SSS:

- As soon as possible, contact the Wastewater Supervisor.
- It must be determined if the creek is safe to enter. During the winter storm season, cleaning the creek may not be possible due to high water flows.
- Cleaning a creek can be very difficult. Get plenty of help—contact additional Wastewater crew members if necessary.
- If possible, block the creek downstream of the contaminated flow based on visual evidence. Block the creek in an area that is safe to enter and is accessible to pumps and/or VacCons. Pump or vacuum contamination from creek and return it to collection system.
- As soon as possible, contact the Wastewater Supervisor, who will notify required State and local agencies through the California Office of Emergency Services. Post public SSS spill signs and sample the creek. Follow-up sampling will also be required.

D. Water Quality Sampling and Testing

The SSSGO's Monitoring and Reporting Program requires that water quality sampling be conducted within 48 hours after initial SSS notification for Category 1 SSSs in which 50,000 gallons or more are spilled to surface waters and that the SSS be documented in an SSS Technical Report. For smaller SSSs, sampling may be conducted at the City's discretion. The City's SSS Monitoring Plan is included in Appendix D.

The following guidance relates to SSS monitoring and deciding when such monitoring should be conducted:

- If it is unclear whether a reported spill is sewage versus some other liquid (e.g., water from a water main break), an ammonia test strip can be used as an indicator of a sewage spill.
- Visual monitoring is part of the initial SSS response to determine what immediate actions should be taken. After the initial response and documentation of spill volume, an assessment of possible impacts on surface water should be conducted as part of the SERP. The storm drain maps can aid in determining if surface water has been impacted. Where it is safe and practical, surface water in the vicinity of the SSS should be inspected visually, with observations recorded on the Wastewater Spill Report. Signs of receiving water impacts include telltale signs of sewage (solids, grease, paper), abnormal color, fish kills, etc. Photographs should be taken for documentation.
- For those SSSs that may imminently and substantially endanger human health and SSSs that cause fish kills, and if feasible and safe, water quality monitoring of affected surface waters should be conducted. For less serious circumstances, monitoring can be conducted if doing so is likely to provide useful information and does not impede clean-up activities. (NOTE: Monitoring is required for large SSSs as described above.)
- In cases where monitoring is discretionary, the Wastewater Duty Person should exercise judgment in deciding whether to conduct monitoring, in consultation with the Wastewater Supervisor. Water quality monitoring should only be conducted when it is safe to do so and should not be given precedence over stopping the SSS or protection of public health. However, if sufficient personnel is available, monitoring can be conducted in parallel with these activities or with the clean-up effort. Any monitoring should be conducted in accordance with the SSS Monitoring Plan.
- If sampling is to be conducted, the Wastewater Duty Person should notify the Wastewater Supervisor and/or Environmental Safety Section to coordinate sample collection. Samples should be collected as soon as possible after the discovery of the SSS event. In most incidents, sampling will occur after the cause of the spill has been resolved and mitigation operations have been completed. The following resources may be able to assist with sampling activities: (1) during normal business hours, the Environmental Safety Section staff may be able to assist with sample collection and analysis; and (2) during nonbusiness hours or if Environmental Safety staff are unable to assist with sampling, contact the City contract sampling service, Dysert Environmental Services, at 650-799-9204 and/or Alpha-Analytical at 925-828-6226.

• Samples should be collected at the point of discharge and at upstream and downstream locations (if applicable). For impoundments, samples should be collected near the point of entry of the spilled sewage and every 100' along the shore samples should be analyzed for ammonia, dissolved oxygen, and a bacterial indicator. The enterococcus or E. coli analyses are preferred to characterize SSS impacts as they are a more reliable indicator of the presence of sewage than fecal coliform.

Follow-up sampling should be performed to determine when posting signs can be removed. If bacteria results are inconclusive, ammonia or DO results may suffice as an indicator for confirmation that the spill was resolved and signs can be removed.

• The Wastewater Supervisor will make follow-up calls to affected agencies until posting has been discontinued.

E. Public Notification

Public notification is required when an SSS poses a threat to public health or the environment. The notification methods are described in the following sections.

Creeks, streams, and beaches that have been contaminated as a result of an SSS should be posted at visible locations until the risk of contamination has subsided to acceptable background levels.

The Environmental Safety Section will make this determination. The warning signs should be checked every day to ensure they are still in place. Sample warning signs are included In Appendix D and in the OERP.

Posting signs and barricades may be necessary to keep vehicles and pedestrians away from spilled sewage. Posting should be done at the direction of the Wastewater Supervisor or Environmental Safety Section. Post the warning signs and block access to the contaminated water areas with yellow "Caution" tape and barricades. Do not remove these until directed.

In the event the spill occurs at night, the location should be inspected as soon as possible the following day. The site should be inspected for any signs of sewer-related debris/material that may warrant additional mitigation activities.

Major spills may warrant broader public notice. Local media may need to be notified when significant areas may have been contaminated by sewage. The Wastewater Supervisor will notify the Utilities Services Manager, Environmental Safety Section, and OES Coordinator in the event of a major SSS.

1. <u>Responder Documentation</u>

This section will explain documentation requirements when responding to an SSS.

- The Wastewater Duty Person must complete a Wastewater Service Call Report to record basic information for all Wastewater calls. When an SSS occurs, the sanitary sewer spill section must be completed. If additional space is needed to explain the incident, attach a separate letter.
- The information provided on the form is used to file an SSS Report in the CIWQS system.
- Take pictures of the spill—pictures are required. If property damage is suspected inside a building or residence, the Wastewater Duty Person and Wastewater Supervisor will request permission to enter and take pictures. Ask the resident to identify the damage and document with pictures. If you are denied entry, note this on the report. Please include names, if possible.
 - Use methods outlined in SERP to estimate the volume of the spilled sewage. Whenever possible, use photos of the SSS site before the recovery operation as an aid to the volume estimation process.
- When the mitigation has been completed, document the volume of sewage recovered. In most cases, you will have to estimate.

2. <u>SSS Investigation</u>

All SSSs should be thoroughly investigated by the Wastewater Supervisor to determine the cause of the spill. This information is required for the SSS report and will aid in determining if additional maintenance is needed or a repair/replacement is required; all records are maintained within the Maps and Files Storage Room located at the Municipal Operations Center.

The procedures for investigating the SSS are:

- Review the incident/spill report.
- Interview responding crew members.
- Review past maintenance records.
- Review past CCTV records.
- Conduct new CCTV inspection if necessary.
- Evaluate all information and determine course of action to avoid future SSSs.
- Document results of investigation and course of action.

3. <u>Post-SSS Debriefing</u>

Every SSS is an opportunity to thoroughly evaluate response and reporting procedures. Each spill event is unique with its own elements and challenges that might include volume, location terrain, and other parameters.

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

F. SSS Categories

The SWRCB has established guidelines for classifying and reporting SSSs. Reporting and documentation requirements vary based on the type of SSS.

There are five categories of SSSs as defined by the SWRCB:

• Category 1 Spill

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

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

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

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

• Category 2 Spill

A Category 2 spill is a spill of 1,000 gallons or greater, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water.

A spill of 1,000 gallons or greater that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system, is a Category 2 spill.

• Category 3 Spill

A Category 3 spill is a spill of equal to or greater than 50 gallons and less than 1,000 gallons, from or caused by a sanitary sewer system regulated under the General Order that does not discharge to a surface water.

A spill of equal to or greater than 50 gallons and less than 1,000 gallons that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 3 spill.

Category 4 Spill

A Category 4 spill is a spill of less than 50 gallons, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water.

A spill of less than 50 gallons that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 4 spill.

• Private Lateral Sewage Discharges (PLSD)

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

G. SSS Documentation and Reporting

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

- 1. Internal SSS Reporting Procedures
 - The Wastewater Duty Person will fill out the Wastewater Spill Report and turn it in to the Wastewater Supervisor.
- The Wastewater Supervisor will notify the Utilities Services Manager.
- The Wastewater Supervisor will investigate the SSS within 10 days of the incident.
- The SSS will be entered in the Service Call Database.

Category 1 SSSs

- The Wastewater Duty Person will immediately notify the Wastewater Supervisor.
- The Wastewater Duty Person or Supervisor will notify Cal OES within two hours of being notified of the spill.
- The Wastewater Supervisor/Lead will notify the Environmental Safety Section and the Utilities Services Manager.
- The Wastewater Duty Person will fill out the Wastewater Spill Report and turn it in to the Wastewater Supervisor.
- The Wastewater Supervisor will meet with field crew(s) at the site of the SSS event to assess the situation and to document the conditions with photos.
- The Wastewater Supervisor will investigate the SSS the following workday.
- The incident will be entered into the Service Call Database.

2. <u>External SSS Reporting Procedures</u>

The CIWQS electronic reporting system must be used for reporting SSS information to the SWRCB whenever possible. The following describes the external notification, reporting, and certification requirements based on the type of SSS.

Category 1 SSS

- Within two hours of becoming aware of any Category 1 SSS, notify Cal OES and obtain a control number.
- Submit a draft report within three business days of becoming aware of the SSS and certify within 15 calendar days of SSS end date.
- SSS Technical Report: Submit within 45 calendar days after the end date of any Category 1 SSS in which 50,000 gallons or greater are spilled to surface waters.

• The Utilities Services Manager will update the certified report as new or changed information becomes available.

Category 2 SSSs

Submit a draft report within three days of becoming aware of the SSS and certify within 15 calendar days of the SSS end date.

Category 3 SSSs

Report and certify all Category 3 spills to the online CIWQS Sanitary Sewer System Database within 30 calendar days after the end of the month in which the spills occurred.

Category 4 SSSs

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

Private Lateral Sewage Discharges

The Utilities Services Manager may report private lateral SSSs using CIWQS at the City's discretion, specifying that the sewage discharge occurred and was caused by a private lateral and identifying the responsible party (other than the City) if known.

No-Spill Certification (Monthly)

Within 30 calendar days after the end of each calendar month, if there are no SSSs during the calendar month, the Utilities Services Manager will submit an electronic report that the City did not have any SSSs. The Utilities Services Manager will certify the report.

CIWQS Not Available

In the event that CIWQS is not available, the Utilities Services Manager will fax all required information to the RWQCB office in accordance with the time schedules identified above. In such event, the City will submit the appropriate reports using CIWQS as soon as practical.

3. Internal SSS Documentation

• <u>Category 1, 2, 3, and 4 SSSs</u>

The Wastewater Duty Person will complete a work order and the Wastewater Spill Report and provide copies to Wastewater Supervisor.

The Wastewater Supervisor will prepare a file for each individual SSS. The file should include the following information:

- Initial service call information.
- Wastewater Service Call Report form.
- Service Call Database report.
- Copies of the CIWQS Report forms.
- Volume estimate and methods used to arrive at the estimate. Guidance for volume estimating is provided in the SERP.
- Failure analysis investigation results.
- Photographs of spill/cleanup.
- Monitoring Results (if applicable)

The following are optional for Category 2 and 3 SSSs:

- Appropriate maps showing the spill location.
- Water quality sampling and test results if applicable.
- Private Lateral SSSs

The Wastewater Duty Person will complete the Wastewater Spill Report and provide copies to Wastewater Supervisor.

A separate file will be prepared for each individual SSS, at the Wastewater Supervisor's discretion. The file should include any relevant information from the above list.

4. External SSS Record Keeping Requirements

The SSSGO requires that individual SSS records be maintained by the City for a minimum of five years from the date of the SSS. This period may be extended when requested by a Regional Water Board Executive Officer. All records shall be made available for review upon State or Regional Water Board staff's request.

Records shall be retained for all SSSs, including, but not limited to, the following when applicable:

- Record of Certified report.
- All original recordings for continuous monitoring instrumentation.
- Service call records and complaint logs of calls received by the City.
- SSS calls.
- SSS records.
- Steps that have been and will be taken to prevent the SSS 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 SSSs.
- A list and description of complaints from customers or others from the previous five years.
- Documentation of performance and implementation measures for the previous five years.

If water quality samples are required by the SSSGO or environmental or health regulatory agencies, or if voluntary monitoring is conducted by the City or its agent(s), as a result of any SSS, records of monitoring information shall include:

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

H. Equipment

This section provides a list of City-specialized equipment used to support the SERP.

VacCon Trucks

• The VacCon trucks are used to clear blockages in gravity sewers and to vacuum up spilled sewage. The trucks can also be used for wash down and cleanup.

Portable Pumps and Hoses

• Portable pumps ranging in size from 2" to 6" are used to pump spilled sewage and/or contaminated water back into the sewer system.

Street Sweeper

• A street sweeper may be used to assist in the cleanup of roadways and parking lots.

Closed-Circuit Television (CCTV) Inspection Units

• Portable CCTV Inspection Units (lateral cameras) are used to conduct condition assessments and as an aid to determine the root cause of SSSs. Each of the two VacCon trucks is equipped with a lateral camera for this purpose. As noted above, mainline CCTV inspections are currently provided by outside contractors.

Emergency Response Truck(s)/Trailer

 In addition to the equipment on the VacCon trucks, the City has an Emergency Response trailer with equipment and supplies needed for effective SSS response. Equipment includes (but is not limited to) an electric eel rodding machine, sectional rods, generator, lights, portable pump and hoses, air compressor, sewer plugs, cones, barricades, measuring devices, and spill containment and clean-up materials.

Photographic Equipment

• A digital or disposable camera is used to record the conditions upon arrival.

Ammonia Strips

• Ammonia strips are used to identify presence or absence of sewage. They are maintained in each vehicle and replaced every 22 months or at the manufacturer's recommended hold time.

I. Training

This section provides information on the training that is required to support this SERP.

1. Initial and Annual Refresher Training

All Wastewater Operations personnel and Duty personnel are trained in sewage spill response, which includes this Plan. The training is updated annually.

All employees who may have a role in responding to, reporting, and/or mitigating a SSS receive training. All new employees receive training before they are placed in a position where they may have to respond. Current employees receive annual refresher training on this Plan and the procedures to be followed.

2. <u>SSS Response Exercises</u>

Periodic training exercises are held to ensure that employees are up to date on the procedures, to verify the equipment is in working order, and the required materials are readily available. The training exercises 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 exercises are be recorded, and action items are tracked to ensure completion.

3. <u>Record Keeping</u>

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

J. Contractors Working On City Sewer Facilities

All contractors working on City sewer facilities are required to develop an SERP to cover their work. All contractor personnel are required to receive training on the Contractor's SERP and to follow the Contractor's SERP in the event that they cause or observe an SSS.

ELEMENT 7: SEWER PIPE BLOCKAGE CONTROL PROGRAM

The Sewer System Management Plan must include procedures for the evaluation of the Enrollee's service area to determine whether a sewer pipe blockage control program is needed to control fats, oils, grease, rags, and debris. If the Enrollee determines that a program is not needed, the Enrollee shall provide justification in its Plan for why a program is not needed. The procedures must include, at minimum:

- An implementation plan and schedule for a public education and outreach program that promotes proper disposal of pipe-blocking substances;
- A plan and schedule for the disposal of pipe-blocking substances generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of substances generated within a sanitary sewer system service area;
- The legal authority to prohibit discharges to the system and identify measures to prevent spills and blockages;
- Requirements to install grease-removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, Best Management Practice (BMP) requirements, recordkeeping, and reporting requirements;
- Authority to inspect grease-producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the fats, oils, and grease ordinance;
- An identification of sanitary sewer system sections subject to fats, oils, and grease blockages and establishment of a cleaning schedule for each section; and
- Implementation of source control measures for all sources of fats, oils, and grease reaching the sanitary sewer system for each section identified above.

A. Nature and Extent of FOG Problem

The City has approximately 235 commercial and industrial sources of grease discharging to its collection system. The largest concentration of commercial grease sources are the food service establishments (FSEs) located in the vicinity of Castro Street. Many of the FSEs are located in older buildings and have undersized grease traps. The industrial grease generators include institutional facilities, such as hospitals and large cafeterias, located at businesses in the industrial areas of the City. Based on the number and types of grease-generating facilities in the City, a FOG Control Program has been implemented.

The FOG Control Program includes maintenance, monitoring, inspection, enforcement, and outreach elements. Since these elements are performed by two City departments (Fire and

Public Works Departments), implementation of the FOG Control Program requires a coordinated effort. Knowledge of the collection system and the locations that are heavily impacted by FOG discharges was critical for developing a control strategy. Ongoing routine maintenance and implementation of source control measures are the approaches for minimizing the threat of sewer spills caused by FOG blockages.

The low incidence of FOG-related SSSs indicates that the City's historical management of FOG dischargers, combined with the City's sewer system preventive maintenance program and FOG Control Program, has been effective, and that there is no basis for increasing substantially increasing current FOG control activities. However, the City will continue to collect information on all FOG-related SSSs and will evaluate the need for any additional FOG control measures on an ongoing basis.

B. FOG Control Program

The City's FOG Control Program includes the following elements: Legal Authority, Preventive Maintenance, Commercial FOG Control and Inspections, Public Outreach, and Listing of Grease Disposal Locations.

1. Legal Authority

Legal authority for the FOG Control Program is addressed in Section III of the SSMP. The City has the necessary legal authority for the Program. In exercising that authority, the City may apply different requirements to new sources than to existing sources.

2. Preventive Maintenance

The Wastewater Operation is responsible for preventative maintenance of the wastewater collection system. The Wastewater crew responds to collection system blockages, sewer spills, conducting preventative maintenance in areas that have a history of problems, and general preventive maintenance for the entire system. A listing of known FOG Hot Spots is provided in Appendix E. The listed gravity sewers segments are included on the one-, three-, six-, and 12-month cleaning lists, an example of which is included in Appendix B. If a new FOG blockage location is observed, staff will monitor the location and determine if a repair is needed, or it should be added to the Hot Spot list. Cleaning frequencies may subsequently be adjusted by the Wastewater Supervisor based on observed results. Wastewater Operations provides feedback on FOG problems to the Fire and Environmental Protection Division and will request review and/or adjustments to grease trap cleaning frequencies when necessary.

3. Commercial FOG Control and Inspections

The Fire and Environmental Protection Division, Environmental Safety Section of the Fire Department is responsible for inspecting grease-generating facilities and for compliance actions that may stem from those inspections. Grease-generating facilities are inspected at a frequency of every two years. Problem areas may be inspected more frequently. Inspections are conducted to ensure that grease-removal devices are adequately maintained and that record-keeping requirements are met. The BMPs to reduce grease discharges are also promoted during inspections. Enforcement actions are implemented where maintenance is inadequate or greaseremoval devices are either not functioning properly or are seriously undersized. Staff resources are sufficient to conduct inspections and implement other elements of the Program.

The Environmental Safety Section will continue to ensure that the grease-generating facilities adequately maintain their grease-removal devices, promote the application of grease BMPs where appropriate, and initiate enforcement actions. Enforcement actions will include:

- Requiring more frequent maintenance of grease-removal devices;
- Requiring training on application of grease BMPs;
- Requiring installation of grease-removal devices;
- Requiring the installation of larger grease-removal devices/grease interceptors;
- Notices of Violation (NOVs), Compliance Orders, or Administrative Citations, as necessary.

4. <u>Public Education and Outreach</u>

The City of Mountain View also partners with the City of Palo Alto Regional Water Quality Control Plant to do outreach regarding proper disposal of FOG. Outreach activities are ongoing and include:

- "Tabling" at local grocery stores during the holiday seasons to provide information to residents on proper disposal of FOG.
- Distributing grease scrapers and FOG control information to residents/visitors at City events throughout the year (Art & Wine Festival, Thursday Night Live events).

- Displaying posters in City Hall during Public Works Week regarding FOG control and FOG-related spills and response.
- Distribution of BMP posters and brochures to FSEs during routine and referral inspections involving FOG control and FOG spills.

The Bay Area Clean Water Agencies (BACWA) maintains an archive of public education materials for FOG at: <u>https://bacwa.org/document-category/bappg-fog/</u>.

5. <u>Grease Disposal Locations</u>

A listing of FOG haulers/disposal sites for use by grease haulers doing business within the City is provided in Appendix D. A more comprehensive, regionwide listing of interceptor and grease trap service providers is maintained by the Union Sanitary District, and can be found at: <u>unionsanitary.com/businesses/restaurants-</u> <u>program/service-providers</u>.

In addition, the California Department of Food and Agriculture maintains listings of collection centers and transporters at: <u>https://apps1.cdfa.ca.gov/IKG/</u> <u>Transporters.aspx</u>.

The City's conclusion is that there is adequate local capacity to dispose of grease from commercial sources within the City at this time.

ELEMENT 8: SYSTEM EVALUATION, CAPACITY ASSURANCE AND CAPITAL IMPROVEMENTS

The Plan must include procedures and activities for:

- Routine evaluation and assessment of system conditions;
- Capacity assessment and design criteria;
- Prioritization of corrective actions; and
- A capital improvement plan.

8.1 System Evaluation and Condition Assessment

The Plan must include procedures to:

- Evaluate the sanitary sewer system assets utilizing the best practices and technologies available;
- Identify and justify the amount (percentage) of its system for its condition to be assessed each year;

- Prioritize the condition assessment of system areas that:
 - Hold a high level of environmental consequences if vulnerable to collapse, failure, blockage, capacity issues, or other system deficiencies;
 - Are located in or within the vicinity of surface waters, steep terrain, high groundwater elevations, and environmentally sensitive areas;
 - Are within the vicinity of a receiving water with a bacterial-related impairment on the most current Clean Water Act Section 303(d) List;
- Assess the system conditions using visual observations, video surveillance, and/or other comparable system inspection methods;
- Utilize observations/evidence of system conditions that may contribute to exiting of sewage from the system which can reasonably be expected to discharge into a water of the state;
- Maintain documents and recordkeeping of system evaluation and condition assessment inspections and activities; and
- Identify system assets vulnerable to direct and indirect impacts of climate change, including, but not limited to: sea level rise; flooding and/or erosion due to increased storm volumes, frequency, and/or intensity; wildfires; and increased power disruptions.

The City uses CCTV and operator visual inspections to assess the collection system condition. CCTV inspections are performed by a qualified contractor annually covering an average of 100,000 to 120,000 linear feet of sewer main. This pace maintains an eight-year cycle to inspect all of the City sewer mains with the exception of the City's three trunk mains, which are on a nine-year cycle. The City also allows for additional as-needed CCTV segments in each annual contract to inspect problematic or high-risk mainlines identified by staff.

While performing sewer main flushing, City staff can visually inspect manholes and system performance while cleaning the pipelines. Through the flushing program, staff can check all collection system mains at least every two years. Areas with history of backups or other issues are included on the one-, three-, six-, or 12-month hot spot lists which give staff more frequent opportunity to check for problems.

The City is analyzing the effects of climate change on all assets. The primary concerns are power outages and sea level rise impacts at the SPS. Currently, the SPS has both redundant power supplies through an onsite diesel generator and a gravity bypass system which

automatically bypasses the SPS during a loss of power to the site. In addition, the City has a Sea Level Rise Adaptation Capital Improvement Program approved by City Council in 2021 to prepare the City for sea level rise. One of these projects have been completed, a few are about to start construction, and some are in design or planning phases.

8.2 Capacity Assessment and Design Criteria

The Plan must include procedures to identify system components that are experiencing or contributing to spills caused by hydraulic deficiency and/or limited capacity, including procedures to identify the appropriate hydraulic capacity of key system elements for:

- Dry-weather peak-flow conditions that cause or contributes to spill events;
- The appropriate design storm(s) or wet weather events that causes or contributes to spill events;
- The capacity of key system components; and
- Identify the major sources that contribute to the peak flows associated with sewer spills. The capacity assessment must consider:
 - Data from existing system condition assessments, system inspections, system audits, spill history, and other available information;
 - Capacity of flood-prone systems subject to increased infiltration and inflow, under normal local and regional storm conditions;
 - Capacity of systems subject to increased infiltration and inflow due to larger and/or higher-intensity storm events as a result of climate change;
 - Increases of erosive forces in canyons and streams near underground and aboveground system components due to larger and/or higher-intensity storm events;
 - Capacity of major system elements to accommodate dry weather peak-flow conditions, and updated design storm and wet weather events; and
 - Necessary redundancy in pumping and storage capacities.

A. System Evaluation and Capacity Assurance Plan

1. Evaluation—Collection System Master Plan and General Plan

The most recent Sewer Master Plan update was completed in August 2022. The master planning effort evaluated the capacity of the existing sanitary sewer system assets and provided capacity design criteria for future assets.

The 2022 Sewer Master Plan study included hydraulic modelling of the entire system using the InfoWorks Model. Flow projections were developed for average and peak dry-weather flow conditions, and adjusted (calibrated) using flow data collected in monitoring studies conducted in 2014 and 2021. Wet-weather flow projections incorporated estimates of rainfall-dependent infiltration/inflow based on a 10-year storm. For purposes of the model, conservative criteria were used to identify current or future capacity deficiencies. (For pipes 12" or smaller, a maximum of 1/2 full at peak wet weather flow; for pipes greater than 12", a maximum 3/4 full at peak wet weather flow). The model results predicated current or future capacity deficiencies in a relatively small percentage (approximately 4%) of the pipes based on these criteria. As indicated in the performance data provided in Appendix G, no SSSs have been attributed to actual capacity deficiencies since formal tracking of SSS causes was initiated in 2008.

Findings from the Master Plan are used to inform the City's General Plan and Precise Plan planning efforts and for ongoing monitoring of potential capacity-deficient line segments. The Master Plan is generally updated every 10 years.

The City's 2030 General Plan, adopted in 2012, identified "target" areas for redevelopment. As part of the California Environmental Quality Act (CEQA) requirements, the General Plan and its associated Utility Impact Study evaluated the long-term impacts to the collection system and developed a list of recommended CIP projects for the projected conditions in 2030. Project-specific plans (Precise Plans) and their associated Utility Impact Studies (as required by CEQA) are used to update and refine the General Plan's impact analysis and list of recommended projects. The recommendations are factored into the City's CIP planning and budgeting process. The references listed at the end of this section include several recently completed Utility Impact Studies.

The City is at or near build-out. Projects within the City's service area are primarily redevelopment projects. The City requires that redevelopment project proponents evaluate the off-site capacity impacts of their project through an engineering study and commit to providing off-site improvements as part of the project approval process. This is the primary means through which capacity deficiencies resulting from redevelopment are addressed.

2. <u>Evaluation—Hydraulic Monitoring</u>

The City periodically monitors the flow in its sanitary sewer system to identify and/or track previously identified capacity deficiencies and to monitor the quantity of inflow and infiltration present. Previous flow monitoring efforts were conducted in 2005, 2014, and 2021. The flow monitoring data is used to calibrate the City's wastewater system hydraulic model and is incorporated into Sewer Master Plan updates. Information from periodic monitoring and subsequent hydraulic modeling is used as a check on flow projections, and to inform decisions regarding capacity-related CIP projects (or redevelopment requirements) as those projects come closer to implementation.

3. <u>Design Criteria</u>

The capacity-related design criteria used by the City are included in Appendix C.

8.3 Prioritization of Corrective Action

The findings of the condition assessments and capacity assessments must be used to prioritize corrective actions. Prioritization must consider the severity of the consequences of potential spills.

A. Condition-Based Rehabilitation and Replacement Program

The Public Works Department maintains a proactive, condition-based pipeline rehabilitation and replacement program to support the long-term reliability and performance of the sanitary sewer system. This program is informed by multiple data sources, including pipeline age, maintenance history, regular CCTV inspection results, field observation records, and input from Wastewater Operations staff.

These data sources are used to identify structural deficiencies in the system, which are then documented and compiled into a Prioritized Repairs List. This list is maintained and regularly updated by the Wastewater Supervisor and is shared with the EEC Section to support development of sewer main rehabilitation and replacement projects under the City's Capital Improvement Program (CIP).

The Public Works Department applies a risk-based methodology that evaluates both the likelihood and consequence of failure. Factors considered include pipe material, diameter, depth, structural condition, frequency of maintenance needs, proximity to sensitive receptors (e.g., schools or waterways), and potential impacts on traffic or essential services. This framework allows the City to allocate resources efficiently on the highest-risk segments of the system and prevent failures before they occur. In addition to condition and risk assessment, coordination with other planned infrastructure efforts, such as the City's street resurfacing and annual water main replacement programs, is a key component of project and program planning. This integrated approach minimizes construction-related disruption and optimizes cost-effectiveness by combining efforts where feasible.

Funding for condition-based rehabilitation and replacement projects is primarily from the City's Wastewater and Wastewater Capacity Funds, which is supported by sewer service charges.

B. <u>Capacity Improvement Program</u>

In addition to condition-based efforts, the Public Works Department implements a capacity-based improvement program to ensure the sanitary sewer system has sufficient hydraulic capacity to convey existing and projected flows under both dry and wet weather conditions. This program is guided by the Sanitary Sewer Master Plan, which is periodically updated using hydraulic modeling, flow monitoring, land use data, and development projections.

Capacity deficiencies are identified through master planning analysis, which evaluates system performance under peak-flow conditions, including the effects of inflow and infiltration (I/I) and anticipated growth. When deficiencies are identified, capital improvement projects are developed and programmed to upgrade undersized sewer mains or pump stations.

Capacity improvement projects are prioritized based on system modeling results, severity of hydraulic constraints, regulatory compliance needs, and anticipated impacts from future development. These projects are also included in the City's CIP and coordinated with other utility and paving programs where feasible. Improvements may be phased to align with development timelines or combined with condition-based projects to reduce disruption and enhance cost-effectiveness.

The Public Works Department coordinates closely with the Planning Division and development review process to ensure infrastructure needs keep pace with growth. Updates on capacity planning efforts and implementation progress are shared through the Sanitary Sewer Master Plan and related regulatory reporting.

Funding for capacity improvement projects is also primarily from the City's Wastewater and Wastewater Capacity Funds and supplemented, when appropriate, by development impact fees and other applicable funding mechanisms that reflect the growth-related nature of these improvements.

8.4 Capital Improvement Plan

The capital improvement plan must include the following items:

- Project schedules, including completion dates for all portions of the Capital Improvement Program;
- Internal and external project funding sources for each project; and
- Joint coordination between operation and maintenance staff, and engineering staff/consultants during planning, design, and construction of capital improvement projects; and Interagency coordination with other impacted utility agencies.

A. Capital Improvement Program

The City includes publicly funded capacity enhancement projects in its Capital Improvement Program. There were no known capacity deficiencies at the time this SSMP was originally prepared; however, the 2022 Master Plan identified some potential capacity deficiencies, which are being addressed in future capital projects.

B. Schedule

The schedule for the City's condition-based rehabilitation/replacement and capacity enhancement projects is included in the City's Capital Improvement Program. A list of completed and planned sewer projects from the CIP are in Appendix F.

ELEMENT 9: MONITORING, MEASUREMENT AND PROGRAM MODIFICATIONS

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

- Maintaining relevant information, including audit findings, to establish and prioritize appropriate Plan activities;
- Monitoring the implementation and measuring the effectiveness of each Plan Element;
- Assessing the success of the preventive operation and maintenance activities;
- Updating Plan procedures and activities, as appropriate, based on results of monitoring and performance evaluations; and

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

A. Performance Measures

The indicators that the City will use to measure the performance of its wastewater collection system and the effectiveness of its SSMP are as follows. Indicators will be compiled on a calendar-year basis.

- Total number of SSSs, with breakdown by gravity system, pump stations, and force mains.
- Number of SSSs by each cause (roots, grease debris, pipe failure, capacity, pump station failures, and other).
- Total SSS volumes, volume reaching surface water, volume recovered, and percent recovered.
- Preventive maintenance annual metrics (wastewater service calls, sewer main stoppages, footages cleaned).

B. Performance Data

The City has tabulated data for the selected performance measures provided in Appendix G. Overall, for SSSs that do occur, recovery rates are very high, and spills rarely reach surface water. These observations, coupled with the relatively low number of SSSs since 2008 and absence of any SSSs in some years, suggests that the City's O&M Program is highly effective in minimizing SSSs and protecting surface waters from their impacts.

C. Performance Monitoring and Program Changes

The City will evaluate the performance of its wastewater collection system at least annually using the performance measures identified in Subsection C, Performance Measures, above. The City will update the performance data in Appendix G at the time of the evaluation. The City may use other performance measures in its evaluation. The City will prioritize its actions and initiate changes to this SSMP and the related programs based on the results of the evaluation.

ELEMENT 10: INTERNAL AUDITS

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

The City will audit its implementation and compliance with the provisions of this SSMP every two years. The last audit was completed in 2024 for the audit period of calendar years 2021-2023.

Audits will be conducted by a team consisting of City staff selected from the Public Works Department. The audit team may include members from other areas of the City, outside agencies or contractors. The scope of the audit will cover each of the major sections of the SSMP. An Audit Checklist, based on the requirements in the SSSGO, is used. Copies of the two most recent audits are included in Appendix H.

ELEMENT 11: COMMUNICATION PROGRAM

The Plan must include procedures for the Enrollee to communicate with:

- The public for spills and discharges resulting in closures of public areas, or that enter a source of drinking water, and the development, implementation, and update of its Plan, including opportunities for public input to Plan implementation and updates.
- Owners/operators of systems that connect into the Enrollee's system, including satellite systems, for system operation, maintenance, and capital improvement-related activities.

A. Collection System Public Information

The City will make information on the performance of its sanitary sewer system performance available for review. The performance information will include the performance indicators listed in Section IX of the SSMP; Monitoring, Measurement, and Program Modifications. The information, which will be periodically updated, is available through a Public Records request.

The City reports SSSs electronically to the CIWQS. The electronic SSS data, as well as information regarding regulatory actions, is available at: <u>waterboards.ca.gov/</u> <u>ciwqs/publicreports.html</u>.

The above website has links to the CIWQS Public Spill Incidence Map, an interactive GISbased application that provides summary data on all reported SSS and to the Interactive SSS Report application, through which the public can query the CIWQS database for all information submitted in SSS reports. In performing a CIWQS query, the easiest identifier to use for the City is the WDID number. The City will direct interested parties to the CIWQS public access website. Agency information for the Interactive SSS Report is as follows:

- Sanitary Sewer System Agency Name: Mountain View City
- Sanitary Sewer System Name: Mountain View City CS
- WDID No.: 2SSS10111

<u>NOTE</u>: In running the Interactive SSS Report query, only one of the above identifiers is needed. The other two can be left blank.

The City will report the performance of its sanitary sewer system to the City Council annually in an informational memorandum. The performance information will include the performance indicators listed in Section IX of the SSMP; Monitoring, Measurement, and Program Modifications, and will be compiled annually.

B. Systems Connected to the Mountain View Collection System

The City of Los Altos wastewater collection system discharges to the City's sanitary sewer system. The City has a written agreement with the City of Los Altos covering its discharges into the City's sewer system. The City maintains up-to-date contact information for staff at the City of Los Altos and the PARWQCP.

APPENDIX A

DOCUMENTS RELATED TO SSMP GOAL AND INTRODUCTION, ORGANIZATION, AND LEGAL AUTHORITY

- 1. Information on Sewer System Infrastructure (from Sewer Master Plan))
- 2. City Staff with SSMP Area of Responsibility
- 3. Wastewater Service Call Report (internal City document)
- 4. State Water Resources Control Board Order No. WQ 2022-0103-DWQ Statewide Waste Discharge Requirements General Order for Sanitary Sewer Systems, December 6, 2022

Diam	Length of Pipe (ft)											
(in)	CIP	CIPP	СМР	DIP	HDPE	PVC	RCP	STL	VCP	Unknown	Total	Total as %
4-in	-	-	-	-	-	58	-	-	220	441	719	<1%
6-in	113	-	-	-	-	2,586	104	70	129,026	570	132,469	16%
8-in	888	-	-	941	63,222	34,256	-	-	370,069	1,375	470,751	57%
10-in	335	-	-	281	3,822	2,985	-	-	65,600	22	73,045	9%
12-in	-	-	-	-	5,194	3,729	-	-	38,981	-	47,904	6%
14-in	-	-	-	-	2,345	-	-	-	-	-	2,345	<1%
15-in	242	-	-	-	1,611	593	6	-	35,603	16	38,071	5%
16-in	304	-	-	-	1,222	-	-	-	-	-	1,526	<1%
18-in	319	-	1,338	-	-	14	-	-	6,962	24	8,657	1%
21-in	-	353	-	-	-	-	-	-	12,715	-	13,068	2%
24-in	-	-	-	-	-	-	-	-	2,278	15	2,293	<1%
27-in	-	-	-	-	-	-	4,402	-	3,883	-	8,285	1%
30-in	-	-	-	-	-	-	3,605	-	3,333	-	6,938	<1%
33-in	-	-	-	-	-	-	5,811	-	-	-	5,811	<1%
36-in	-	573	-	-	-	455	3,019	-	-	-	4,047	<1%
39-in	-	1,417	-	-	-	-	323	-	-	-	1,740	<1%
42-in	-	1,886	-	-	-	-	5,349	63	-	-	7,298	<1%
48-in	-	-	-	-	-	-	59	-	-	28	87	<1%
Unknown	-	-	-	-	-	-	-	-	-	3,432	3,432	<1%
Total	2,201	4,229	1,338	1,222	77,416	44,676	22,678	133	668,670	5,923	828,486	-
Total as %	<1%	<1%	<1%	<1%	9%	5%	3%	<1%	81%	<1%	-	-

Table 3-1: Wastewater Collection System Pipelines by Material and Diameter

Notes:

1. CIP = Cast Iron Pipe

2. CIPP = Cured-in-Place Pipe

3. CMP = Corrugated Metal Pipe

4. DIP = Ductile Iron Pipe

5. HDPE = High-Density Polyethylene

6. PVC = Polyvinyl Chloride

7. RCP = Reinforced Concrete Pipe

8. STL = Steel

9. VCP = Vitrified Clay Pipe

City Staff with SSMP Area of Responsibility

Name	Title/Department	SSMP Area of Responsibility
Bob Bleisner (650) 903-6270	Wastewater Supervisor DPW Public Services Div.	Sewer System Management Plan Goal and Introduction
Bob Bleisner (650) 903-6270	Wastewater Supervisor DPW Pulic Services Div.	Organization
Lisa Au (650) 903-6329	Assistant DPW Director DPW Public Services Div.	Legal Authority
Bob Bleisner (650) 703-6270	Wastewater Supervisor DPW Public Services Div.	Operations and Maintenance Program
Tina Tseng (650) 903-6187	Principle Engineer - EEC DPW Public Services Div.	Design and Performance Provisions
Bob Bleisner (650) 903-6270	Wastewater Supervisor DPW Public Services Div.	Spill Emergency Response Plan
Brian T. Jones (650) 903-2874	Environmental Safety Coordinator FD Fire and Environmental Protection Division	Sewer Pipe Blockage Control Program
Mike Vasquez (650) 903-6081	Utilities Services Manager DPW Public Services Div.	System Evaluation, Capacity Assurance and Capital Improvements Plan
Mike Vasquez (650) 903-6081	Utilities Services Manager DPW Public Services Div.	Monitoring, Measurement, and Program Modifications
Mike Vasquez (650) 903-6081	Utilities Services Manager DPW Public Services Div.	Internal Audits
Mike Vasquez (650) 903-6081	Utilities Services Manager DPW Public Services Div.	Communication Program
Lisa Au (650) 903-6329	Assistant DPW Director DPW Public Services Div.	SSMP Certification
Mike Vasquez (650) 903-6081	Utilities Services Manager DPW Public Services Div.	SSMP Update Log

Em	ail	

Print Form

Wastewater Service Call Report

Name:				Date:						
Origin of Call:	MV3 O	Comm.	0		Function	:	SR #:			
Time of Call: Day O Duty O				Wastewater:			Facilities: C			0
Street # St. Name					Water	: O			Police:	Ο
				Streets		: O			Fire:	Ο
Cross St:					Parks	: O			Other:	0
Contact:				Phone:						
Time Received (24 hour):					Type: Latera	l: 🗌		C	leanout:	
Time Arrived:					Mair	n: 🗌 🗖			One:	
Time Completed:					Drain Inle	t: 🔲			Two:	
Time Out of Service:			_	Other: None:						
Follow-up Required?	Yes O	No			Left Do	or Hange	r: Yes	0	No	0
Must complete for sewer n	nain stoppage:	: Ur	ostream	n M/H #:		Down	stream M/H			
Detail description of blockage, location, cause, etc.:										
Must complete for private lateral sewer discharges (PL					Did sewage enter					
Time spill reported (24 hour):		Gallons	s spilled	1:	storm sytem? Pictures taken?				m?	
Time spill stopped: Gallons recover				ered:	۲ ۱	'es 🔘	No O	Yes	O No	0
Cause & Cleanup:										

STATE WATER RESOURCES CONTROL BOARD 1001 I Street, Sacramento, California 95814 ORDER WQ 2022-0103-DWQ STATEWIDE WASTE DISCHARGE REQUIREMENTS GENERAL ORDER FOR SANITARY SEWER SYSTEMS

This Order was adopted by the State Water Resources Control Board on December 6, 2022.

This Order shall become effective **180 days after the Adoption Date of this General Order**, on June 5, 2023.

The Enrollee shall comply with the requirements of this Order upon the Effective Date of this General Order.

This General Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, protect the Enrollee from liability under federal, state, or local laws, nor create a vested right for the Enrollee to continue the discharge of waste.

CERTIFICATION

I, Jeanine Townsend, Clerk to the Board, do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the State Water Board on December 6, 2022.

- AYE: Chair E. Joaquin Esquivel Vice Chair Dorene D'Adamo Board Member Sean Maguire Board Member Laurel Firestone Board Member Nichole Morgan
- NAY: None
- ABSENT: None
- ABSTAIN: None

urtney Tyler for

Jeanine Townsend Clerk to the Board

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1. INTRODUCTION

This General Order regulates sanitary sewer systems designed to convey sewage. For the purpose of this Order, a sanitary sewer system includes, but is not limited to, pipes, valves, pump stations, manholes, siphons, wet wells, diversion structures and/or other pertinent infrastructure, upstream of a wastewater treatment plant headworks. A sanitary sewer system includes:

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

Sewage is untreated or partially treated domestic, municipal, commercial and/or industrial waste (including sewage sludge), and any mixture of these wastes with inflow or infiltration of stormwater or groundwater, conveyed in a sanitary sewer system. Sewage contains high levels of suspended solids, non-digested organic waste, pathogenic bacteria, viruses, toxic pollutants, nutrients, oxygen-demanding organic compounds, oils, grease, pharmaceuticals, and other harmful pollutants.

For the purpose of this General Order, a spill is a discharge of sewage from any portion of a sanitary sewer system due to a sanitary sewer system overflow, operational failure, and/or infrastructure failure. Sewage and its associated wastewater spilled from a sanitary sewer system may threaten public health, beneficial uses of waters of the State, and the environment.

This General Order serves as statewide waste discharge requirements and supersedes the previous State Water Resources Control Board (State Water Board) Order 2006-0003-DWQ and amendments thereafter. All sections and attachments of this General Order are enforceable by the State Water Board and Regional Water Quality Control Boards (Regional Water Boards). Through this General Order, the State Water Board requires an Enrollee to:

- Comply with federal and state prohibitions of discharge of sewage to waters of the State, including federal waters of the United States;
- Comply with specifications, and notification, monitoring, reporting and recordkeeping requirements in this General Order that implement the federal Clean Water Act, the California Water Code (Water Code), water quality control plans (including Regional Water Board Basin Plans) and policies;
- Proactively operate and maintain resilient sanitary sewer systems to prevent spills;
- Eliminate discharges of sewage to waters of the State through effective implementation of a Sewer System Management Plan;
- Monitor, track, and analyze spills for ongoing system-specific performance improvements; and
- Report noncompliance with this General Order per reporting requirements.

An Enrollee is a public, private, or other non-governmental entity that has obtained approval for regulatory coverage under this General Order, including:

- A state agency, municipality, special district, or other public entity that owns and/or operates one or more sanitary sewer systems:
 - o greater than one (1) mile in length (each individual sanitary sewer system);
 - one (1) mile or less in length where the State Water Board or a Regional Water Board requires regulatory coverage under this Order; or
- A federal agency, private company, or other non-governmental entity that owns and/or operates a sanitary sewer system of any size where the State Water Board or a Regional Water Board requires regulatory coverage under this Order in response to a history of spills, proximity to surface water, or other factors supporting regulatory coverage.

For the purpose of this Order, a sanitary sewer system includes only systems owned and/or operated by the Enrollee.

2. **REGULATORY COVERAGE AND APPLICATION REQUIREMENTS**

2.1. Requirements for Continuation of Existing Regulatory Coverage

To continue regulatory coverage from previous Order 2006-0003-DWQ under this General Order, **within the 60-days-prior-to the Effective Date of this General Order**, the Legally Responsible Official of an existing Enrollee shall electronically certify the Continuation of Existing Regulatory Coverage form in the online California Integrated Water Quality System (CIWQS) Sanitary Sewer System Database. The Legally Responsible Official will receive an automated CIWQS-issued Notice of Applicability email, confirming continuation of regulatory coverage under this General Order. All regulatory coverage under previous Order 2006-0003-DWQ will cease on the Effective Date of this Order.

An Enrollee continuing existing regulatory coverage is not required to submit a new application package or pay an application fee for enrollment under this General Order. The annual fee due date for continued regulatory coverage from previous Order 2006-0003-DWQ to this General Order remains unchanged.

A previous Enrollee of Order 2006-0003-DWQ that fails to certify the Continuation of Existing Regulatory Coverage form in the online CIWQS database by the Effective Date of this Order is considered a New Applicant, and will not have regulatory coverage for its sanitary sewer system(s) until:

- A new application package for system(s) enrollment is submitted per section 2.2 (Requirements for New Regulatory Coverage) below; and
- The new application package is approved per section 2.2.2 (Approval of Application Package (For New Applicants Only)).

2.2. Requirements for New Regulatory Coverage

No later than 60 days prior to commencing and/or assuming operation and maintenance responsibilities of a sanitary sewer system, a duly authorized representative that

maintains legal authority over the public or private sanitary sewer system is required to enroll under this General Order by submitting a complete application package as specified below and as provided in Attachment B (Application for Enrollment Form) of this General Order.

Unless required by a Regional Water Board, a public agency that owns a combined sewer system subject to the Combined Sewer Overflow Control Policy (33 U.S. Code § 1342(q)), is not required to enroll, under this Order, the portions of its sanitary sewer system(s) that collects combined sanitary wastewater and stormwater.

2.2.1. Application Package Requirements

The Application for Enrollment package for new applicants must include the following items:

- Application for Enrollment Form. The form in Attachment B of this General Order must be completed, signed, and certified by a Legally Responsible Official, in accordance with section 5.1 (Designation of a Legally Responsible Official) of this General Order. If an electronic Application for Enrollment form is available at the time of application, a new applicant shall submit its application form electronically; and
- **Application Fee**. A fee payable to the "State Water Resources Control Board" in accordance with the Fee Schedule in the California Code of Regulations, Title 23, section 2200, or subsequent fee regulations updates.

The application fee for this General Order is based on the sanitary sewer system's threat to water quality and complexity designations of category 2C or 3C, which is assigned based on the population served by the system. The current Fee Schedule for sanitary sewer systems is listed under subdivision (a)(2) at the following website: <u>Fee Schedule</u> (https://www.waterboards.ca.gov/resources/fees/water_quality/).

2.2.2. Approval of Application Package (For New Applicants Only)

The Deputy Director of the State Water Board, Division of Water Quality (Deputy Director) will consider approval of each complete Application for Enrollment package. The Deputy Director will issue a Notice of Applicability letter which serves as approved regulatory coverage for the new Enrollee.

If the submitted application package is not complete in accordance with section 2.2.1 (Application Package Requirements) of this General Order, the Deputy Director will send a response letter to the applicant outlining the application deficiencies. The applicant will have 60 days from the date of the response letter to correct the application deficiencies and submit the identified items necessary to complete the application package to the State Water Board.

2.2.3. Electronic Reporting Account for New Enrollee

Within 30 days after the date of the Approval of Complete Application Package for System Enrollment, a duly authorized representative for the Enrollee shall obtain a CIWQS Sanitary Sewer System Database user account by clicking the "User Registration" button and following the directions on the <u>CIWQS Login Page</u>

(https://ciwqs.waterboards.ca.gov). If additional assistance is needed to establish an online CIWQS user account, contact State Water Board staff by email at <u>CIWQS@waterboards.ca.gov.</u> The online user account will provide the Enrollee secure access to the online CIWQS database for electronic reporting.

2.3. Regulatory Coverage Transfer

Regulatory coverage under this General Order is not transferable to any person or party except after an existing Enrollee submits a written request for a regulatory coverage transfer to the Deputy Director, at least 60 days in advance of any proposed system ownership transfer. The written request must include a written agreement between the existing Enrollee and the new Enrollee containing:

- Acknowledgement that the transfer of ownership is solely of an existing system with an existing waste discharge identification (WDID) number;
- The specific ownership transfer date in which the responsibility and regulatory coverage transfer between the existing Enrollee and the new Enrollee becomes effective; and
- Acknowledgement that the existing Enrollee is liable for violations occurring up to the ownership transfer date and that the new Enrollee is liable for violations occurring on and after the ownership transfer date.

The Deputy Director will consider approval of the written request. If approved, the Deputy Director will issue a Notice of Applicability letter which serves as an approved transfer of regulatory coverage to the new Enrollee.

3. FINDINGS

3.1. Legal Authorities

3.1.1. Federal and State Regulatory Authority

The objective of the Clean Water Act is to restore and maintain the chemical, physical, and biological integrity of the waters of the United States (33 U.S.C. 1251). The Water Code authorizes the State Water Board to implement the Clean Water Act in the State and to protect the quality of all waters of the State (Water Code sections 13000 and 13160).

3.1.2. Discharge of Sewage

A discharge of untreated or partially treated sewage is a discharge of waste as defined in Water Code section 13050(d) that could affect the quality of waters of the State and is subject to regulation by waste discharge requirements issued pursuant to Water Code section 13263 and Chapter 9, Division 3, Title 23 of the California Code of Regulations. A discharge of sewage may pollute and alter the quality of the waters of the State to a degree that unreasonably affects the beneficial uses of the receiving water body or facilities that serve those beneficial uses (Water Code section 13050(I)(1)).

3.1.3 Water Boards Authority to Require Technical Reports, Monitoring, and Reporting

Water Code sections 13267 and 13383 authorize the Regional Water Boards and the State Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. Water Code section 13267(b), authorizes the Regional Water Boards to "require any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region... or is suspected of having discharged or discharged or discharged or discharges, waste outside of its region that could affect the quality of water within its region shall furnish, under penalty of perjury, technical or monitoring reports which the regional board requires...In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports and shall identify the evidence that supports requiring that person to provide the reports." Water Code section 13267(f) authorizes the State Water Board to require this information if it consults with the Regional Water Boards and determines that it will not duplicate the efforts of the Regional Water Boards. The State Water Board has consulted with the Regional Water Boards and made this determination.

The technical and monitoring reports required by this General Order and Attachment E (Notification, Monitoring, Reporting and Recordkeeping Requirements) are necessary to evaluate and ensure compliance with this General Order. The effort to develop required technical reports will vary depending on the system size and complexity and the needs of the specific technical report. The burden and cost of these reports are reasonable and consistent with the interest of the state in protecting water quality, which is the primary purpose of requiring the reports.

Water Code section 13383(a) authorizes the Water Boards to "establish monitoring, inspection, entry, reporting, and recordkeeping requirements... for any person who discharges, or proposes to discharge, to navigable waters, any person who introduces pollutants into a publicly owned treatment works, any person who owns or operates, or proposes to own or operate, a publicly owned treatment works or other treatment works treating domestic sewage, or any person who uses or disposes, or proposes to use or dispose, of sewage sludge." Section 13383(b) continues, "the state board or the regional boards may require any person subject to this section to establish and maintain monitoring equipment or methods, including, where appropriate, biological monitoring methods, sample effluent as prescribed, and provide other information as may be reasonably required."

Reporting of spills from privately owned sewer laterals and systems pursuant to section 5.15 (Voluntary Reporting of Spills from Privately-Owned Sewer Laterals and/or Private Sanitary Sewer Systems) of this General Order is authorized by Water Code section 13225(c) and encouraged by the State Water Board, wherein a local agency may investigate and report on any technical factors involved in water quality control provided the burden including costs of such reports bears a reasonable relationship to the need for the report and the benefits to be obtained therefrom. The burden of reporting private spills under section 5.15 (Voluntary Reporting of Spills from Privately-Owned Sewer Laterals and/or Private Sanitary Sewer Systems) is minimal and is outweighed by the benefit of providing Regional Water Boards an opportunity to respond to these spills

when an Enrollee, which in many cases has a contractual relationship with the owner of the private system, has knowledge of the spills.

3.1.4. Water Board Authority to Prescribe General Waste Discharge Requirements

Water Code section 13263(i) provides that the State Water Board may prescribe general waste discharge requirements for a category of discharges if the State Water Board finds or determines that:

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

Since 2006, the State Water Board has been regulating over 1,100 publicly owned sanitary sewer systems (See section 3.1.5 (Previous Statewide General Waste Discharge Requirements) of this General Order). California also has a large unknown number of unregulated privately owned sanitary sewer systems. All waste conveyed in publicly owned and privately owned sanitary sewer systems (as defined in this General Order) is comprised of untreated or partially treated domestic waste and/or industrial waste. Generally, sanitary sewer systems are designed and operated to convey waste by gravity or under pressure; system-specific design elements and system-specific operations do not change the common nature of the waste, the common threat to public health, or the common impacts on water quality. Spills of waste from a sanitary sewer system prior to reaching the ultimate downstream treatment facility are unauthorized and enforceable by the State Water Board and/or a Regional Water Board. Therefore, spills from sanitary sewer systems are more appropriately regulated under general waste discharge requirements.

As specified in Water Code sections 13263(a) and 13241, the implementation of requirements set forth in this Order is for the reasonable protection of past, present, and probable future beneficial uses of water and the prevention of nuisance. The requirements implement the water quality control plans (Basin Plans) for each Regional Water Board and take into account the environmental characteristics of sewer service areas and hydrographic units within the state. Additionally, the State Water Board has considered water quality conditions that could reasonably be achieved through the coordinated control of all factors that affect water quality, costs associated with compliance with these requirements, the need for developing housing within California, and the need to protect sources of drinking water and other water supplies.

3.1.5. Previous Statewide General Waste Discharge Requirements

On May 2, 2006, the State Water Board adopted Order 2006-0003-DWQ serving as Waste Discharge Requirements pursuant to Article 4, Chapter 4, Division 7 of the Water Code (commencing with section 13260) for inadvertent discharges to waters of the State. Order 2006-0003-DWQ prohibited discharges of untreated or partially treated sewage. Order 2006-0003-DWQ also required system-specific management, operation, and maintenance of publicly owned sewer systems greater than one mile in length.

To decrease the impacts on human health and the environment caused by sewage spills, the previous Order required enrollees to develop a rehabilitation and replacement plan that identifies system deficiencies and prioritizes short-term and long-term rehabilitation actions. The previous Order also required enrollees to:

- 1. Maintain information that can be used to establish and prioritize appropriate Sewer System Management Plan activities; and
- 2. Implement a proactive approach to reduce spills.

The previous Order required Sewer System Management Plan elements for "the proper and efficient management, operation, and maintenance of sanitary sewer systems, while taking into consideration risk management."

On July 30, 2013, the State Water Board amended General Order 2006-0003-DWQ with Order WQ 2013-0058-EXEC, Amending Monitoring and Reporting Program for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems.

Many enrollees of Order 2006-0003-DWQ have already implemented proactive measures to reduce sewage spills. Other enrollees, however, still need technical assistance and funding to improve sanitary sewer system operation and maintenance for the reduction of sewage spills.

3.1.6. Existing Memorandum of Agreement with California Water Environment Association

The California Water Environment Association is a nonprofit organization dedicated to providing water industry certifications, training, and networking opportunities. The Association's Technical Certification Program provides accredited sanitary sewer system operator certification for collection system operators and maintenance workers.

On February 10, 2016, the State Water Board entered into a collaborative agreement with the Association titled *Memorandum of Agreement Between the California State Water Resources Control Board and the California Water Environment Association -Training Regarding Requirements Set Forth in Statewide General Waste Discharge Requirements for Sanitary Sewer Systems.* The Memorandum sets forth collaborative training necessary for regulated sanitary sewer system personnel to operate and maintain a well operating system and ensure full compliance with statewide sewer system regulations.

On March 15, 2018, the State Water Board and the California Water Environment Association amended the existing Memorandum of Agreement to include collaborative outreach and expand training needs associated with further updates to Water Board regulations for sanitary sewer systems. The State Water Board encourages further Agreement updates as necessary to support improved sewer system operations and the professionalism of collection system operators.

3.2. General

3.2.1. Waters of the State

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

3.2.2. Sanitary Sewer System Spill Threats to Public Health and Beneficial Uses

Sewage contains high levels of suspended solids, pathogenic organisms, toxic pollutants, nutrients, oxygen-demanding organic compounds, oil and grease and other pollutants. Sewage spills may cause a public nuisance, particularly when sewage is discharged to areas with high public exposure such as streets and surface waters used for drinking, irrigation, fishing, recreation, or other public consumption or contact uses.

More specifically, sanitary sewer spills may:

- Adversely affect aquatic life and/or threaten water quality when reaching receiving waters;
- Inadvertently release trash, including plastics;
- Impair the recreational use and aesthetic enjoyment of surface waters by polluting surface water or groundwater;
- Threaten public health through direct public exposure to bacteria, viruses, intestinal parasites, and other microorganisms that can cause serious illness such as gastroenteritis, hepatitis, cryptosporidiosis, and giardiasis;
- Negatively impact ecological receptors and biota within surface waters; and
- Cause nuisance including odors, closure of beaches and recreational areas, and property damage.

Sanitary sewer system spills may pollute receiving waters and threaten beneficial uses of surface water and groundwater. Potentially threatened beneficial uses include, but are not limited to the following (with associated acronym representations as included in statewide water quality control plans and Regional Water Boards' Basin Plans):

- Municipal and Domestic Supply (MUN)
- Water Contact Recreation (REC-1) and Non-Contact Water Recreation (REC-2)
- Cold Freshwater Habitat (COLD)
- Warm Freshwater Habitat (WARM)
- Native American Culture (CUL)
- Wildlife Habitat (WILD)
- Rare, Threatened, or Endangered Species (RARE)
- Spawning, Reproduction, and/or Early Development (SPWN)
- Wetland Habitat (WET)
- Agricultural Supply (AGR)
- Estuarine Habitat (EST)

- Commercial and Sport Fishing (COMM)
- Subsistence Fishing (SUB)
- Tribal Tradition and Culture (CUL)
- Tribal Subsistence Fishing (T-SUB)
- Aquaculture (AQUA)
- Marine Habitat (MAR)
- Preservation of Biological Habitats of Special Significance (BIOL)
- Migration of Aquatic Organisms (MIGR)
- Shellfish Harvesting (SHELL)
- Industrial Process Supply (PROC)
- Industrial Service Supply (IND)
- Hydropower Generation (POW)
- Navigation (NAV)
- Flood Peak Attenuation/Flood Water Storage (FLD)
- Water Quality Enhancement (WQE)
- Fresh Water Replenishment (FRSH)
- Groundwater Recharge (GWR)
- Inland Saline Water Habitat (SAL)

3.2.3. Proactive Sanitary Sewer System Management to Eliminate Spill Causes

Finding 3 of the previous Order, 2006-0003-DWQ, states: "Sanitary sewer systems experience periodic failures resulting in discharges that may affect waters of the state. There are many factors (including factors related to geology, design, construction methods and materials, age of the system, population growth, and system operation and maintenance), which affect the likelihood of an SSO [sanitary sewer overflow]. A proactive approach that requires Enrollees to ensure a system-wide operation, maintenance, and management plan is in place will reduce the number and frequency of SSOs within the state. This approach will in turn decrease the risk to human health and the environment caused by SSOs."

Many spills are preventable through proactive attention on sanitary sewer system management using the best practices and technologies available to address major causes of spills, including but not limited to:

- Blockages from sources including but not limited to:
 - Fats, oils and grease;
 - Tree roots;
 - \circ Rags, wipes and other paper, cloth and plastic products; and
 - \circ Sediment and debris.
- Sewer system damage and exceedance of sewer system hydraulic capacity from identified <u>system-specific</u> environmental, and climate-change impacts, including but not limited to:

- Sea level rise impacts including flooding, coastal erosion, seawater intrusion, tidal inundation and submerged lands;
- o Increased surface water flows due to higher intensity rain events;
- Flooding;
- Wildfires and wildfire induced impacts;
- Earthquake induced damage;
- Landslides; and
- Subsidence.
- Infrastructure deficiencies and failures, including but not limited to:
 - Pump station mechanical failures;
 - System age;
 - Construction material failures;
 - Manhole cover failures;
 - o Structural failures; and
 - Lack of proper operation and maintenance.
- Insufficient system capacity (temporary or sustained), due to factors including but not limited to:
 - Excessive and/or increased storm or groundwater inflow/infiltration;
 - Insufficient capacity due to population increase and/or new connections from industrial, commercial and other system users; and
 - Stormwater capture projects utilizing a sanitary sewer system to convey stormwater to treatment facilities for reuse.
- Community impacts, including but not limited to:
 - Power outages;
 - Vandalism; and
 - o Contractor-caused or other third party-caused damages.

3.2.4. Underground Sanitary Sewer System Leakage

Portions of some sanitary sewer systems may leak, causing underground exfiltration (exiting) of sewage from the system. Exfiltrated sewage that remains in the underground infrastructure trench and/or the soil matrix, and that does not discharge into waters of the State (surface water or groundwater) may not threaten beneficial uses.

Underground exfiltrated sewage may threaten beneficial uses if discharged to waters of the State. Exfiltrated sewage that discharges to groundwater may impact beneficial uses of groundwater and pollute groundwater supply. Additionally, if in close proximity, exfiltrated sewage may enter into a compromised underground drainage conveyance system that discharges into a water of the United States, or into groundwater that is hydrologically connected to (feeds into) a water of the United States, thus potentially causing: (1) a Clean Water Act violation, (2) threat and impact to beneficial uses, and/or (3) surface water pollution.
3.2.5. Proactive Sanitary Sewer System Management to Reduce Inflow and Infiltration

Excessive inflow (stormwater entering) and infiltration (groundwater seepage entering) to sanitary sewer systems is preventable through proactive sewer system management using the best practices and technologies available. The efficiency of the downstream wastewater treatment processes is dependent on the performance of the sanitary sewer system. When the structural integrity of a sanitary sewer system deteriorates, high volumes of inflow and infiltration can enter the sewer system. High levels of inflow and infiltration increase the hydraulic load on the downstream treatment plant, which can reduce treatment efficiency, lead to bypassing a portion of the treatment process, cause illegal discharge of partially treated effluent, or in extreme situations make biological treatment facilities inoperable (e.g., wash out the biological organisms that treat the waste).

3.3. Water Quality Control Plans, Policies and Resolutions

The nine Regional Water Boards have adopted region-specific water quality control plans (commonly referred to as Basin Plans) that designate beneficial uses, establish water quality objectives, and contain implementation programs and policies to achieve those objectives. The State Water Board has adopted statewide water quality control plans, policies and resolutions establishing statewide water quality objectives, implementation programs and initiatives.

3.3.1. State Water Board Antidegradation Policy

On October 28, 1968, the State Water Board adopted Resolution 68-16, titled Statement of Policy with Respect to Maintaining High Quality of Waters in California, which incorporates the federal antidegradation policy. Resolution 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings.

The continued prohibition of sewage discharges from sanitary sewer systems into waters of the State aligns with Resolution 68-16. A sewage discharge from sanitary sewers to waters of the State is prohibited by this Order. Therefore, this Order does not allow degradation of waters of the State. In addition, this Order: (1) further expands the existing prohibition of sewage discharges to include waters of the State, in addition to waters of the United States as provided in previous Order 2006-0003-DWQ, and (2) enhances the ability for Water Board enforcement of violations of the established prohibitions.

3.3.2. State Water Board Sources of Drinking Water Policy

On May 19,1988, the State Water Board adopted Resolution 88-63 (amended on February 1, 2006), titled Sources of Drinking Water, establishing state policy that all waters of the State, with certain exceptions, are suitable or potentially suitable for municipal or domestic supply.

3.3.3. State Water Board Cost of Compliance Resolution

On September 24, 2013, the State Water Board adopted Resolution 2013-0029, titled Directing Actions in Response to Efforts by Stakeholders on Reducing Costs of

Compliance While Maintaining Water Quality Protection. Through this resolution, the State Water Board committed to continued stakeholder engagement in identifying and implementing measures to reduce costs of compliance with regulatory orders while maintaining water quality protection and improving regulatory program outcomes.

3.3.4. State Water Board Human Right to Water Resolution

On February 16, 2016, the State Water Board adopted Resolution 2016-0010, titled Adopting the Human Right to Water as a Core Value and Directing its Implementation in Water Board Programs and Activities, addressing the human right to water as a core value and directing Water Board programs to implement requirements to support safe drinking water for all Californians.

On November 16, 2021, the State Water Board adopted Resolution 2021-0050 titled Condemning Racism, Xenophobia, Bigotry, and Racial Injustice, and Strengthening Commitment to Racial Equity, Diversity, Inclusion, Access, and Anti-racism. Among other actions, through Resolution 2021-0050, the State Water Board, in summary as corresponding to this General Order, reaffirms its commitment to its Human Right to Water resolution, upholding that every human being in California deserves safe, clean, affordable, and accessible water for human consumption, cooking, and sanitation purposes. Resolution 2021-0050 provides the State Water Board commitment to:

- Protect public health and beneficial uses of waterbodies in all communities, including communities disproportionately burdened by wastes discharge of waste to land and surface water;
- Restore impaired surface waterbodies and degraded aquifers; and
- Promote multi-benefit water quality projects.

Through Resolution 2021-0050, the State Water Board also commits to expanding implementation of its Climate Change Resolution to address the disproportionate effects of extreme hydrologic conditions and sea-level rise on Black, Indigenous, and people of color communities, prioritizing:

- The right to safe, clean, affordable, and accessible drinking water and sanitation;
- Sustainable management and protection of local groundwater resources;
- Healthy watersheds; and
- Access to surface waterbodies that support subsistence fishing.

On June 7, 2022, the State Water Board adopted a Resolution, titled Authorizing the Executive Director or Designee to Enter into One or More Multi-Year Contracts Up to a Combined Sum of \$4,000,000 for a Statewide Wastewater Needs Assessment, supporting the equitable access to sanitation for all Californians and implementation of Resolutions 2016-0010 and 2021-0050.

This General Order supports the State Water Board priority in collecting a comprehensive set of data for California's wastewater systems, including sanitary sewer systems. Data reported per the requirements of this Order will be used with data from other Water Boards' programs, to further develop criteria and create a statewide risk

framework to prioritize critical funding and infrastructure investments for California's most vulnerable populations, including disadvantaged or severely disadvantaged communities with inadequate or failing sanitation systems and threatened access to healthy drinking water supplies.

3.3.5. State Water Board Open Data Resolution

On July 10, 2018, the State Water Board adopted Resolution 2018-0032, titled Adopting Principles of Open Data as a Core Value and Directing Programs and Activities to Implement Strategic Actions to Improve Data Accessibility and Associated Innovation, directing regulatory programs to assure all monitoring and reporting requirements support the State Water Boards' Open Data Initiative.

3.3.6. State Water Board Response to Climate Change

On March 7, 2017, the State Water Board adopted Resolution 2017-0012, titled Comprehensive Response to Climate Change, requiring a proactive response to climate change in all California Water Board actions, with the intent to embed climate change consideration into all programs and activities.

3.4. California Environmental Quality Act

The adoption of this Order is an action to reissue general waste discharge requirements that is exempt from the California Environmental Quality Act (Public Resources Code section 21000 et seq.) because it is an action taken by a regulatory agency to assure the protection of the environment and the regulatory process involves procedures for protection of the environment (Cal. Code Regs., Title 14, section 15308). In addition, the action to adopt this Order is exempt from CEQA pursuant to Cal. Code Regs., Title 14, section 15301, to the extent that it applies to existing sanitary sewer collection systems that constitute "existing facilities" as that term is used in sections 15301 and 15302, to the extent that it results in the repair or replacement of existing systems involving negligible or no expansion of capacity.

3.5. State Water Board Funding Assistance for Compliance with Water Board Water Quality Orders

The State Water Board, Division of Financial Assistance administers the implementation of the State Water Board financial assistance programs, per Board-adopted funding policies. Among other funding areas, the Division administers loan and grant funding for the planning and construction of wastewater and water recycling facilities per funding program-specific policies and guidelines. Applicants may apply for Clean Water State Revolving Fund low-interest loan, Small Community Wastewater grant funding assistance, and other funding available at the time of application, for some of the costs associated with complying with this General Order.

Funding applicants may obtain further information regarding current funding opportunities, and Division of Financial Assistance staff contact information at the following website: <u>Financial Assistance Funding - Grants and Loans | California State</u> <u>Water Resources Control Board</u>.

(https://www.waterboards.ca.gov/water_issues/programs/grants_loans/)

Section 13477.6 of the Water Code authorizes the Small Community Grant Fund. The Small Community Grant Fund allows the State Water Board to provide grant funding assistance to small, disadvantaged communities and small severely disadvantaged communities that may not otherwise be able to afford a loan or similar financing for projects to comply with requirements of this General Order. The State Water Board also considers loan forgiveness on a disadvantaged community-specific basis.

For disadvantaged communities' wastewater needs, the State Water Board places priority on the funding of projects that address:

- Public health;
- Violations of waste discharge requirements and National Pollutant Discharge Elimination System (NPDES) permits;
- Providing sewer system service to existing septic tank owners; and
- High priority public health and water quality concerns identified by a Regional Water Board.

3.6. Notification to Interested Parties

On January 31, 2022, the State Water Board notified interested parties and persons of its intent to reissue Sanitary Sewer Systems General Order 2006-0003-DWQ by issuing a draft General Order for a 60-day public comment period. State Water Board staff conducted extensive stakeholder outreach and encouraged public participation in the adoption process for this General Order. On March 15, 2022, the State Water Board held a public meeting to hear and consider oral public comments. The State Water Board Board considered all public comments prior to adopting this General Order.

THEREFORE, IT IS HEREBY ORDERED, that pursuant to Water Code sections 13263, 13267, and 13383 this General Order supersedes Order 2006-0003-DWQ, Order WQ 2013-0058-EXEC, and any amendments made to these Orders thereafter, except for enforcement purposes and to meet the provisions contained in Division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, the Enrollee shall comply with the requirements in this Order.

4. **PROHIBITIONS**

4.1 Discharge of Sewage from a Sanitary Sewer System

Any discharge from a sanitary sewer system that has the potential to discharge to surface waters of the State is prohibited unless it is promptly cleaned up and reported as required in this General Order.

4.2. Discharge of Sewage to Waters of the State

Any discharge from a sanitary sewer system, discharged directly or indirectly through a drainage conveyance system or other route, to waters of the State is prohibited.

4.3. Discharge of Sewage Creating a Nuisance

Any discharge from a sanitary sewer system that creates a nuisance or condition of pollution as defined in Water Code section 13050(m) is prohibited.

5. SPECIFICATIONS

5.1. Designation of a Legally Responsible Official

The Enrollee shall designate a Legally Responsible Official that has authority to ensure the enrolled sanitary sewer system(s) complies with this Order, and is authorized to serve as a duly authorized representative. The Legally Responsible Official must have responsibility over management of the Enrollee's entire sanitary sewer system, and must be authorized to make managerial decisions that govern the operation of the sanitary sewer system, including having the explicit or implicit duty of making major capital improvement recommendations to ensure long-term environmental compliance. The Legally Responsible Official must have or have direct authority over individuals that:

- Possess a recognized degree or certificate related to operations and maintenance of sanitary sewer systems, and/or
- Have professional training and experience related to the management of sanitary sewer systems, demonstrated through extensive knowledge, training and experience.

For example, a sewer system superintendent or manager, an operations manager, a public utilities manager or director, or a district engineer may be designated as a Legally Responsible Official.

The Legally Responsible Official shall complete the electronic <u>CIWQS "User</u> <u>Registration" form</u> (https://ciwqs.waterboards.ca.gov/ciwqs/newUser.jsp). A Legally Responsible Official that represents multiple enrolled systems shall complete the electronic CIWQS "User Registration" form for each system.

The Enrollee shall submit any change to its Legally Responsible Official, and/or change in contact information, to the State Water Board within 30 calendar days of the change by emailing <u>ciwqs@waterboards.ca.gov</u> and copying the appropriate Regional Water Board as provided in Attachment F (Regional Water Quality Control Board Contact Information) of this General Order.

5.2. Sewer System Management Plan Development and Implementation

To facilitate adequate local funding and management of its sanitary sewer system(s), the Enrollee shall develop and implement an updated Sewer System Management Plan. The scale and complexity of the Sewer System Management Plan, and specific elements of the Plan, must match the size, scale and complexity of the Enrollee's sanitary sewer system(s). The Sewer System Management Plan must address, at minimum, the required Plan elements in Attachment D (Sewer System Management Plan – Required Elements) of this General Order. To be effective, the Sewer System Management Plan must include procedures for the management, operation, and maintenance of the sanitary sewer system(s). The procedures must: (1) incorporate the

prioritization of system repairs and maintenance to proactively prevent spills, and (2) address the implementation of current standard industry practices through available equipment, technologies, and strategies.

For an existing Enrollee under Order 2006-0003-DWQ that has certified its Continuation of Existing Regulatory Coverage, per section 2.1 (Requirements for Continuation of Existing Regulatory Coverage) of this General Order:

Within six (6) months of the Adoption Date of this General Order:

• The Legally Responsible Official shall upload the Enrollee's existing Sewer System Management Plan to the online CIWQS Sanitary Sewer System Database.

For a new Enrollee:

Within twelve (12) months of the Application for Enrollment approval date:

- The governing entity of the new Enrollee shall approve its Sewer System Management Plan; and
- The Legally Responsible Official shall certify and upload its Sewer System Management Plan to the online CIWQS Sanitary Sewer System Database.

5.3. Certification of Sewer System Management Plan and Plan Updates

The Legally Responsible Official shall certify and upload its Sewer System Management Plan and all subsequent updates to the online CIWQS Sanitary Sewer System Database.

5.4. Sewer System Management Plan Audits

The Enrollee shall conduct an internal audit of its Sewer System Management Plan, and implementation of its Plan, at a minimum frequency of once every three years. The audit must be conducted for the period after the end of the Enrollee's last required audit period. **Within six months after the end of the required 3-year audit period**, the Legally Responsible Official shall submit an audit report into the online CIWQS Sanitary Sewer System Database per the requirements in section 3.10 (Sewer System Management Plan Audit Reporting Requirements) of Attachment E1 of this General Order.

Audit reports submitted to the CIWQS Sanitary Sewer System Database will be viewable only to Water Boards staff.

The internal audit shall be appropriately scaled to the size of the system(s) and the number of spills. The Enrollee's sewer system operators must be involved in completing the audit. At minimum, the audit must:

- Evaluate the implementation and effectiveness of the Enrollee's Sewer System Management Plan in preventing spills;
- Evaluate the Enrollee's compliance with this General Order;
- Identify Sewer System Management Plan deficiencies in addressing ongoing spills and discharges to waters of the State; and

Identify necessary modifications to the Sewer System Management Plan to correct deficiencies.

The Enrollee shall submit a complete audit report that includes:

- Audit findings and recommended corrective actions;
- A statement that sewer system operators' input on the audit findings has been considered; and
- A proposed schedule for the Enrollee to address the identified deficiencies.

<u>A new Enrollee</u> of this General Order (that did not have a sanitary sewer system enrolled in the previous State Water Board Order 2006-0003-DWQ) shall conduct its first internal Sewer System Management Plan audit for the time period between the date of submittal of its certified Sewer System Management Plan and the third subsequent December 31st date. The audit report must be submitted into the online CIWQS Sanitary Sewer System Database **by July 1 of the following calendar year**.

See the following tables for clarification:

	Audit Period	Audit Due Date
New Enrollee	Certified Sewer System Management Plan Submittal Date through the third subsequent December 31 st date	July 1 st date after audit period
Example	Certified Sewer System Management Plan Submittal Date of August 2, 2025 Audit Period of August 2, 2025 through December 31, 2027	July 1, 2028

Initial Audit Period and Audit Due Date for New Enrollees

Initial Audit Period for Transition from 2-Year Audit Required in Previous Order 2006-0003-DWQ to 3-Year Audit Required in this General Order

	Audit Period	Audit Due Date
An Enrollee previously regulated by Order 2006-003-DWQ	A 3-year period starting from the end of last required 2-year Audit Period	Within six months after end of 3-year Audit Period
Example	Last required Audit Period start date of August 2, 2021; Audit Period of August 2, 2021 through August 1, 2024	February 1, 2025

Three-Year Ongoing Audit Period

	Audit Period	Audit Due Date
Each Enrollee	A 3-year period starting from the end of last required Audit Period	Within six months after end of 3-year Audit Period

5.5. Six-Year Sewer System Management Plan Update

At a minimum, the Enrollee shall update its Sewer System Management Plan every six (6) years after the date of its last Plan Update due date. (For an Enrollee previously regulated by Order 2006-0003-DWQ, the six-year period shall commence on the due date identified in section 3.11 of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this Order. The Updated Sewer System Management Plan must include:

- Elements required in Attachment D (Sewer System Management Plan Required Elements) of this Order;
- Summary of revisions included in the Plan update based on internal audit findings; and
- Other sewer system management-related changes.

The Enrollee's governing entity shall approve the updated Plan. The Legally Responsible Official shall upload and certify the approved updated Plan in the online CIWQS Sanitary Sewer System Database in accordance with section 3.11 (Sewer System Management Plan Reporting Requirements) of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this General Order. During the time period in between Plan updates, the Enrollee shall continuously document changes to its Sewer System Management Plan in a change log attached to the Plan.

5.6. System Resilience

The Enrollee shall include and implement system-specific procedures in its Sewer System Management Plan to proactively prioritize: (1) operation and maintenance, (2) condition assessments, and (3) repair and rehabilitation, to address ongoing system resilience, as specified in Attachment D (Sewer System Management Plan – Required Elements) of this General Order.

5.7. Allocation of Resources

The Enrollee shall:

- Establish and maintain a means to manage all necessary revenues and expenditures related to the sanitary sewer system; and
- Allocate the necessary resources to its sewer system management program for:
 - o Compliance with this General Order,
 - o Full implementation of its updated Sewer System Management Plan,
 - o System operation, maintenance, and repair, and
 - Spill responses.

5.8. Designation of Data Submitters

The Legally Responsible Official may designate one or more individuals as a Data Submitter for reporting of spill data. The Legally Responsible Official shall authorize the designation of Data Submitter(s) through the online <u>CIWQS database</u> (https://ciwqs.waterboards.ca.gov) prior to the individuals establishing a <u>CIWQS user account</u> (https://ciwqs.waterboards.ca.gov/ciwqs/newUser.jsp) and entering spill data into the online CIWQS Sanitary Sewer System Database.

The Legally Responsible Official shall submit any change to its Data Submitter(s), and/or change in Data Submitter contact information, to the State Water Board within 30 calendar days of the change, by emailing <u>ciwqs@waterboards.ca.gov</u> and copying the appropriate Regional Water Board as provided in Attachment F (Regional Water Quality Control Board Contact Information) of this General Order.

5.9. Reporting Certification

The Legally Responsible Official shall electronically certify, on the Enrollee's behalf, all applications, reports, the Sewer System Management Plan(s) and corresponding updates, and other information submitted electronically into the online CIWQS Sanitary Sewer System Database, as follows:

"I certify under penalty of perjury under the laws of the State of California that the electronically submitted information was prepared under my direction or supervision. Based on my inquiry of the person(s) directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete, and complies with the Statewide Sanitary Sewer Systems General Order. I am aware that there are significant penalties for submitting false information."

Hardcopy submittals to the State Water Board must be accompanied by the above certification statement.

5.10. System Capacity

The Enrollee shall maintain the system capacity necessary to convey: (1) base flows during dry weather conditions, and (2) wet weather peak flows consistent with designated local historic storms. Design storms must take into account system-specific stormwater contributions via inflow and infiltration, and location-specific depth of groundwater and storm frequencies. The Enrollee shall implement capital improvements to provide adequate hydraulic capacity to:

- Meet or exceed the design criteria as defined in the Enrollee's System Evaluation and Capacity Assurance element of its Sewer System Management Plan; and
- Prevent system capacity-related spills, and adverse impacts to the treatment efficiency of downstream wastewater treatment facilities.

5.11. System Performance Analysis

The Enrollee shall include a running 10-year system performance analysis in its Annual Report. The analysis must include two CIWQS-generated graphs presenting the following information:

Graph 1 – Total Spill Volume per Year:

- <u>X axis</u>: A 10-year period which includes the current calendar year and the nine previous calendar years;
- Y axis: The total spill volume, per Spill Category, for each calendar year.

Graph 2 – Total Number of Spills per Year:

- <u>X axis</u>: A 10-year period which includes the current calendar year and the nine previous calendar years;
- Y axis: The total number of spills, per Spill Category, for each calendar year.

The current calendar year is the calendar year covered in the Annual Report.

The Enrollee shall generate the graphs in CIWQS, using the existing data in the online CIWQS Sanitary Sewer System Database at the following graph generation link: (<u>https://ciwqs.waterboards.ca.gov/ciwqs/readOnly/PublicReportSSOServlet?reportAction=criteria&reportId=sso_operation_report</u>).

5.12. Spill Emergency Response Plan and Remedial Actions

For Existing Enrollees (with regulatory coverage under Order 2006-0003-DWQ):

Within six (6) months of the Adoption Date of this General Order, the Enrollee shall update and implement its Spill Emergency Response Plan, per Attachment D, section 6 (Spill Emergency Response Plan) of this General Order.

For New Enrollees:

Within six (6) months of the Application for Enrollment approval date, the Enrollee shall develop and implement a Spill Emergency Response Plan, per Attachment D, section 6 (Spill Emergency Response Plan) of this General Order.

The Enrollee shall certify, in its Annual Report, that its Spill Emergency Response Plan is up to date.

The Spill Emergency Response Plan shall include measures to protect public health and the environment. The Enrollee shall respond to spills from its system(s) in a timely manner that minimizes water quality impacts and nuisance by:

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

5.13. Notification, Monitoring, Reporting and Recordkeeping Requirements

The Enrollee shall comply with notification, monitoring, reporting, and recordkeeping requirements in Attachment E1 of this General Order.

5.13.1. Spill Categories

Individual spill notification, monitoring and reporting must be in accordance with the following spill categories:

• Category 1 Spill

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

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

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

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

• Category 2 Spill

A Category 2 spill is a spill of 1,000 gallons or greater, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water.

A spill of 1,000 gallons or greater that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system, is a Category 2 spill.

Category 3 Spill

A Category 3 spill is a spill of equal to or greater than 50 gallons and less than 1,000 gallons, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water.

A spill of equal to or greater than 50 gallons and less than 1,000 gallons, that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 3 spill.

• Category 4 Spill

A Category 4 spill is a spill of less than 50 gallons, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water.

A spill of less than 50 gallons that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 4 spill.

5.13.2. Annual Report

The Enrollee shall submit an Annual Report (previously termed as Collection System Questionnaire in Order 2006-0003-DWQ) as specified in section 3.9 (Annual Report) of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this General Order.

For new Enrollees: Within 30 days of obtaining a CIWQS account, a new Enrollee shall submit its initial Annual Report, as specified in section 3.9 (Annual Report) of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this General Order.

5.14. Electronic Sanitary Sewer System Service Area Boundary Map

For continuing enrollees, starting on July 1, 2025, and no later than December 31, 2025:

For new enrollees – no earlier than July 1, 2025, or within 12 months of the Application for Enrollment approval date, whichever date is later:

The Legally Responsible Official shall submit, to the State Water Board, geospatial data detailing the locations of the Enrollee's sanitary sewer system service area boundary, per the required content and specifications in section 3.8 (Electronic Sanitary Sewer System Service Area Boundary Map) of Attachment E1 of this General Order, for each system identified by a WDID number.

An Enrollee of a disadvantaged community that may need assistance developing an electronic map to comply with this requirement, may contact State Water Board staff for assistance at <u>SanitarySewer@waterboards.ca.gov</u>.

5.15. Voluntary Reporting of Spills from Privately-Owned Sewer Laterals and/or Private Sanitary Sewer Systems

Within 24 hours of becoming aware of a spill (as described below) from a private sewer lateral or private sanitary sewer system that is not owned/operated by the Enrollee, the Enrollee is encouraged to report the following observations to the online CIWQS Sanitary Sewer System Database at the following link: https://ciwqs.waterboards.ca.gov:

- A spill equal or greater than 1,000 gallons that discharges (or has a potential to discharge) to a water of the State, or a drainage conveyance system that discharges to waters of the State; **or**
- Any volume of sewage that discharges (or has a potential to discharge) to surface waters.

In the CIWQS module, the Enrollee is encouraged to identify:

- Time of observation;
- Description of general spill location (for example, street name and cross street names);
- Estimated volume of spill;
- If known, general description of spill destination (for example, flowing into drainage channel, flowing directly into a creek, etc.); and
- If known, name of private system owner/operator.

The CIWQS database will make the name and contact information of the entity voluntarily reporting a private spill, accessible to State and Regional Water Board staff only. The CIWQS database will only make information regarding the actual spill, accessible to the public.

5.16. Voluntary Notification of Spills from Privately-Owned Laterals and/or Systems to the California Office of Emergency Services

Upon observing or acquiring knowledge of any of the following from a private sewer lateral or private sanitary sewer system that is not owned/operated by the Enrollee, the Enrollee is encouraged to notify the California Office of Emergency Services (as provided by Health and Safety Code section 5410 et. seq. and Water Code section 13271), or inform the responsible party that State law requires such notification to the Office of Emergency Services by any person that causes or allows a sewage discharge to waters of the State:

- A spill equal to 1,000 gallons or more that discharges (or has a potential to discharge) to waters of the State, or a drainage conveyance system that discharges to waters of the State; or
- A spill of any volume to surface waters.

5.17. Unintended Failure to Report

If an Enrollee becomes aware that they unintentionally failed to submit relevant facts in any report required in this General Order, the Enrollee shall promptly notify Regional Water Board and State Water Board staff. Regional Water Board contact information is included in Attachment F of this Order. State Water Board staff shall be contacted by email at <u>SanitarySewer@waterboards.ca.gov</u> for assistance in formally amending the corresponding report(s) in the online CIWQS Sanitary Sewer System Database.

5.18. Duty to Report to Water Boards

In accordance with Water Code section 13267 and/or section 13383, upon request by the State Water Board Executive Director (or designee) or a Regional Water Board Executive Officer (or designee), the Enrollee shall provide the requested information which the State or Regional Water Board deems necessary to determine compliance with this General Order.

5.19. Operation and Maintenance

To prevent discharges to the environment, the Enrollee shall maintain in good working order, and operate as designed, any facility or treatment and control system designed to contain sewage and convey it to a treatment plant.

6. **PROVISIONS**

6.1. Enforcement Provisions

The following enforcement provisions are based on existing federal and state regulations, laws and policies, including the federal Clean Water Act, the state Water Code and the State Water Board Enforcement Policy.

6.1.1. Enforceability of Clean Water Act and Water Code Violations

Noncompliance with requirements of this General Order or discharging sewage without enrolling in this General Order constitutes a violation of the Water Code and a potential

violation of the Clean Water Act and is grounds for an enforcement action by the State Water Board or the applicable Regional Water Board. Failure to comply with the notification, monitoring, inspection, entry, reporting, and recordkeeping requirements may subject the Enrollee to administrative civil liabilities of up to \$10,000 a day per violation pursuant to Water Code section 13385; up to \$1,000 a day per violation pursuant to Water Code section 13268; or referral to the Attorney General for judicial civil enforcement. Discharging waste not in compliance with the requirements of this General Order or the Clean Water Act may subject the Enrollee to administrative civil liabilities up to \$10,000 a day per violation and additional liability up to \$10 per gallon of discharge not cleaned up after the first 1,000 gallons of discharge; up to \$5,000 a day per violation pursuant to Water Code section 13350 or up to \$20 per gallon of waste discharged; or referral to the Attorney General for judicial civil enforcement.

6.1.2. Monetary Penalties

The Water Code provides the State and Regional Water Boards the authority to pursue formal enforcement actions, including imposing administrative liability and civil monetary penalties, for non-compliance with the requirements of this General Order and violations of the Clean Water Act.

6.1.3. Falsifying or Failure to Report

The Water Code provides that any person failing or refusing to furnish technical or monitoring program reports, as required under this General Order, or falsifying any information provided in the technical or monitoring reports is subject to administrative liability and civil monetary penalties. Any person who knowingly fails or refuses to furnish technical or monitoring program reports or falsifies any information provided in reports required by this General Order is subject to criminal penalties.

6.1.4. Severability of General Order

The provisions of this General Order are severable; if any provision of this Order, or the application of any provision of this Order to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this Order shall not be affected thereby.

6.1.5. Indirect Discharges

In the event that a spill enters into a drainage conveyance system, the Enrollee shall take all feasible steps to prevent discharge of sewage into waters of the State by blocking or redirecting the flow in the drainage conveyance system, removing the sewage from the drainage conveyance system, and cleaning the system in a manner that does not inadvertently impact beneficial uses of the receiving water body.

6.1.6. Water Boards' Considerations for Discretionary Enforcement

Consistent with the State Water Board Enforcement Policy, when considering Water Code section 13327 factors, the State Water Board or a Regional Water Board may consider the Enrollee's efforts to contain, control, clean up, and mitigate spills. In assessing the factors, the State Water Board or the applicable Regional Water Board will consider:

- The Enrollee's compliance with this General Order with a focus on compliance with reporting requirements;
- The Enrollee's provision of adequate funding to implement the requirements of this General Order;
- The Enrollee's compliance with providing a complete and updated Sewer System Management Plan;
- The Enrollee's compliance with implementing its Sewer System Management Plan;
- The overall effectiveness of the Enrollee's Sewer System Management Plan with respect to:
 - o System management, operation, and maintenance,
 - Adequate treatment facilities, sanitary sewer system facilities, and/or components with an appropriate design capacity, to reasonably prevent spills (e.g. adequately enlarging treatment or collection facilities to accommodate growth, infiltration and inflow, etc.),
 - Preventive maintenance (including cleaning, root grinding, and fats, oils, and grease control) and source control measures,
 - o Implementation of backup equipment,
 - o Inflow and infiltration prevention and control,
 - Appropriate sanitary sewer system capacity to prevent spills, and
 - The Enrollee's responsiveness to stop and mitigate the impact of the discharge;
- The Enrollee's compliance with identifying the cause of the spill;
- The Enrollee's use of available information and observations to accurately estimate the spill volume and identify the affected or potentially affected receiving waters;
- The Enrollee's thoroughness of cleaning up sewage in drainage conveyance systems after the spill(s);
- The Enrollee's use of water quality and biological monitoring and assessment to determine the short-term and long-term impacts to beneficial uses and the environment;
- The Enrollee's follow up actions to improve system performance;
- The Enrollee's implementation of feasible alternatives to prevent spills, such as:
 - Use of temporary storage or waste retention,
 - Reduction of system inflow and infiltration,
 - Collection and hauling of waste to a treatment facility,
 - Prevention of and/ or containment of spills due to a design storm event identified in the Enrollee's Sewer System Management Plan,

- Implementation of available equipment, technologies, strategies, and recommended industry practices for maintaining and managing sewer systems to prevent spills, and contain and eliminate discharges to waters of the State; and
- The spill duration and factors beyond the reasonable control of the Enrollee causing the event.

6.1.7. Enforcement Discretion Based on Reporting Compliance

Consistent with the State Water Board Enforcement Policy, the State Water Board or a Regional Water Board may consider the Enrollee's efforts to comply with spill reporting requirements when determining compliance with Water Code section 13267 and section 13383. When assessing Water Code section 13227 factors, the State Water Board or the applicable Regional Water Board will consider:

- The Enrollee's diligence to comply with all reporting requirements in this General Order;
- The use of best available information for the Enrollee's reporting of spill start date and start time in which the release of sewage from the sanitary sewer system initiated;
- The Enrollee's reporting of spill end date, and end time to be the date and time in which the release of sewage from the sanitary sewer system was stopped;
- The Enrollee's diligence to accurately estimate and report spill volumes;
- The Enrollee's subsequent verification and/or updates to initial Draft Spill Reports in accordance with this General Order; and
- The Enrollee's timely certification of required spill reports.

Consistent with Water Code section 13267 and section 13383, the State Water Board or a Regional Water Board may require an Enrollee to report the results of a condition assessment of a specified portion of the Enrollee's sanitary sewer system.

6.2. Other Regional Water Board Orders

It is the intent of the State Water Board that sanitary sewer systems be regulated in a manner consistent with federal and state regulations. This Order will not be interpreted or applied:

- In a manner inconsistent with the federal Clean Water Act;
- To authorize a spill or discharge that is illegal under either the Clean Water Act, the Water Code, and/or an applicable Basin Plan prohibition or water quality standard;
- To prohibit a Regional Water Board from issuing an individual National Pollutant Discharge Elimination System (NPDES) permit or individual waste discharge requirements superseding an Enrollee's regulatory coverage under this General Order for a sanitary sewer system authorized under the Clean Water Act or Water Code;

- To supersede any more specific or more stringent waste discharge requirements or enforcement orders issued by a Regional Water Board; or
- To supersede any more specific or more stringent state or federal requirements in existing regulation, an administrative/judicial order, or Consent Decree.

6.3. Sewer System Management Plan Availability

The Enrollee's updated Sewer System Management Plan must be maintained for public inspection at the Enrollee's offices and facilities and must be available to the public through CIWQS and/or on the Enrollee's website, in accordance with section 3.8 (Sewer System Management Plan Reporting Requirements) of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this General Order.

6.4. Entry and Inspection

6.4.1. Entry and Availability of Information

The Enrollee shall allow State and Regional Water Board staff, upon presentation of credentials and other documents as may be required by law, to:

- Enter upon the Enrollee's premises where a regulated facility or activity is located or conducted, or where records are kept under the requirements of this General Order;
- Have access to and reproduce any records required to be maintained by this General Order;
- Inspect any facility and/or equipment (including monitoring and control equipment), practices, or operations required in this General Order; and
- Sample or monitor substances or parameters for assuring compliance with this General Order, or as otherwise authorized by the Water Code.

6.4.2. Pre-Inspection Questionnaire

The Enrollee shall provide pre-inspection information to State and Regional Water Board staff through the completion of a Pre-Inspection Questionnaire provided by Water Board staff.

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ATTACHMENT A - DEFINITIONS

Annual Report

An Annual Report (previously termed as Collection System Questionnaire in Order 2006-0003-DWQ) is a mandatory report in which the Enrollee provides a calendar-year update of its efforts to prevent spills.

Basin Plan

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

Beneficial Uses

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

California Integrated Water Quality System (CIWQS)

CIWQS is the statewide database that provides for mandatory electronic reporting as required in State and Regional Water Board-issued waste discharge requirements.

Data Submitter

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

Disadvantaged Community

A disadvantaged community is a community with a median household income of less than eighty percent (80%) of the statewide annual median household income.

For the purpose of this General Order, there is no differentiation between a small and large disadvantaged community.

Drainage Conveyance System

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

Enrollee

An Enrollee is a public, private, or other non-governmental entity that has obtained approval for regulatory coverage under this General Order, including:

- A state agency, municipality, special district, or other public entity that owns and/or operates one or more sanitary sewer systems:
 - greater than one (1) mile in length (each individual sanitary sewer system);
 - one mile or less in length where the State Water Resources Control Board or a Regional Water Quality Control Board requires regulatory coverage under this Order, or
- A federal agency, private company, or other non-governmental entity that owns and/or operates a sanitary sewer system of any size where the State Water Resources Control Board or a Regional Water Quality Control Board requires regulatory coverage under this Order in response to a history of spills, proximity to surface water, or other factors supporting regulatory coverage.

Environmentally Sensitive Area

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

Exfiltration

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

Flood Control Channel

A flood control channel is a channel used to convey stormwater and non-stormwater flows through and from areas for flood management purposes.

Governing Entity

A governing entity includes but is not limited to the following:

- A publicly elected governing board, council, or commission of a municipal agency;
- A Department or Division director of a federal or state agency that is not governed by a board;
- A governing board or commission of an organization or association; and
- A private system owner/manager that is not governed by a board.

Hydrologically Connected

Two waterbodies are hydrologically connected when one waterbody flows, or has the potential to flow, into the other waterbody. For the purpose of this General Order, groundwater is

hydrologically connected to a surface water when the groundwater feeds into the surface water. (The surface waterbody in this example is termed a gaining stream as it gains flow from surrounding groundwater.)



Lateral (including Lower and Upper Lateral)

A lateral is an underground segment of smaller diameter pipe that transports sewage from a customer's building or property (residential, commercial, or industrial) to the Enrollee's main sewer line in a street or easement. Upper and lower lateral boundary definitions are subject to local jurisdictional codes and ordinances, or private system ownership.

A lower lateral is the portion of the lateral located between the sanitary sewer system main, and either the property line, sewer clean out, curb line, established utility easement boundary, or other jurisdictional locations.

An upper lateral is the portion of the lateral from the property line, sewer clean out, curb line, established utility easement boundary, or other jurisdictional locations, to the building or property.

Legally Responsible Official

A Legally Responsible Official is an official representative, designated by the Enrollee, with authority to sign and certify submitted information and documents required by this General Order.

Nuisance

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

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

Private Sewer Lateral

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

Private Sanitary Sewer System

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

Potential to Discharge, Potential Discharge

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

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Receiving Water

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

Resilience

Resilience is the ability to recover from or adjust to adversity or change, and grow from disruptions. Resilience can be built through planning, preparing for, mitigating, and adapting to changing conditions.

Sanitary Sewer System

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

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

For purpose of this Order, sanitary sewer systems include only systems owned and/or operated by the Enrollee.

Satellite Sewer System

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

Sewer System Management Plan

A sewer system management plan is a living document an Enrollee develops and implements to effectively manage its sanitary sewer system(s) in accordance with this General Order.

Sewage

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

Spill

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

Training

Training is in-house or external education and guidance needed that provides the knowledge, skills, and abilities to comply with this General Order.

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Wash Down Water

Wash down water is water used to clean a spill area.

Waste

Waste, as defined in Water Code section 13050(d), includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal.

Waste Discharge Identification Number (WDID)

A waste discharge identification number (WDID) identifies each individual sanitary sewer system enrolled under this General Order. A WDID number is assigned to each enrolled system upon an Enrollee's approved regulatory coverage.

Waters of the State

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

Waters of the United States

Waters of the United States are surface waters or waterbodies that are subject to federal jurisdiction in accordance with the Clean Water Act.

Water Quality Objective

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

ATTACHMENT B – APPLICATION FOR ENROLLMENT

- 1. Enrollment Status: (Mark only one item)
 - □ New Enrollee
 - New Enrollee with previous regulatory coverage under Order 2006-0003-DWQ (that failed to certify continuation of coverage in CIWQS per Order 2022-XXXX-DWQ) Existing WDID Number:

2. Applicant Information:

	Legally Responsible Official Submitting Application					
	First and Last Name:					
	Title:					
	Phone:					
	Email:					
	System Owner/Operator Name:					
	Mailing Address:					
	City, State, Zip:					
	County:					
	Sanitary Sewer System Name:					
	Regional Water Quality Control Board(s):					
	Signature and Date:					
3.	Applicant Type (Check one):					
	City County State Federal Special District					
	□ Government Combination □ Private □ Other Non-governmental Entity					
4.	Wastewater Treatment Plant Receiving Sanitary Sewer System Waste:					
	Wastewater Treatment Plant Permittee:					
	WDID No.:					

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5. Billing Information Billing Address: ______ City, State, Zip: ______ Billing Contact Person and Title: ______ Phone and Email Address: ______

6. Application Fee:

The application fee, as required by Water Code section 13260, is based on the daily population served by the sanitary sewer system. See updated <u>Fee Schedule.</u> (https://www.waterboards.ca.gov/resources/fees/water_quality/)

Check one of the following and enter fee amount:

□ Population Served < 50,000 – Total Fee submitted: \$ _____

□ Population Served \geq 50,000 – Total Fee submitted: \$ _____

Make the fee payment payable to the State Water Resources Control Board and mail the complete application package to:

State Water Resources Control Board, Accounting Office P. O. Box 1888 Sacramento, CA 95812-1888

Attention: Statewide Sanitary Sewer System Program

7. Application Submittal Certification

I certify under penalty of perjury under the laws of the State of California that to the best of my knowledge and belief, the information in the submitted application package is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

Print Name: _____

Title: _____

Signature: _____Date: _____

ATTACHMENT C - NOTICE OF TERMINATION

1. Enrollee Information

Enrollee Name:
WDID No:
Legally Responsible Official Requesting Termination of Coverage:
First and Last Name:
Title:
Phone:
Email:
Mailing Address:
City, State, Zip:
County:
Sanitary Sewer System Name(s) or Unique Identifier(s):
Regional Water Quality Control Board(s):
Signature and Date:

2. Basis of Termination

Explanation of termination, including subsequent regulatory coverage and subsequent owner/operator of enrolled sanitary sewer system, as applicable:



3. Regulatory Coverage Termination Certification

I certify under penalty of perjury under the laws of the State of California that to the best of my knowledge: 1) the sanitary sewer system I officially represent is not required to be regulated under the Statewide Waste Discharge Requirements for Sanitary Sewer Systems Order 2022-XXXX-DWQ, and 2) the information submitted in this Notice of Termination is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment. Additionally, I understand that the submittal of this Notice of Termination does not release sanitary sewer system agencies from liability for any violations of the Clean Water Act.

Print Name:		
Title:		
Signature:		Date:
For State Water Board Use	Only nation	Denied and Returned to Enrollee
Deputy Director of Water Qu	ality Signature:	
Date:	Notice of Termin	ation Effective Date:

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER 2022-0103-DWQ

ATTACHMENT D – SEWER SYSTEM MANAGEMENT PLAN – REQUIRED ELEMENTS

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ATTACHMENT D – SEWER SYSTEM MANAGEMENT PLAN – REQUIRED ELEMENTS

A Sewer System Management Plan (Plan) is a living planning document that documents ongoing local sewer system management program activities, procedures, and decision-making – at the scale necessary to address the size and complexity of the subject sanitary sewer system(s). This Plan may incorporate other programs and other plans by reference, to address short-term and long-term system resilience through:

- Proactive planning and decision-making;
- Local government ordinances;
- Updated operations and maintenance activities and procedures;
- Implementation of capital improvements;
- Sufficient local budget to support staff resources, contractors, equipment, and training; and
- Updated training of staff and contractors.

The Enrollee's development, update, and implementation of a Sewer System Management Plan addressing the requirements of this Attachment is an enforceable component of this General Order. As specified in Provision 6.1 (Enforcement Provisions) of this General Order, consistent with the Water Code and the State Water Board Enforcement Policy, the State Water Board or a Regional Water Board may consider the Enrollee's efforts in implementing an effective Sewer System Management Plan to prevent, contain, control, and mitigate spills when considering Water Code section 13327 factors to determine necessary enforcement of this General Order.

This Attachment includes the following required elements that the Enrollee shall address in its Plan and subsequent updates. The Enrollee shall identify any requirement in this Attachment that is not applicable to the Enrollee's sewer system and shall explain in its Plan why the requirement is not applicable.

1. SEWER SYSTEM MANAGEMENT PLAN GOAL AND INTRODUCTION

The goal of the Sewer System Management Plan (Plan) is to provide a plan and schedule to: (1) properly manage, operate, and maintain all parts of the Enrollee's sanitary sewer system(s), (2) reduce and prevent spills, and (3) contain and mitigate spills that do occur.

The Plan must include a narrative Introduction section that discusses the following items:

1.1. Regulatory Context

The Plan Introduction section must provide a general description of the local sewer system management program and discuss Plan implementation and updates.

1.2. Sewer System Management Plan Update Schedule

The Plan Introduction section must include a schedule for the Enrollee to update the Plan, including the schedule for conducting internal audits. The schedule must include milestones for incorporation of activities addressing prevention of sewer spills.

1.3. Sewer System Asset Overview

The Plan Introduction section must provide a description of the Enrollee-owned assets and service area, including but not limited to:

- Location, including county(ies);
- Service area boundary;
- Population and community served;
- System size, including total length in miles, length of gravity mainlines, length of pressurized (force) mains, and number of pump stations and siphons;
- Structures diverting stormwater to the sewer system;
- Data management systems;
- Sewer system ownership and operation responsibilities between Enrollee and private entities for upper and lower sewer laterals;
- Estimated number or percent of residential, commercial, and industrial service connections; and
- Unique service boundary conditions and challenge(s).

Additionally, the Plan Introduction section must provide reference to the Enrollee's upto-date map of its sanitary sewer system, as required in section 4.1 (Updated Map of Sanitary Sewer System) of this Attachment.

2. ORGANIZATION

The Plan must identify organizational staffing responsible and integral for implementing the local Sewer System Management Plan through an organization chart or similar narrative documentation that includes:

- The name of the Legally Responsible Official as required in section 5.1 (Designation of a Legally Responsible Official) of this General Order;
- The position titles, telephone numbers, and email addresses for management, administrative, and maintenance positions responsible for implementing specific Sewer System Management Plan elements;
- Organizational lines of authority; and
- Chain of communication for reporting spills from receipt of complaint or other information, including the person responsible for reporting spills to the State and Regional Water Boards and other agencies, as applicable. (For example, county

ATTACHMENT D – SEWER SYSTEM MANAGEMENT PLAN REQUIRED ELEMENTS health officer, county environmental health agency, and State Office of Emergency Services.)

3. LEGAL AUTHORITY

The Plan must include copies or an electronic link to the Enrollee's current sewer system use ordinances, service agreements and/or other legally binding procedures to demonstrate the Enrollee possesses the necessary legal authority to:

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

4. OPERATION AND MAINTENANCE PROGRAM

The Plan must include the items listed below that are appropriate and applicable to the Enrollee's system.

4.1. Updated Map of Sanitary Sewer System

An up-to-date map(s) of the sanitary sewer system, and procedures for maintaining and providing State and Regional Water Board staff access to the map(s). The map(s) must show gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable stormwater conveyance facilities within the sewer system service area boundaries.

4.2. Preventive Operation and Maintenance Activities

A scheduling system and a data collection system for preventive operation and maintenance activities conducted by staff and contractors.

The scheduling system must include:

• Inspection and maintenance activities;

ATTACHMENT D – SEWER SYSTEM MANAGEMENT PLAN REQUIRED ELEMENTS

- Higher-frequency inspections and maintenance of known problem areas, including areas with tree root problems;
- Regular visual and closed-circuit television (CCTV) inspections of manholes and sewer pipes.

The data collection system must document data from system inspection and maintenance activities, including system areas/components prone to root-intrusion potentially resulting in system backup and/or failure.

4.3. Training

In-house and external training provided on a regular basis for sanitary sewer system operations and maintenance staff and contractors. The training must cover:

- The requirements of this General Order;
- The Enrollee's Spill Emergency Response Plan procedures and practice drills;
- Skilled estimation of spill volume for field operators; and
- Electronic CIWQS reporting procedures for staff submitting data.

4.4. Equipment Inventory

An inventory of sewer system equipment, including the identification of critical replacement and spare parts.

5. DESIGN AND PERFORMANCE PROVISIONS

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

5.1. Updated Design Criteria and Construction Standards and Specifications

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

5.2. Procedures and Standards

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

6. SPILL EMERGENCY RESPONSE PLAN

The Plan must include an up to date Spill Emergency Response Plan to ensure prompt detection and response to spills to reduce spill volumes and collect information for prevention of future spills. The Spill Emergency Response Plan must include procedures to:

- Notify primary responders, appropriate local officials, and appropriate regulatory agencies of a spill in a timely manner;
- Notify other potentially affected entities (for example, health agencies, water suppliers, etc.) of spills that potentially affect public health or reach waters of the State;
- Comply with the notification, monitoring and reporting requirements of this General Order, State law and regulations, and applicable Regional Water Board Orders;
- Ensure that appropriate staff and contractors implement the Spill Emergency Response Plan and are appropriately trained;
- Address emergency system operations, traffic control and other necessary response activities;
- Contain a spill and prevent/minimize discharge to waters of the State or any drainage conveyance system;
- Minimize and remediate public health impacts and adverse impacts on beneficial uses of waters of the State;
- Remove sewage from the drainage conveyance system;
- Clean the spill area and drainage conveyance system in a manner that does not inadvertently impact beneficial uses in the receiving waters;
- Implement technologies, practices, equipment, and interagency coordination to expedite spill containment and recovery;
- Implement pre-planned coordination and collaboration with storm drain agencies and other utility agencies/departments prior, during, and after a spill event;
- Conduct post-spill assessments of spill response activities;
- Document and report spill events as required in this General Order; and
- Annually, review and assess effectiveness of the Spill Emergency Response Plan, and update the Plan as needed.

7. SEWER PIPE BLOCKAGE CONTROL PROGRAM

The Sewer System Management Plan must include procedures for the evaluation of the Enrollee's service area to determine whether a sewer pipe blockage control program is needed to control fats, oils, grease, rags and debris. If the Enrollee determines that a program is not needed, the Enrollee shall provide justification in its Plan for why a program is not needed.

The procedures must include, at minimum:

- An implementation plan and schedule for a public education and outreach program that promotes proper disposal of pipe-blocking substances;
- A plan and schedule for the disposal of pipe-blocking substances generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of substances generated within a sanitary sewer system service area;
- The legal authority to prohibit discharges to the system and identify measures to prevent spills and blockages;
- Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, best management practices requirements, recordkeeping and reporting requirements;
- Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the fats, oils, and grease ordinance;
- An identification of sanitary sewer system sections subject to fats, oils, and grease blockages and establishment of a cleaning schedule for each section; and
- Implementation of source control measures for all sources of fats, oils, and grease reaching the sanitary sewer system for each section identified above.

8. SYSTEM EVALUATION, CAPACITY ASSURANCE AND CAPITAL IMPROVEMENTS

The Plan must include procedures and activities for:

- Routine evaluation and assessment of system conditions;
- Capacity assessment and design criteria;
- Prioritization of corrective actions; and
- A capital improvement plan.

8.1 System Evaluation and Condition Assessment

The Plan must include procedures to:

• Evaluate the sanitary sewer system assets utilizing the best practices and technologies available;

ATTACHMENT D – SEWER SYSTEM MANAGEMENT PLAN REQUIRED ELEMENTS

December 6, 2022

- Identify and justify the amount (percentage) of its system for its condition to be assessed each year;
- Prioritize the condition assessment of system areas that:
 - Hold a high level of environmental consequences if vulnerable to collapse, failure, blockage, capacity issues, or other system deficiencies;
 - Are located in or within the vicinity of surface waters, steep terrain, high groundwater elevations, and environmentally sensitive areas;
 - Are within the vicinity of a receiving water with a bacterial-related impairment on the most current Clean Water Act section 303(d) List;
- Assess the system conditions using visual observations, video surveillance and/or other comparable system inspection methods;
- Utilize observations/evidence of system conditions that may contribute to exiting of sewage from the system which can reasonably be expected to discharge into a water of the State;
- Maintain documents and recordkeeping of system evaluation and condition assessment inspections and activities; and
- Identify system assets vulnerable to direct and indirect impacts of climate change, including but not limited to: sea level rise; flooding and/or erosion due to increased storm volumes, frequency, and/or intensity; wildfires; and increased power disruptions.

8.2. Capacity Assessment and Design Criteria

The Plan must include procedures to identify system components that are experiencing or contributing to spills caused by hydraulic deficiency and/or limited capacity, including procedures to identify the appropriate hydraulic capacity of key system elements for:

- Dry-weather peak flow conditions that cause or contributes to spill events;
- The appropriate design storm(s) or wet weather events that causes or contributes to spill events;
- The capacity of key system components; and
- Identify the major sources that contribute to the peak flows associated with sewer spills.

The capacity assessment must consider:

- Data from existing system condition assessments, system inspections, system audits, spill history, and other available information;
- Capacity of flood-prone systems subject to increased infiltration and inflow, under normal local and regional storm conditions;

- Capacity of systems subject to increased infiltration and inflow due to larger and/or higher-intensity storm events as a result of climate change;
- Increases of erosive forces in canyons and streams near underground and aboveground system components due to larger and/or higher-intensity storm events;
- Capacity of major system elements to accommodate dry weather peak flow conditions, and updated design storm and wet weather events; and
- Necessary redundancy in pumping and storage capacities.

8.3. Prioritization of Corrective Action

The findings of the condition assessments and capacity assessments must be used to prioritize corrective actions. Prioritization must consider the severity of the consequences of potential spills.

8.4. Capital Improvement Plan

The capital improvement plan must include the following items:

- Project schedules including completion dates for all portions of the capital improvement program;
- Internal and external project funding sources for each project; and
- Joint coordination between operation and maintenance staff, and engineering staff/consultants during planning, design, and construction of capital improvement projects; and Interagency coordination with other impacted utility agencies.

9. MONITORING, MEASUREMENT AND PROGRAM MODIFICATIONS

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

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

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

11. COMMUNICATION PROGRAM

The Plan must include procedures for the Enrollee to communicate with:

- The public for:
 - Spills and discharges resulting in closures of public areas, or that enter a source of drinking water, and
 - The development, implementation, and update of its Plan, including opportunities for public input to Plan implementation and updates.
- Owners/operators of systems that connect into the Enrollee's system, including satellite systems, for:
 - System operation, maintenance, and capital improvement-related activities.

ATTACHMENT E1 – NOTIFICATION, MONITORING, REPORTING AND RECORDKEEPING REQUIREMENTS

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ATTACHMENT E1– NOTIFICATION, MONITORING, REPORTING AND RECORDKEEPING REQUIREMENTS

The Notification Requirements (section 1), Spill-specific Monitoring Requirements (section 2), Reporting Requirements (section 3) and Recordkeeping Requirements (section 4) in this Attachment are pursuant to Water Code section 13267 and section 13383, and are an enforceable component of this General Order. For the purpose of this General Order, the term:

- Notification means the notifying of appropriate parties of a spill event or other activity.
- Spill-specific Monitoring means the gathering of information and data for a specific spill event to be reported or kept as records.
- Reporting means the reporting of information and data into the online California Integrated Water Quality System (CIWQS) Sanitary Sewer System Database.
- Recordkeeping means the maintaining of information and data in an official records storage system.

Failure to comply with the notification, monitoring, reporting and recordkeeping requirements in this General Order may subject the Enrollee to civil liabilities of up to \$10,000 a day per violation pursuant to Water Code section 13385; up to \$1,000 a day per violation pursuant to Water Code section 13268; or referral to the Attorney General for judicial civil enforcement.

Water Code section 13193 et seq. requires the Regional Water Quality Control Boards (Regional Water Boards) and the State Water Resources Control Board (State Water Board) to collect sanitary sewer spill information for each spill event and make this information available to the public. Sanitary sewer spill information for each spill event spill event includes but is not limited to: Enrollee contact information for each spill event, spill cause, estimated spill volume and factors used for estimation, location, date, time, duration, amount discharged to waters of the State, response and corrective action(s) taken.

1. NOTIFICATION REQUIREMENTS

1.1. Notification of Spills of 1,000 Gallons or Greater to the California Office of Emergency Services

Per Water Code section 13271, for a spill that discharges in or on any waters of the State, or discharges or is deposited where it is, or probably will be, discharged in or on any waters of the State, the Enrollee shall notify the California Office of Emergency Services and obtain a California Office of Emergency Services Control Number as soon as possible **but no later than two (2) hours** after:

- The Enrollee has knowledge of the spill; and
- Notification can be provided without substantially impeding cleanup or other emergency measures.

The notification requirements in this section apply to individual spills of 1,000 gallons or greater, from an Enrollee-owned and/or operated laterals, to a water of the State.

1.2. Spill Notification Information

The Enrollee shall provide the following spill information to the California Office of Emergency Services before receiving a Control Number, as applicable:

- Name and phone number of the person notifying the California Office of Emergency Services;
- Estimated spill volume (gallons);
- Estimated spill rate from the system (gallons per minute);
- Estimated discharge rate (gallons per minute) directly into waters of the State or indirectly into a drainage conveyance system;
- Spill incident description:
 - Brief narrative of the spill event, and
 - Spill incident location (address, city, and zip code) and closest cross streets and/or landmarks;
- Name and phone number of contact person on-scene;
- Date and time the Enrollee was informed of the spill event;
- Name of sanitary sewer system causing the spill;
- Spill cause or suspected cause (if known);
- Amount of spill contained;
- Name of receiving water body receiving or potentially receiving discharge; and
- Description of water body impact and/ or potential impact to beneficial uses.

1.3. Notification of Spill Report Updates

Following the initial notification to the California Office of Emergency Services and until such time that the Enrollee certifies the spill report in the online CIWQS Sanitary Sewer System Database, the Enrollee shall provide updates to the California Office of Emergency Services regarding substantial changes to:

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

2. SPILL-SPECIFIC MONITORING REQUIREMENTS

2.1 Spill Location and Spread

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

- Photography and GPS coordinates for:
 - The system location where spill originated.

For multiple appearance points of a single spill event, the points closest to the spill origin.

- Photography for:
 - Drainage conveyance system entry locations,
 - The location(s) of discharge into surface waters, as applicable,
 - Extent of spill spread, and
 - The location(s) of clean up.

2.2 Spill Volume Estimation

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

2.3. Receiving Water Monitoring

2.3.1. Receiving Water Visual Observations

Through visual observations and use of best available spill volume-estimating techniques and field calculation techniques, the Enrollee shall gather and document the following information for spills discharging to surface waters:

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

- Discoloration of receiving water, and
- Impact to the receiving water.

2.3.2. Receiving Water – Water Quality Sampling and Analysis

For sewage spills in which an estimated 50,000 gallons or greater are discharged into a surface water, the Enrollee shall conduct the following water quality sampling no later than **18 hours** after the Enrollee's knowledge of a potential discharge to a surface water:

- Collect one water sample, each day of the duration of the spill, at:
 - The DCS-001 location as described in section 2.3.4 (Receiving Water Sampling Locations) of this Attachment, if sewage discharges to a surface water via a drainage conveyance system; and/or
 - Each of the three receiving water sampling locations in section 2.3.4 (Receiving Water Sampling Locations) of this Attachment;

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

The Enrollee shall analyze the collected receiving water samples for the following constituents per section 2.3.3 (Water Quality Analysis Specifications) of this Attachment:

- Ammonia, and
- Appropriate bacterial indicator(s) per the applicable Basin Plan water quality objectives, including one or more of the following, unless directed otherwise by the Regional Water Board:
 - o Total Coliform Bacteria
 - Fecal Coliform Bacteria
 - o **E-coli**
 - Enterococcus

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

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

2.3.3. Water Quality Analysis Specifications

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

Sufficiently Sensitive Methods

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

Environmental Laboratory Accreditation Program-Accredited Laboratories

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

2.3.4. Receiving Water Sampling Locations

The Enrollee shall collect receiving water samples at the following locations.

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

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

Receiving Surface Water Sampling (RSW)¹

Sampling Location	Sampling Location Description
RSW-001 Point of Discharge	A point in the receiving water where sewage initially enters the receiving water.
RSW-001U: Upstream of Point of Discharge	A point in the receiving water, upstream of the point of sewage discharge, to capture ambient conditions absent of sewage discharge impacts.

Sampling Location	Sampling Location Description
RSW-001D: Downstream of Point of Discharge	A point in the receiving water, downstream of the point of sewage discharge, where the spill material is fully mixed with the receiving water.

¹ The Enrollee must use its best professional judgment to determine the upstream and downstream distances based on receiving water flow, accessibility to upstream/downstream waterbody banks, and size of visible sewage plume.

2.4. Safety and Access Exceptions

If the Enrollee encounters access restrictions or unsafe conditions that prevents its compliance with spill response requirements or monitoring requirements in this General Order, the Enrollee shall provide documentation of access restrictions and/or safety hazards in the corresponding required report.

3. **REPORTING REQUIREMENTS**

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

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

3.1. Reporting Requirements for Individual Category 1 Spill Reporting

3.1.1. Draft Spill Report for Category 1 Spills

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

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

- 1. Contact information: Name and telephone number of Enrollee contact person to respond to spill-specific questions;
- 2. Spill location name;
- 3. Date and time the Enrollee was notified of, or self-discovered, the spill;
- 4. Operator arrival time;

- 5. Estimated spill start date and time;
- 6. Date and time the Enrollee notified the California Office of Emergency Services, and the assigned control number;
- 7. Description, photographs, and GPS coordinates of the system location where the spill originated;
 - If a single spill event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the spill appearance point explanation field;
- 8. Estimated total spill volume exiting the system;
- 9. Description and photographs of the extent of the spill and spill boundaries;
- 10. Did the spill reach a drainage conveyance system? If Yes:
 - Description of the drainage conveyance system transporting the spill;
 - Photographs of the drainage conveyance system entry location(s);
 - o Estimated spill volume fully recovered from the drainage conveyance system;
 - Estimated spill volume remaining within the drainage conveyance system;
- 11. Description and photographs of all discharge point(s) into the surface water;
- 12. Estimated spill volume that discharged to surface waters; and
- 13. Estimated total spill volume recovered.

3.1.2. Certified Spill Report for Category 1 Spills

Within 15 calendar days of the spill end date, the Enrollee shall submit a Certified Spill Report for Category 1 spills, to the online CIWQS Sanitary Sewer System Database. Upon completion of the Certified Spill Report, the online CIWQS Sanitary Sewer System Database will issue a final spill event identification number.

The Certified Spill Report must, at minimum, include the following mandatory information in addition to all information in the Draft Spill Report per section 3.1.1 (Draft Spill Report for Category 1 Spills) above:

- 1. Description of the spill event destination(s), including GPS coordinates if available, that represent the full spread and reach of the spill;
- 2. Spill end date and time;
- 3. Description of how the spill volume estimations were calculated, including at a minimum:
 - The methodology, assumptions and type of data relied upon, such as supervisory control and data acquisition (SCADA) records, flow monitoring or other telemetry information used to estimate the volume of the spill discharged, and the volume of the spill recovered (if any volume of the spill was recovered), and
 - The methodology(ies), assumptions and type of data relied upon for estimations of the spill start time and the spill end time;

- 4. Spill cause(s) (for example, root intrusion, grease deposition, etc.);
- 5. System failure location (for example, main, lateral, pump station, etc.);
- 6. Description of the pipe material, and estimated age of the pipe material, at the failure location;
- 7. Description of the impact of the spill;
- 8. Whether or not the spill was associated with a storm event;
- 9. Description of spill response activities including description of immediate spill containment and cleanup efforts;
- 10. Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the spill, and a schedule of major milestones for those steps;
- 11. Spill response completion date;
- 12. Detailed narrative of investigation and investigation findings of cause of spill;
- 13. Reasons for an ongoing investigation (as applicable) and the expected date of completion;
- 14. Name and type of receiving water body(s);
- 15. Description of the water body(s), including but not limited to:
 - o Observed impacts on aquatic life,
 - Public closure, restricted public access, temporary restricted use, and/or posted health warnings due to spill,
 - o Responsible entity for closing/restricting use of water body, and
 - Number of days closed/restricted as a result of the spill.
- 16. Whether or not the spill was located within 1,000 feet of a municipal surface water intake; and
- 17. If water quality samples were collected, identify sample locations and the parameters the water quality samples were analyzed for. If no samples were taken, Not Applicable shall be selected.

3.1.3. Spill Technical Report for Individual Category 1 Spill in which 50,000 Gallons or Greater Discharged into a Surface Water

For any spill in which 50,000 gallons or greater discharged into a surface water, **within 45 calendar days** of the spill end date, the Enrollee shall submit a Spill Technical Report to the online CIWQS Sanitary Sewer System Database. The Spill Technical Report, at minimum, must include the following information:

- 1. Spill causes and circumstances, including at minimum:
 - o Complete and detailed explanation of how and when the spill was discovered;

- Photographs illustrating the spill origin, the extent and reach of the spill, drainage conveyance system entrance and exit, receiving water, and post-cleanup site conditions;
- Diagram showing the spill failure point, appearance point(s), the spill flow path, and ultimate destinations;
- Detailed description of the methodology employed, and available data used to calculate the discharge volume and, if applicable, the recovered spill volume;
- Detailed description of the spill cause(s);
- Description of the pipe material, and estimated age of the pipe material, at the failure location:
- Description of the impact of the spill;
- Copy of original field crew records used to document the spill; and
- Historical maintenance records for the failure location.
- 2. Enrollee's response to the spill:
 - Chronological narrative description of all actions taken by the Enrollee to terminate the spill;
 - Explanation of how the Sewer System Management Plan Spill Emergency Response Plan was implemented to respond to and mitigate the spill; and
 - Final corrective action(s) completed and a schedule for planned corrective actions, including:
 - Local regulatory enforcement action taken against an illicit discharge in response to this spill, as applicable,
 - Identifiable system modifications, and operation and maintenance program . modifications needed to prevent repeated spill occurrences, and
 - Necessary modifications to the Emergency Spill Response Plan to incorporate lessons learned in responding to and mitigating the spill.
- 3. Water Quality Monitoring, including at minimum:
 - Description of all water quality sampling activities conducted;
 - List of pollutant and parameters monitored, sampled and analyzed; as required in section 2.3 (Receiving Water Monitoring) of this Attachment;
 - Laboratory results, including laboratory reports;
 - Detailed location map illustrating all water guality sampling points; and
 - Other regulatory agencies receiving sample results (if applicable).
- 4. Evaluation of spill impact(s), including a description of short-term and long-term impact(s) to beneficial uses of the surface water.

3.1.4. Amended Certified Spill Reports for Individual Category 1 Spills

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

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

3.2. Reporting Requirements for Individual Category 2 Spill Reporting

3.2.1. Draft Spill Report for Category 2 Spills

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

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

- 1. Contact information: Name and telephone number of Enrollee contact person to respond to spill-specific questions;
- 2. Spill location name;
- 3. Date and time the Enrollee was notified of, or self-discovered, the spill;
- 4. Operator arrival time;
- 5. Estimated spill start date and time;
- 6. Date and time the Enrollee notified the California Office of Emergency Services, and the assigned control number;
- 7. Description, photographs, and GPS coordinates of the system location where the spill originated;

If a single spill event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the spill appearance point explanation field;

- 8. Estimated total spill volume exiting the system;
- 9. Description and photographs of the extent of the spill and spill boundaries;
- 10. Did the spill reach a drainage conveyance system? If Yes:
 - Description of the drainage conveyance system transporting the spill;
 - Photographs of the drainage conveyance system entry location(s);
 - Estimated spill volume fully recovered from the drainage conveyance system;
 - o Estimated spill volume remaining within the drainage conveyance system;

- Estimated spill volume discharged to a groundwater infiltration basin or facility, if applicable; and
- 11. Estimated total spill volume recovered.

3.2.2. Certified Spill Report for Category 2 Spills

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

The Certified Spill Report must, at minimum, include the following mandatory information in addition to all information in the Draft Spill Report per section 3.2.1 (Draft Spill Report for Category 2 Spills) above:

- 1. Description of the spill event destination(s), including GPS coordinates if available, that represent the full spread and reach of the spill;
- 2. Spill end date and time;
- 3. Description of how the spill volume estimations were calculated, including at a minimum:
 - The methodology, assumptions and type of data relied upon, such as supervisory control and data acquisition (SCADA) records, flow monitoring or other telemetry information used to estimate the volume of the spill discharged, and the volume of the spill recovered (if any volume of the spill was recovered), and
 - The methodology(ies), assumptions and type of data relied upon for estimations of the spill start time and the spill end time;
- 4. Spill cause(s) (for example, root intrusion, grease deposition, etc.);
- 5. System failure location (for example, main, pump station, etc.);
- 6. Description of the pipe/infrastructure material, and estimated age of the pipe material, at the failure location;
- 7. Description of the impact of the spill;
- 8. Whether or not the spill was associated with a storm event;
- 9. Description of spill response activities including description of immediate spill containment and cleanup efforts;
- 10. Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the spill, and a schedule of major milestones for those steps;
- 11. Spill response completion date;
- 12. Detailed narrative of investigation and investigation findings of cause of spill;
- 13. Reasons for an ongoing investigation (as applicable) and the expected date of completion; and

14. Whether or not the spill was located within 1,000 feet of a municipal surface water intake.

3.2.3. Amended Certified Spill Reports for Individual Category 2 Spills

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

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

3.3. Monthly Certified Spill Reporting for Category 3 Spills

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

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

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

- Estimated spill volume discharged to a groundwater infiltration basis or facility, if applicable.
- 10. Estimated total spill volume recovered;
- 11. Description of the spill event destination(s), including GPS coordinates, if available, that represent the full spread and reaches of the spill;
- 12. Spill end date and time;
- 13. Description of how the spill volume estimations were calculated, including, at minimum:
 - The methodology and type of data relied upon, including supervisory control and data acquisition (SCADA) records, flow monitoring or other telemetry information used to estimate the volume of the spill discharged, and the volume of the spill recovered (if any volume of the spill was recovered), and
 - The methodology and type of data relied upon to estimate the spill start time, on-going spill rate at time of arrival (if applicable), and the spill end time;
- 14. Spill cause(s) (for example, root intrusion, grease deposition, etc.);
- 15. System failure location (for example, main, pump station, etc.);
- 16. Description of the pipe/infrastructure material, and estimated age of the pipe/infrastructure material, at the failure location;
- 17. Description of the impact of the spill;
- 18. Whether or not the spill was associated with a storm event;
- 19. Description of spill response activities including description of immediate spill containment and cleanup efforts;
- 20. Description of spill corrective actions, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the spill, and a schedule of the major milestones for those steps; including, at minimum:
 - Local regulatory enforcement action taken against an illicit discharge in response to this spill, as applicable, and
 - Identifiable system modifications, and operation and maintenance program modifications needed to prevent repeated spill occurrences at the same spill event location, including:
 - Adjusted schedule/method of preventive maintenance,
 - Planned rehabilitation or replacement of sanitary sewer asset,
 - Inspected, repaired asset(s), or replaced defective asset(s),
 - Capital improvements,
 - Documentation verifying immediately implemented system modifications and operating/maintenance modifications,
 - Description of spill response activities,

- Spill response completion date, and
- Ongoing investigation efforts, and expected completion date of investigation to determine the full cause of spill;
- 21. Detailed narrative of investigation and investigation findings of cause of spill.

3.4. Monthly Certified Spill Reporting for Category 4 Spills

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

3.5. Amended Certified Spill Reports for Category 3 Spills

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

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

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

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

• Maintain records per section 4.4. of this Attachment;

The Enrollee shall provide records upon request by State Water Board or Regional Water Board staff.

• Annually upload and certify a report, in an appropriate digital format, of all recordkeeping of spills to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occurred.

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

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

If either (1) no spills occur during a calendar month or (2) only Category 4, and/or Enrollee-owned and/or operated lateral spills (that do not discharge to a surface water) occur during a calendar month, the Enrollee shall certify, within 30 calendar days after

the end of each calendar month, either a "No-Spill" certification statement, or a "Category 4 Spills" and/or "Non-Category 1 Lateral Spills" certification statement, in the online CIWQS Sanitary Sewer System Database, certifying that there were either no spills, or Category 4 and/or Non-Category 1 Lateral Spills that will be reported annually (per section 3.6 of this Attachment) for the designated month.

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

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

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

3.8. Electronic Sanitary Sewer System Service Area Boundary Map

The Legally Responsible Official shall submit, to the State Water Board, an up-to-date electronic spatial map of its sewer system service area boundaries. The map must be in accordance with section 5.14 (Electronic Sanitary Sewer System Service Area Boundary Map) of this General Order and the specification provided on the statewide Sanitary Sewer Systems program website. The map must include the location of wastewater treatment facility(ies) that treats the sewer system waste, if in the same sewer service boundary.

By the Effective Date of this General Order, specifications for the electronic sanitary sewer service area boundary map format will be provided on the statewide Sanitary Sewer Systems Order program website.

3.9. Annual Report (Previously termed as Collection System Questionnaire in General Order 2006-0003-DWQ)

A new Enrollee shall complete and submit its first certified Annual Report into the online CIWQS Sanitary Sewer System Database, **within 30 days of obtaining a CIWQS account**; Subsequent Annual Reports are due by April 1 of each year.

All enrollees shall update their previous year's Annual Report, **by April 1 of each year after the Effective Date of this General Order,** for each calendar year (January 1 through December 31).

The Annual Report must be entered directly into the online CIWQS Sanitary Sewer System Database. The Enrollee's Legally Responsible Official shall certify the Annual Report as instructed in CIWQS;

The Annual Report must address, and update as applicable, the following items:

• Population served;

- Updated sewer system service area boundary map, if service area boundary has changed from original map submitted per section 5.14 (Electronic Sanitary Sewer System Service Area Boundary Map) of this General Order;
- Number of system operation and maintenance staff:
 - Entry level (less than two years of experience),
 - o Journey level (greater than two years of experience),
 - Supervisory level, and
 - Managerial level;
- Number of operation and maintenance staff certified as a certified collection system operator by the California Water Environmental Association (CWEA), with:
 - Corresponding number of certified collection system operator grade levels (Grade I, II, III, IV, and V);
- System information:
 - Miles of system gravity and force mains,
 - o Number of upper and lower service laterals connected to system,
 - Estimated number of upper and lower laterals owned and/or operated by the Enrollee,
 - Portion of laterals that is Enrollee's responsibility,
 - o Average age the major components of system infrastructure,
 - Number and age of pump stations, and
 - Estimated total miles of the system pipeline not accessible for maintenance;
- Name and location of the treatment plant(s) receiving sanitary sewer system's waste;
- Name of satellite sewer system tributaries;
- Number of system's gravity sewer above or underground crossings of water bodies throughout system;
- Number of force main (pressurized pipe) above or underground crossings of water bodies throughout system;
- Number of siphons used to convey waste throughout the sewer system;
- Miles of sewer system cleaned;
- Miles of sewer system video inspected, or comparable (i.e., video closed-circuit television or alternative inspection methods);
- System Performance Evaluation as specified in section 5.11 (System Performance Analysis) of this General Order;
- Major spill causes (for example, root intrusion, grease deposition);

- System infrastructure failure points (for example, main, pump station, lateral, etc.);
- Ongoing spill investigations; and
- Actions taken to address system deficiencies.

3.10. Sewer System Management Plan Audit Reporting Requirements

The Enrollee shall submit its Sewer System Management Plan Audit and other pertinent audit information, in accordance with section 5.4 (Sewer System Management Plan Audits) of this General Order, to the online CIWQS Sanitary Sewer System Database **by six (6) months after the end of the 3-year audit period**.

If a Sewer System Management Plan Audit is not conducted as required: the Enrollee shall:

- Update the online CIWQS Sanitary Sewer System Database and select the justification for not conducting the Audit; and
- Notify its corresponding Regional Water Board (see Attachment F (Regional Water Quality Control Board Contact Information)) of the justification for the lapsed requirements.

The Enrollee's reporting of a justification for not conducting a timely Audit does not justify non-compliance with this General Order. The Enrollee shall:

- Submit the late Audit as required in this General Order; and
- Comply with subsequent Audit requirements and due dates corresponding with the original audit cycle.

3.11. Sewer System Management Plan Reporting Requirements

For an Existing Enrollee previously regulated by Order 2006-0003-DWQ: Within every six (6) years after the required due date of its last Plan Update, the Legally Responsible Official shall upload and certify a local governing entity-approved Sewer System Management Plan Update to the online CIWQS Sanitary Sewer System Database. If the electronic document format or size capacity prevents the electronic upload of the Plan, the Legally Responsible Official shall report an electronic link to its updated Sewer System Management Plan posted on its own website.

Order 2006-0003-DWQ required each enrollee to develop its initial Sewer System Management Plan per the following schedule, with required Plan updates at a frequency of 5-years thereafter:

Systems serving populations: Greater than 100,000: May 2, 2009

Between 100,000 and 10,000: August 2, 2009 Between 10,000 and 2,500: May 2, 2010 Less than 2,500: August 2, 2010

This Order carries forth the previously-required Plan Update schedule per Order 2006-0003-DWQ. Per the six-year Plan Update frequency required in this Order, the Enrollee shall upload and certify its first Plan Update, to the online CIWQS Sanitary Sewer System Database by the following due dates, with subsequent Plan Updates at the frequency of six years thereafter:

Systems serving populations: Greater than 100,000: May 2, 2025

Between 100,000 and 10,000: August 2, 2025 Between 10,000 and 2,500: May 2, 2026 Less than 2,500: August 2, 2026

For a New Enrollee: Within twelve (12) months of its Application for Enrollment Approval date, the Legally Responsible Official of a new Enrollee shall upload and certify a local governing entity-approved Sewer System Management Plan to the online CIWQS Sanitary Sewer System Database. If electronic document format or size capacity prevents the electronic upload of the Plan, the Legally Responsible Official shall report an electronic link to its Sewer System Management Plan posted on its own website. The due date for subsequent 6-year Plan updates, is six (6) years from the submittal due date of the new Enrollee's first Sewer System Management Plan.

4. **RECORDKEEPING REQUIREMENTS**

The Enrollee shall maintain records to document compliance with the provisions of this General Order, and previous General Order 2006-0003-DWQ as applicable, for each sanitary sewer system owned, including any required records generated by an Enrollee's contractor(s).

4.1. Recordkeeping Time Period

The Enrollee shall maintain records of documents required in this Attachment, including records collected for compliance with this General Order, and records collected in accordance with previous General Order 2006-0003-DWQ, for five (5) years.

4.2. Availability of Documents

The Enrollee shall make the records required in this General Order readily available, either electronic or hard copies, for review by Water Board staff during onsite inspections or through an information request.

4.3. Spill Reports

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

- Spill event complaint, including but not limited to records documenting how the Enrollee responded to notifications of spills. Each complaint record must, at a minimum, include the following information:
 - Date, time, and method of notification,

- Date and time the complainant first noticed the spill, if available,
- Narrative description of the complaint, including any information the caller provided regarding whether the spill has reached surface waters or a drainage conveyance system, if available,
- o Complainant's contact information, if available, and
- Final resolution of the complaint;
- Records documenting the steps and/or remedial action(s) undertaken by the Enrollee, using all available information, to comply with this General Order, and previous General Order 2006-0003-DWQ as applicable;
- Records documenting how estimate(s) of volume(s) and, if applicable, volume(s) of spill recovered were calculated;
- All California Office of Emergency Services notification records, as applicable; and
- Records, in accordance with the Monitoring Requirements in this Attachment.

4.4. Recordkeeping of Category 4 Spills and Non-Category 1 Lateral Spills

An Enrollee must maintain the following records for each individual Category 4 spill and for each individual non-Category 1 Enrollee-owned and/or operated lateral spill, and report in accordance to section 3.6 (Annual Certified Spill Reporting of Category 4 and/or Lateral Spills) of this Attachment.

Recordkeeping of Individual Category 4 Spill Information:

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

- The methodology and type of data relied upon, including supervisory control and data acquisition (SCADA) records, flow monitoring or other telemetry information used to estimate the volume of the spill discharged, and the volume of the spill recovered (if any volume of the spill was recovered), and
- The methodology and type of data relied upon to estimate the spill start time, ongoing spill rate at time of arrival (if applicable), and the spill end time;
- 11. Description of implemented system modifications and operating/maintenance modifications.

Recordkeeping of Individual Lateral Spill Information:

- 1. Date and time the Enrollee was notified of, or self-discovered, the spill;
- 2. Location of individual spill;
- 3. Estimated individual spill volume;
- 4. Spill cause(s) (for example, root intrusion, grease deposition, etc.); and
- 5. Description of how the volume estimations were calculated.

Total Annual Spill Information:

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

4.5. Sewer System Telemetry Records

The Enrollee shall maintain the following sewer system telemetry records if used to document compliance with this General Order, and previous General Order 2006-0003-DWQ as applicable, including spill volume estimates:

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

4.6. Sewer System Management Plan Implementation Records

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

4.7. Audit Records

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

- Completed audit documents and findings;
- Name and contact information of staff and/or consultants that conducted or involved in the audit; and
- Follow-up actions based on audit findings.

4.8. Equipment Records

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

4.9. Work Orders

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

ATTACHMENT E2 – SUMMARY OF NOTIFICATION, MONITORING AND REPORTING REQUIREMENTS

This Attachment provides a summary of notification, monitoring and reporting requirements, by spill category, and for Enrollee-owned and/or operated laterals as required in Attachment E1 of this General Order, for quick reference purposes only.

Spill Requirement	Due	Method
Notification	Within two (2) hours of the Enrollee's knowledge of a Category 1 spill of 1,000 gallons or greater, discharging or threatening to discharge to surface waters: Notify the California Office of Emergency Services and obtain a notification control number.	California Office of Emergency Services at: (800) 852-7550 (Section 1 of Attachment E1)
Monitoring	 Conduct spill-specific monitoring; Conduct water quality sampling of the receiving water within 18 hours of initial knowledge of spill of 50,000 gallons or greater to surface waters. 	(Section 2 of Attachment E1)
Reporting	 Submit Draft Spill Report within three (3) business days of the Enrollee's knowledge of the spill; Submit Certified Spill Report within 15 calendar days of the spill end date; Submit Technical Report within 45 calendar days after the spill end date for a Category 1 spill in which 50,000 gallons or greater discharged to surface waters; and Submit Amended Spill Report within 90 calendar days after the spill end date. 	(Section 3.1 of Attachment E1)

Spill Category 1: Spills to Surface Waters

Table E2-2	
Spill Category 2: Spills of 1,000 Gallons or Greater	That Do Not Discharge to Surface
Waters	

Spill Requirements	Due	Method
Notification	Within two (2) hours of the Enrollee's knowledge of a Category 2 spill of 1,000 gallons or greater, discharging or threatening to discharge to waters of the State:	California Office of Emergency Services at: (800) 852-7550
	Notify California Office of Emergency Services and obtain a notification control number.	(Section 1 of Attachment E1)
Monitoring	Conduct spill-specific monitoring.	(Section 2 of Attachment E1)
	 Submit Draft Spill Report within three (3) business days of the Enrollee's knowledge of the spill; 	
Reporting	 Submit Certified Spill Report within 15 calendar days of the spill end date; and 	(Section 3.2 of Attachment E1)
	• Submit Amended Spill Report within 90 calendar days after the spill end date.	

Table E2-3Spill Category 3: Spills of Equal or Greater than 50 Gallons and Less than 1,000 GallonsThat Does Not Discharge to Surface Waters

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

Table E2-4

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

Spill Requirements	Due	Method
Notification	Not Applicable	Not Applicable
Monitoring	Conduct spill-specific monitoring.	(Section 2 of Attachment E1)
Reporting	 If, during any calendar month, Category 4 spills occur, certify monthly, the estimated total spill volume exiting the sanitary sewer system, and the total number of all Category 4 spills into the online CIWQS Sanitary Sewer System Database, within 30 days after the end of the calendar month in which the spills occurred. 	(Section 3.4, 3.6, 3.7 and 4.4 of Attachment E1)
	 Upload and certify a report, in an acceptable digital format, of all Category 4 spills to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occur. 	

Spill Requirements	Due	Method
Notification	Within two (2) hours of the Enrollee's knowledge of a spill of 1,000 gallons or greater, from an enrollee- owned and/or operated lateral, discharging or threatening to discharge to waters of the State:	California Office of Emergency Services at: (800) 852-7550
	Notify California Office of Emergency Services and obtain a notification control number.	(Section 1 of Attachment
	Not applicable to a spill of less than 1,000 gallons.	L I)
Monitoring	Conduct visual monitoring.	(Section 2 of Attachment E1)
Reporting	 Upload and certify a report, in an acceptable digital format, of all lateral spills (that do not discharge to a surface water) to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occur. Report a lateral spill of any volume that discharges to a surface water as a Category 1 spill. 	(Sections 3.6, 3.7 and 4.4 of Attachment E1)

 Table E2-5

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

ATTACHMENT F – REGIONAL WATER QUALITY CONTROL BOARD CONTACT INFORMATION

This Attachment provides a map, list of counties, and contact information to assist the Enrollee in identifying the corresponding Regional Water Quality Control Board office, for all Regional Water Board notification requirements in this General Order.



Region 1 -- North Coast Regional Water Quality Control Board:

Del Norte, Glenn, Humboldt, Lake, Marin, Mendocino, Modoc, Siskiyou, Sonoma, and Trinity counties.

RB1SpillReporting@waterboards.ca.gov or (707) 576-2220

Region 2 -- San Francisco Bay Regional Water Quality Control Board:

Alameda, Contra Costa, San Francisco, Santa Clara (Northern most part of Morgan Hill), San Mateo, Marin, Sonoma, Napa, Solano counties.

RB2SpillReports@waterboards.ca.gov or (510) 622-2369

Region 3 -- Central Coast Regional Water Quality Control Board:

Santa Clara (most of Morgan Hill), San Mateo (Southern portion), Santa Cruz, San Benito, Monterey, Kern (small portions), San Luis Obispo, Santa Barbara, Ventura (Northern portion) counties.

CentralCoast@waterboards.ca.gov or (805) 549-3147

Region 4 -- Los Angeles Regional Water Quality Control Board:

Los Angeles, Ventura counties (small portions of Kern and Santa Barbara counties).

rb4-ssswdr@waterboards.ca.gov or (213) 576-6600

Region 5 -- Central Valley Regional Water Quality Control Board:

Rancho Cordova (Sacramento) Office: Colusa, Lake, Sutter, Yuba, Sierra, Nevada, Placer, Yolo, Napa, (North East), Solano (West), Sacramento, El Dorado, Amador, Calaveras, San Joaquin, Contra Costa (East), Stanislaus, Tuolumne counties.

RB5sSpillReporting@waterboards.ca.gov or (916) 464-3291

Fresno Office: Fresno, Kern, Kings, Madera, Mariposa, Merced, and Tulare counties, and small portions of San Benito and San Luis Obispo counties.

RB5fSpillReporting@waterboards.ca.gov or (559) 445-5116

Redding Office: Butte, Glen, Lassen, Modoc, Plumas, Shasta, Siskiyou, and Tehama counties.

RB5rSpillReporting@waterboards.ca.gov or (530) 224-4845

Region 6 -- Lahontan Regional Water Quality Control Board:

Lake Tahoe Office: Alpine, Modoc (East), Lassen (East side and Eagle Lake), Sierra, Nevada, Placer, El Dorado counties.

RB6sSpillReporting@waterboards.ca.gov or (530) 542-5400

Victorville Office: Mono, Inyo, Kern (East), San Bernardino, Los Angeles (North East corner) counties.

RB6vSpillReporting@waterboards.ca.gov or (760) 241-6583

Region 7 -- Colorado River Basin Regional Water Quality Control Board:

Imperial county and portions of San Bernardino, Riverside, San Diego counties.

RB7SpillReporting@waterboards.ca.gov or (760) 346-7491

Region 8 -- Santa Ana Regional Water Quality Control Board:

Orange, Riverside, San Bernardino counties.

RB8SpillReporting@waterboards.ca.gov or (951) 782-4130

Region 9 -- San Diego Regional Water Quality Control Board:

San Diego county and portions of Orange and Riverside counties.

RB9Spill Report@waterboards.ca.gov or (619) 516-1990

End of Order 2022-0103-DWQ

APPENDIX B

DOCUMENTS RELATED TO

OPERATIONS AND MAINTENANCE

- 1. Example of Sewer System Map
- 2. Example Sanitary Sewer Flushing Sheet
- 3. Example Wastewater Daily Report.
- 4. Example Sewage Pump Station Maintenance Checklist
- 5. Example Remote Monitoring SCADA Screens
- 6. SOP for Sewer Cleaning
- 7. Major Sewer System Equipment



Sanitary Sewer Flushing Sheet

Operator: 426, 422Date: 2/24/18

Chart				
Type of debris	Clear (No debris)	Light	Moderate	Heavy
Sand, grit, rock	CLR	DL	DM	DH
Grease	CLR	GL	GM	GH
Roots	CLR	RL	RM	RH
Other (specify)	CLR	OL	OM	OH

M/H# INSPECTED	U/S Manhole	D/S Manhole	Street	Feet	Debris Yes/No	Debris Type (see chart)	Comments
15-53	15-55	65-53	BROOK PL	173'		RL,GL	WART HOG
(5-41	65-43	6541	FAIRBROOK DR	341'		DLIRL	t
15-43	M5-20	L5-43	10 10	340'		DL, RL	
15-29	15-31	15-29	KATRIONS WAY	290'		RL,DM	
	175-18	L5-31	n ci	301		RL, DM	
45-35	25-33	15.35	DIERICX CT	262		RL, DM	
	15-37	65-35	DIERICX DR	282'	Ves	DHIRL	
	65-39	L5-37	11 C C	181'			
	L5-138	15-35		161'			FLUSHED X2
	15-136	15-138		117'			FLUSHEDX2
15-130	65-134	15-130		229'			FLUSHED X2
	15-134	L5-134	L L	225			FLUSHEDX2
	25-132	65-130	FRANKLIN AVE	231'			FLUSHEDZZ
	15-27	L5-132		235'			FLUSNEDX2
	15-29	65-27	4	246	V	\checkmark	FLUSHED X2
TOTAL M/H'S				Total Feet	Cubic Yards of Debris		Total Water
0				3,614	1/4		9,500
Sewer F	lushing N	laps High	lighted & Updated YES	×	HotSpot	Flushing Y	ES 🗆

			Wast	ewater	Daily	Repo	rt						
	Day Tuesda	у				Date	Feb 2	7, 2018					
Crew 426	Crew 422		Crew	/	C	rew		Cre	w		Crew	/	
	Activity	Ea	Ft	Gal	Crew	Crew	Crew	Crew	Crew	Crew	Hrs	Equip No.	Use (hrs)
SS Main	Scheduled Cleaning		3,614	4,500	426	422					8	2807	8
SS Main	Manholes Inspected	6											
SS Main													
SS Main	· · · · · · · · · · · · · · · · · · ·												
SS Lateral													
SS Lateral		-/											
SS Lateral		-\											
Sanitary													
SD Main													
SD Main													
Drain Inlet				\backslash									
Drain Inlet													
Reclaim			\backslash										
MISC (describe below)	Meetings/Trainings				426	422					1		
MISC (describe below)													
Comments	Am meeting 701 Flushing Dump/Clean Vac-con												

Sewage Pump Station January 2018 Maintenance

Name	Date	
		Wash and inspect building.
		Clean and inspect generator.
		Cut weeds and blow out micro turbine area.
		Cut weeds and ivy around station.
		Blow and sweep driveway and transformer area.
		Pick up garbage around site.
		Check fire extinguishers and sign tag.
		Test and sign eye wash tag.
		Check safety equipment.
		Sweep outside stairs.
		Clean bathroom and empty trash.
		Calibrate portable gas monitors.
		Inspect and log SCBAS.
		Inspect all fans.
		Clean odor scrubber room, clean and inspect scrubber.
		Run and inspect generator.
		Run and inspect pump #2.
		Grease pumps and couplings.
		Purge air bubbler.
		Drain water and inspect compressors.
		Check oil and wipe off compressor motors.
		Clean motor room and wipe off equipment.
		Clean pump room and wipe off equipment.
		Test and inspect sump pump.
		Inspect motors and pumps.
		Clean wet well and inspect grinder rotation.
		Check wet well fire extinguisher and sign tag.
		Inspect and wash off slews gate.
		Inspect Vickers unit and wipe off.
		Check camera operation.
		Clean control room and wipe off equipment.
		Clean vent on odor scrubber.
		Clean all vents above back doors.
		Clean vent room above panels.
		Inspect cranes and operate.
		Check and fill oil on #2 pump and generator.
		Check and fill radiators on pump #2 and generator.
		Check stationary gas monitor operation and level.
		Check alarm panel.
		Sweep stairs inside station.
		Inspect beits on both compressors.
0		Service Odor scrubber media from top ports, clean filter and housing.
Comments	5	Additional maintenance preformed or needed. Contractors

Pastel Lane Lift Station November 2018 Maintenance

Date	Name	
		Pick up trash around site and clean vault.
		Check vault and manhole.
		Fill line and test pump. Turn pump off when ariving for the PM to fill vault
		Check oil level
		Check belt
		•
-		
Comments		
Contractors	S	
Additional	maintenanc	e preformed or needed.
		• F
Example Remote Monitoring SCADA Screens – Shoreline Pump Station

木 EE 動 命 告・÷ #RX WonSpace Run)	
City of Mountain View SCADA System Utility Department	
Back Print Comm Notes Alarm Trend Main Station Selection	Exit 🗞 MIVIEV
SPS - GO Primary Server 15	6/1/2018 10:34:50 AM
SPS (RTU-24) PLC Time 10 : 45	9
	To Palo Alto Force Main
Auto 95 % Running 4 3 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	
Pump Room	
Screen Room	
East, West, and Central Trunk Mains Grinder 1 Grinder 2 Grinder 2 Grinder 2	Exhaust Fan # 1 Running Exhaust Fan # 2 Running
Air Scrubber Running Compressor # 1 Not Running Sump Pump	Generator
Compressor # 2 Bypacs Vau Setpoints Pump Settings Available Alarms Reset	
Ack Date In Time In Tagname Description	Value Status

		No. Boat & House	C. Strange Street		-		
* = @ + = * *			IFX WorkSpace (Ru	in)			-
El Historical	ADA Sustan	11/98/200	and the second has				
Rock Brint Comm Notes Alex	Trend Main	Unity Depa	artiment	Connecte	al to: Log	in <u>Exit</u> (MIVIEV
		Station Selection		Primary	Server	6/1/2018	10:38:04 AM
		515	GO				
SPS (RTU-24)							9
PLC Time to : 46	uti_SPS_SP.grf					Palo Alto For	ce Main
	-	Sewer Pump S	Station Setpo	<u>pint</u>			
		Pump Stage		Alarms			
	Stage 1 Start 2.75 ft	Stage 1 Stop	1.90 ft	WW High Level	4.50 ft		
Pump Room	Stage 2 Start 3.50 ft	t Stage 2 Stop	2.50 ft	WW Low Level	1.00		
	Stage 3 Start 4.50 ft	Stage 3 Stop	3.25 ft	Sluice Gate Low	80.0 %		
Screen Room		Co	ntrol	Sluice Gate Pump	5 min		
		Desired Level	3.00 ft				
		Gate Drop	4.50 ft			Exhaust F	an # 1
East, West, and Central					Close	Runni	9
	Crimdre 2		× 14444	1~		Exhaust F	an # 2
\geq	Chandel 2		······································			Runnin	19
Air Scrubber	ow			\sim	111200 100	Generator	
- Curring -	Grinder 3	Running	TYTY A		Wetwell	Not Run	ning
Compressor # 1					3.0 ft.		
Not Running			Sum	p Pump			
Compressor # 2					0		
Not Running	Bypass					-	
	Vaux	T.	970				
	Setp	oints Pump Se	ettings Avail	able Alarms	8581	VI - 201920	
Ack Date in Time In	Tagname			Description		Value	Status -
	and the second se						

	The Balance of the State of the	
* ◎ ● 号・*	iFD: WorkSpace (Run)	
Historical	Dally D	
City of Mountain View SCADA System	Utility Department	Connected to: Login Exit & MIVIEV
Back Print Comm Notes Alarm Irend Main	Station Selection	Primary Server 12 6/1/2018 10:30-52 A34
	SPS <u>•</u> GO	12 0 0 2010 1000 AM
SPS Available Alarms		
SI'S Avanable Alarms		
Miscellaneous Page Out	Compressor Page OL	t Pump Page Out
Site Intrusion Alarm YES	Compressor 1 Fail Alarm YES	Pump 1 Fail Alarm YES
AC Power Fail Alarm YES	Compressor 2 Fail Alarm YES	Pump 2 Fail Alarm YES
Generator Fuel Alarm YES	Low Air Pressure Alarm YES	Pump 3 Fail Alarm YES
Generator Running Alarm NO	Level	Pump 4 Fail Alarm YES
Gas LEL Level High Alarm YES	Wet Well Level High Alarm YES	Pump 2 Running Alarm YES
Station in Bypass YES	Pump Room Sump Level High Alarm YES	Pump 2 Not Auto Alarm YES
	Grinder	Too Many Pumps Running Alarm YES
	Grinder 1 Fail Alarm YES	Pump 1 Not Ready YES
	Grinder 2 Fail Alarm YES	Pump 3 Not Ready YES
	Grinder 3 Fail Alarm YES	Pump 4 Not Ready YES
	One of the Grinders Fail Alarm YES	Sluice Gate Hydraulic Pump Alarm YES
	r.	
	13	
Ack Date In Time In Tagname	Descr	iption Value Status
× [in .	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1



Example Remote Monitoring SCADA Screens – San Antonio Mixing Station





p. 3 of 3

Standard Operating Procedure for Sewer Cleaning

Purpose

The purpose of this Standard Operating Procedure is to ensure that sewer cleaning is performed in a manner that will produce a high-quality work product. Quality is important because it ensures that the sanitary sewers will not experience problems prior to their next scheduled cleaning.

Note: Portions of this SOP may be superseded or modified by SOPs developed specifically for the VacCon Flushing and Rodding operations.

Goal

The goal of cleaning a gravity sewer is to restore the flow area to 95 percent of the original flow area of the pipe.

Required Equipment and Tools

- 1. Personal protective equipment (hardhat, steel toe boots, gloves, eye/face protection, hearing protection).
- 2. Calibrated gas detector.
- 3. Proper safety cones/barricades/flagging/signs or other traffic-control devices.
- 4. Confined space equipment tripod, harness, and ventilation blower.
- 5. Sanitary sewer system map book.
- 6. Combo (jet rodder/vacuum) truck.
- 7. 45-degree sewer cleaning nozzle and root saws.
- 8. Manhole hook or pickax.
- 9. Measuring wheel.
- 10. Disinfectant.

Required Forms

- Cleaning work order.
- Daily truck report form.
- Damage report form.

Procedures for Sewer Cleaning Crew

Prior to Leaving the Yard

- 1. Plan the work so that it starts in the upstream portion of the area and moves downstream.
- 2. Wherever possible, plan to clean sewers from the downstream manhole.
- 3. Inspect the sewer cleaning nozzles for wear. Replace nozzles that are excessively worn.

At the Job Site

- 1. Wear proper personnel protective equipment (PPE).
- 2. Fill the water tank at or near the first job site.
- 3. Determine and confirm location of upstream and downstream manholes (use manhole identification numbers if possible).
- 4. Look for any overhead utilities that may come into contact with the vacuum boom during the cleaning operation.
- 5. Set up proper traffic control by placing traffic signs, flags, cones, and other trafficcontrol devices.
- 6. Move the cleaning unit into the traffic control so that the hose reel is positioned over the manhole.
- 7. Open the manhole and use the gas detector to determine if it is safe to proceed with the cleaning operation.
- 8. Install the 45-degree sewer cleaning nozzle of choice or root saw on the hose.

Cleaning Operation

- 1. Start the auxiliary engine.
- 2. Lower the hose, with a guide or roller to protect the hose, into the manhole and direct it into the sewer to be cleaned.
- 3. Start the high-pressure pump and set the engine speed to provide adequate pressure for the sewer cleaning operation.
- 4. Open the water valve and allow the hose to proceed up the sewer. The hose speed should not exceed 3' per second.
- 5. Allow the hose to proceed 25 percent of the length of the sewer (or 50' minimum) and pull the hose back (only in heavy grit lines).
- 6. Observe the nature and the quantity of debris pulled back to the manhole.
- 7. If there is little or no debris, allow the hose to proceed to the upstream manhole.

- 8. If there is moderate to heavy debris, clean the remaining portion of the sewer in steps not to exceed 25 percent of the length of the sewer (or 50' minimum).
- 9. Open the upstream manhole and verify that the nozzle is at or past the manhole. Rely on map footage and hose reel footage. If there is a conflict, check upstream manhole to verify.
- 10. The sewer has been adequately cleaned when successive passes with a cleaning nozzle do not produce any additional debris.
- 11. Determine the nature and quantity of the debris removed during the cleaning operation. Use the codes shown in the table below to report the nature and quantity of debris.
- 12. Remove the debris from the manhole using the vacuum unit (The operator may vacuum during flushing pull-back operations).
- 13. Rewind the hose on the reel.
- 14. Clean the mating surface and close the manhole. Ensure that the manhole is properly seated.
- 15. Enter the results on the work order.
- 16. Move the cleaning unit, break down and stow the traffic controls.
- 17. Proceed to the next cleaning job site.

Nature and Quantity of Debris Removed During Cleaning

Type of Debris	Clear (no debris)	Light	Moderate	Heavy
Sand, grit, rock	CLR	DL	DM	DH
Grease	CLR	GL	GM	GH
Roots	CLR	RL	RM	RH
Other (specify)	CLR	OL	OM	OH

At the End of the Day

- 1. Inspect the equipment and tools for problems.
- 2. Report any problems with equipment, tools, or sewers that were cleaned during the day to the Supervisor and crew leaders.
- 3. Submit daily work reports to the Supervisor at end of shift.

Equipment Number	Major Equipment Type	Year Purchased
2807	Combination Cleaning Unit (VacCon)	2017
2808	Combination Cleaning Unit (VacCon)	2017
2102	Service truck w/ #7022 rodder (2016) and lateral camera (2017)	2007
2128	Service truck w/ #7023 rodder (2016) and lateral camera (2017)	2016
5300	Emergency Response Trailer	2007
2806	Dump Truck, 10 cubic yard (International)	2010
492	Backhoe (Caterpillar)	2017
449	Trash Pump, 6" (Deutz)	1987
702	Trash Pump, 4" (Gorman Rupp)	1991
833	Confined Space Trailer	1988

Major Sewer System Equipment

APPENDIX C

DOCUMENTS RELATED TO

DESIGN AND PERFORMANCE PROVISIONS

- 1. Standard Design Criteria for Sanitary Sewers
- 2. Standard Provisions for Sanitary Sewers
- 3. Standard Details Sanitary Sewers

Standard Design Criteria for Sanitary Sewers

These design criteria apply to all new and rehabilitated sanitary sewer system facilities within the City of Mountain View. Any variations from these criteria require the prior approval of the Public Works Director. Requests for variations must be accompanied by information supporting the need for the variation, including an assessment of available alternatives and related drawings and calculations.

The following abbreviations are used: groundwater infiltration (GWI), base wastewater flow (BWF), rainfall derived inflow and infiltration (RDI/I), daily peaking factor (DPF), and depth to diameter ratio (d/D).

Sewer Mains

All sewer mains, whether intended for City maintenance or homeowner association maintenance, will be designed to these standards.

- 1. <u>Materials for Construction</u>
 - a. Vitrified Clay Pipe (VCP), extra strength (ASTM C700) with elastomeric joints (ASTM C425); or
 - b. Polyvinylchloride Pipe (PVC), SDR 26 (ASTM D3034 or F679)
 - i. C900 PVC may be used in place of SDR 26 PVC.

2. <u>Sewer Location and Alignment</u>

- a. Locate sewer mains on street centerline.
- b. The minimum distance from underground utilities is:
 - i. <u>Domestic water main</u>:
 - (1) Sewer mains will not cross domestic water mains unless absolutely necessary.
 - (2) When sewer mains cross domestic water mains, the minimum distances measured between the outside wall of the pipe at the closest location will be:
 - (a) 10' horizontally.
 - (b) 1' vertically with the sewer main located below the elevation of the domestic water main.
 - (c) The sewer main joints will be located as far as possible on either side of the point of crossing.
 - ii. <u>Underground pipes, conduits, structures, or other utilities</u>:
 - (1) 5' horizontally and 1' vertically measured from the closest outside wall.
 - c. Sewers with vertical or horizontal curves are not allowed.

3. <u>Size</u>

a. The minimum size for sewer mains is 8".

4. <u>Depth</u>

- a. The minimum depth from finished grade to sewer invert is 5'.
 - i. The minimum depth for unfinished streets where street grades have not been set is 6' from the existing grade.
- b. The maximum depth from finished grade to sewer invert is 22'.

5. <u>Slope</u>

- a. The minimum slope will be 0.004'/1' (0.04 percent).
- b. The design slope shall provide a velocity of 2'/second when the sewer is flowing half full (d/D = 0.5) where d/D refers to the depth-to-diameter ratio.
 - i. Wherever possible, the design slope will provide a velocity of 2'/second during peak daily dry weather flow.
- c. The maximum slope will be limited to a velocity of 10'/second during any flow condition.
- 6. <u>Capacity</u>
 - a. The design flow will be calculated using the following criteria:
 - i. Residential Design flow = GWI + BWF + RDI/I where:
 - (1) GWI + RDI/I = 800 gallons per acre per day
 - (a) This value is for use on sewers $\leq 10^{"}$ in diameter.
 - (b) This factor will be established using actual flow data for all other cases.
 - (2) BWF = Population Served x Daily Peaking Factor x 90 gallons per capita per day where:
 - (a) Population Served = projected population at build-out.
 - ii. Nonresidential Design Flow
 - (1) Nonresidential sewage generation factors shall be:
 - (a) Commercial 100 gpd/1,000 square feet
 - (b) Office/R&D 150 gpd/1,000 square feet
 - (c) Mixed Use 100 gpd/1,000 square feet
 - (d) Industrial 60 gpd/1,000 square feet
 - (e) Public 15 gpd/employee
 - (f) Employment 15 gpd/employee
 - (g) Restaurant
- 1,000 gpd/1,000 square feet

iii. Daily Peaking Factor, DPF:

- (1) 0 to 199 upstream connections, DPF = 2.5
- (2) 200 to 1,000 upstream connections, DPF = 2.2
- (3) > 1,000 upstream connections, DPF = 1.8
- iv. Maximum Depth of Flow will be:
 - (1) Sewers $\leq 12''$ in diameter, d/D = 0.5
 - (2) Sewers > 12'' in diameter, d/D = 0.75
- b. The sewer capacity will be calculated using Manning's Equation with the friction factor, n = 0.013.
- 7. <u>Manholes</u>
 - a. Provide a 0.1' drop in flow line at all manholes.
 - b. Manholes will be installed:
 - i. At all changes in direction, slope, pipe size, and pipe material.
 - ii. At the intersection of all sewer mains.
 - iii. The soffit (or crown) elevation of smaller sewer mains shall match the soffit elevation of larger sewer mains.
 - iv. At the upstream end of all sewer mains.
 - (1) At the property line where a private sanitary sewer connects to the Citymaintained sewer main.
 - v. Nominally every 300' along the sewer main with the maximum distance not to exceed 350'.
 - vi. At 8" or larger lateral connections
 - c. Drop manholes will be installed when the flow line of the sewer main entering the manhole is 30" or more above the manhole flow line.
 - d. End-of-line cleanouts are not allowed.
 - i. Cleanouts may be used at the temporary ends of sewer mains.
- 8. <u>Siphons</u>
 - a. Siphons will be avoided whenever possible.
 - b. The minimum flow line drop across siphons will be 2'.
 - c. Siphons will have a minimum of two barrels.
 - i. One barrel will be designed to provide a velocity of at least 2'/second during peak daily dry weather flows.
 - ii. The second barrel will be designed:
 - (1) Flow will enter the second barrel when the flow line is at or above the crown of the first barrel.
 - (2) The second barrel will be designed to accommodate peak wet weather flows.

- iii. Additional barrels will be designed to accommodate intermediate flow conditions if warranted.
- d. Siphon inlet and outlet structures will be designed:
 - i. To provide for the installation of stop logs to direct flows.
 - ii. To provide for adequate room to accommodate siphon cleaning equipment.
- e. Siphon material will be ductile iron pipe (AWWA C111) with interior and exterior corrosion-protection and passive cathodic-protection system.
- 9. <u>Pump Stations</u>
 - a. Public pump stations are not allowed.
 - b. Private pump stations are not allowed.
 - c. Individual pump stations serving a single dwelling unit are not allowed.
- 10. <u>Rehabilitation</u>
 - a. Sewer main rehabilitation methods will include:
 - i. Pipe bursting.
 - ii. Open cut.
 - b. Manholes will be replaced or rehabilitated when sewer mains are rehabilitated.
 - c. Lower sewer service laterals between the sewer main and the property line will be replaced or rehabilitated when sewer mains are rehabilitated.
 - i. Service lateral connections to the sewer main will be reinstated by excavating the lateral and installing a factory wye, tap, or watertight/ root-tight saddle.
 - ii. In-situ or internal service lateral reinstatement is not allowed.

Sewer Service Laterals

All sewer service laterals will be designed to these standards.

- 1. <u>Materials for Construction</u>
 - a. Polyvinylchloride Pipe (PVC), SDR 26.
- 2. Individual laterals will be installed from each dwelling unit to the sewer main.
- 3. Lateral Location and Alignment
 - a. Laterals will be connected to manholes wherever possible.
 - i. Laterals in cul-de-sacs will be connected to manholes. The invert of the lateral will be located at the flow line of the manhole (no drop will be allowed).
 - b. Laterals will not be located:
 - i. Under driveways.
 - ii. Within 5' horizontally from domestic water service.

- iii. Within 10' horizontally from the drip line of any existing or planned street trees.
- c. The location of laterals will be stationed on the design drawings.
- d. Lateral alignment will be at right angle or radial to the street right-of-way.
- e. Lateral alignment will be marked where it crosses under the curb with a 1" high "S" stamped or ground into the concrete.
- 4. <u>Size</u>
 - a. The minimum size for detached, single-family dwellings is 4".
 - b. The minimum size for all other connections is 6" or larger if required to provide adequate capacity.
- 5. <u>Depth</u>
 - a. The minimum depth from finished grade to sewer invert is 4' at the back of the sidewalk or property line for easement sewers.
 - b. Deep sewer risers are required where the depth of the sewer main is 10' or greater.
- 6. <u>Slope</u>
 - a. The minimum slope will be 0.02'/foot (2 percent).
- 7. <u>Cleanouts</u>
 - a. All sewer service laterals will have cleanouts as shown on the Standard Details.
 - b. Cleanout size and type will be:
 - i. Single-family residential 4", one-way.
 - ii. All others full size, one-way.
 - c. Cleanouts in paved areas will have traffic-rated metal covers.
- 8. <u>Backflow Prevention Valve</u>
 - a. Any dwelling unit or other connection where the elevation of the lowest floor is less than 1' above the elevation of the rim of the next downstream manhole must install a sewer backwater prevention valve.
 - b. The property owner is responsible for the proper installation and maintenance of the backflow prevention valve.

SECTION 32: SANITARY SEWER INSTALLATION

32-01 <u>SCOPE</u>. The Work shall consist of furnishing and installing sewer mains, manholes, laterals, cleanout fittings and appurtenances; and testing, flushing and cleaning the same in accordance with the Plans and these Standard Provisions.

32-02 MATERIALS.

32-02.01 <u>Vitrified Clay Pipe</u>. Vitrified clay pipe and fittings shall be bell and spigot, unglazed, extra strength, conforming to ASTM C700, as amended to date.

32-02.02 Polyvinylchloride Pipe. Polyvinylchloride pipe and fittings shall be bell and spigot, conforming to ASTM D3034 (SDR 26) for diameters from four inches (4") through fifteen inches (15") and ASTM F679 for diameters from eighteen inches (18") through twenty- four inches (24"), as amended to date.

32-02.03 <u>Vitrified Clay Pipe Joints</u>. Vitrified clay pipe joints shall be of the resilient preformed type conforming to ASTM C425, as amended to date, except that rubber sleeve (Band-Seal) couplings will not be allowed in new main or new lateral installation.

32-02.04 <u>Polyvinylchloride Pipe Joints</u>. Polyvinylchloride pipe joints shall be bell gasketed joints. Gaskets shall meet the requirements of ASTM F477. The joints shall meet the requirements of ASTM D3212.

32-02.05 <u>Precast Manhole Sections and Castings</u>. These items shall conform to Section 31, "Storm Drain Installation," of these Standard Provisions.

32-02.06 <u>Standard Sewer Main Cleanouts</u>. Standard sewer main cleanouts built in accordance with the Standard Details shall be installed where shown on the Plans.

32-02.07 <u>Sewer Laterals and Cleanouts</u>. Sewer laterals and cleanouts shall be constructed of materials specified in the Standard Details. Sewer lateral cleanouts shall be the same size as the sewer lateral.

32-02.08 <u>Portland Cement, Portland Cement Concrete and Mortar</u>. These items shall conform to Section 31, "Storm Drain Installation," of these Standard Provisions.

32-03 CONSTRUCTION METHODS.

32-03.01 <u>Handling of Materials</u>. Vitrified clay pipe, polyvinylchloride pipe, fittings, precast concrete manhole sections, and cast iron frames and manhole covers must be carefully handled at all times. Only suitable and proper equipment and appliances shall be used for the safe loading, hauling, unloading, handling and placing of all materials. Special care shall be exercised so that the preformed resilient joints on pipe and fittings will not be damaged. Any pipe or fitting with a joint damaged or flattened will be rejected.

32-03.02 <u>Trenching</u>. Trench excavation, shoring, grade control, backfill and resurfacing shall conform to Section 24, "Trench Excavation, Backfill and Resurfacing," of these Standard Provisions.

32-03.03 <u>**Pipe Laying.**</u> Pipe laying shall proceed upgrade with the spigot end of bell and spigot pipe pointing in the direction of flow. Each pipe shall be laid true to line and grade and in such a manner as to form a close, concentric joint with the adjoining pipe and to prevent sudden offsets in the flow line. As the work progresses, the interior of the sewer shall be cleaned of all dirt and debris. Pipe shall not be laid when the condition of the trench or the weather is unsuitable. When Work is not in progress, open ends of pipe and fittings shall be plugged. As pipe laying proceeds, bell holes shall then be excavated at each joint to facilitate the jointing operations and shall be only of sufficient size for that purpose.

32-03.04 <u>Manholes</u>. Manholes shall be located as shown on the Plans and installed in accordance with the Standard Details. When a manhole is constructed over an existing sewer main, City Inspector shall be present when the Contractor makes the cut into the existing main.

32-03.05 <u>Cleanouts</u>. Cleanouts on mains and laterals shall be installed in accordance with the Standard Details.

32-03.06 Sewer Laterals. Sewer laterals shall be installed in accordance with the Standard Details. All taps into existing sewer mains shall be made by machine taps ("Tap Tite"), or, for VCP only, utilize Mission Clay insertion wye with Band-Seal fittings. Stamp or grind an "S" on the curb face where a sewer lateral crosses under the curb if no "S" currently exists.

32-03.07 Testing Sewer Lines.

a. <u>Exfiltration/Infiltration Testing</u>. Sewer pipe joints and manholes shall be so watertight that leaking into the sewer by groundwater infiltration shall not exceed 0.039 gallons per minute, per inch diameter, per one thousand feet (1,000') of

main line sewer and sewer laterals being tested. The measure of the infiltration shall be defined as the exfiltration out of the pipeline when the lower end is plugged at the manhole and the upper end is filled at a manhole so as to create a hydrostatic head in the line of a minimum four feet (4') and a maximum five feet (5') above the invert at the upper end of the line. If groundwater is encountered, the head above the invert of the pipe at the upper end of the line shall be increased so that the net hydrostatic head shall be a minimum of four feet (4') and a maximum of five feet (5'). The amount of exfiltration in one (1) hour measured through a water meter or other convenient device by bringing the water level back up to the starting level at the upper manhole shall determine the rate of exfiltration. The Contractor shall furnish and install the necessary and required plugs for the tests. The length of the laterals entering the section of main line being tested shall be included.

b. <u>Air Testing</u>. Air testing of sewer mains may be allowed in lieu of exfiltration/infiltration testing.

Air testing of vitrified clay pipe shall be in accordance with ASTM C-828, "Standard Test Methods for Low-Pressure Air Test of Vitrified Clay Pipe Lines." Air testing of PVC pipe shall be in accordance with the requirements specified in the most current Uni-B-6 pamphlet, "Recommended Practice for Low-Pressure Air Testing of Installed Sewer Pipe" issued by the Uni-Bell PVC Pipe Association, or as per the pipe manufacturer's specifications. At the approval of the Engineer, air testing of HDPE pipe installed by pipe-bursting method may be in accordance with the most current Installation Test Standard IS-16 issued by the International Association of Plumbing and Mechanical Officials.

c. <u>Acceptance</u>. During the testing and flushing operation, a wire screen with a one-quarter of an inch (1/4'') mesh or smaller shall be placed over the downstream outlet of the lower manhole to prevent any debris from being washed into the existing sewer system.

In no case shall the Contractor place the newly constructed sewer in operation without the approval of the Engineer.

In the event that infiltration or leakage exceeds the limits indicated above, the Contractor shall, at his own expense, immediately proceed to make necessary repairs, and no further payment shall be allowed, nor shall the project be finally accepted, until the tests indicate that the entire project meets the above requirements.

The Contractor shall furnish the necessary pumps, water, labor, equipment and materials and shall assist the Engineer in making tests of the completed sewerage project before the system is placed in operation or connected to other lines. The Engineer shall designate the length or section of the sewer to be tested and may approve portions or all of the project without testing.

32-03.08 <u>Flushing and Cleaning Sewer Lines</u>. After all backfilling and pavement restoring operations have been completed, the Contractor shall flush and clean all sanitary sewer lines in the following manner, under the supervision of the Engineer or Inspector:

A heavy rubber ball, such as "MacWane Ball," manufactured by Sidu Company, Long Beach, California, or approved equal, inflated with air, and having an outside diameter equal to the interior diameter of the pipe to be cleaned, shall be furnished by the Contractor. The ball shall be inflated so that it will fit snugly into the sewer line. The ball shall be placed in the last (upper) manhole on the line and water introduced into the manhole back of the ball. The ball shall pass through the pipe with only the pressure of the water behind it. The rate at which the ball is allowed to pass through the pipe shall be controlled by a rope at all times. Debris flushed ahead with the ball shall be removed at the lower manhole where its presence is evident. This cleaning shall be conducted on each section of pipe installed. Care shall be exercised not to feed the ball too rapidly in order that all debris can be removed at each manhole.

During the flushing and cleaning operation, a wire screen with a one-quarter of an inch (1/4'') mesh or smaller shall be placed over the downstream outlet of the lower manhole to prevent any debris from being washed into the existing sewer system.

32-03.09 <u>Television Inspection</u>. After completion of the pipe installation, service connections, flushing and cleaning, the sewer line shall be televised with a color closed-circuit television with tilt-head camera recorded in VHS format. The original videotape and log sheets shall be provided to the Engineer.

32-03.10 <u>Abandoning Existing Sewer Mains</u>. The existing sewer main to be abandoned shall be cut a minimum of twelve inches (12") clear of the manhole and abandoned in place at the location shown on the Plans after the new sewer is installed. The main shall be filled with sand and ends plugged with a minimum of six inches (6") of Portland cement concrete at each required cut.

32-04 MEASUREMENT.

32-04.01 <u>Sewers</u>. Sewers shall be measured horizontally by the linear foot. The measured distance for payment shall be the total distance along the centerline of the pipe, including all connections, less the design distance between the ends of the pipe

in manholes through which the pipe does not pass. Whenever split pipe is required through a manhole, such pipe shall be included in the measurement.

32-04.02 <u>Sewer Lateral</u>. Sewer laterals shall be measured horizontally by the linear foot from the centerline of the main sewer to the end of the lateral, and shall include all fittings and connections.

32-04.03 <u>Manholes</u>. Manholes shall be measured as one complete installed unit, including base, precast sections, frame and cover.

32-04.04 <u>Standard Sewer Main Cleanout</u>. Standard sewer main cleanout shall be measured as one complete installed unit, including frame, cover and pipe.

32-04.05 <u>Sewer Lateral Cleanout</u>. Sewer lateral cleanouts shall be measured as one complete unit, including fittings, cleanout plug, box, cover (including metal traffic cover where required on the Plans or in the Special Provisions) and pipe.

32-04.06 <u>Trench Surfacing</u>. Trench surfacing shall not be measured for payment and shall be considered paid for under various items of Work.

32-04.07 <u>Rechanneling Manhole Bases</u>. Rechanneling manhole bases and breaking into manholes shall not be measured for payment and shall be considered as paid for in the various items of Work.

32.04.08 <u>Television Inspection</u>. Television inspection shall not be measured for payment and shall be considered paid for in the various items of Work.

32.04.09 <u>Abandoning Existing Sewer Mains</u>. Existing sewer main pipelines to be abandoned shall be measured as one complete unit, including concrete for both ends.

32-05 <u>PAYMENT</u>.

32-05.01 <u>Sewer Main</u>. The price per linear foot of sewer main shall include all wye branches and connections shown on the drawings; all labor, materials and pipe necessary to excavate the trench, bed, place and joint the pipe; backfill the trench; flushing, cleaning, testing and televising; all other work necessary to produce a complete and finished job, as required in the Special Provisions, shown on the Plans and specified herein.

32-05.02 <u>Sewer Lateral</u>. The price per linear foot of sewer lateral shall include one-eighth (1/8) bends, pipe, connections to main line sewer and all labor and materials necessary to excavate the trench, bed, place and joint the pipe; backfill the

trench; and all other work necessary to produce a complete and finished job as required in the Special Provisions, shown on the Plans and specified herein.

32-05.03 <u>Manhole</u>. The Contract unit price paid for each manhole shall include full compensation for all labor, materials, tools and equipment, and for doing all Work, including excavation, backfill, compaction and resurfacing, as required in the Special Provisions, shown on the Plans and specified herein.

32-05.04 <u>Standard Sewer Main Cleanout</u>. The Contract unit price per each "Standard Sewer Main Cleanout" shall include full compensation for all labor, materials, tools and equipment and for doing all Work necessary and incidental to furnishing and installing a cleanout complete as required in the Special Provisions, shown on the Plans and specified herein.

32-05.05 <u>Sewer Lateral Cleanouts</u>. The Contract unit price per each sewer lateral cleanout shall include full compensation for wye branch, one-eighth (1/8) bend, riser, iron body cleanout with plug, box and lid, connection to lateral, labor, materials, tools and equipment, excavation, backfilling and resurfacing, required in the Special Provisions, as shown on the Plans and specified herein.

32-05.06 <u>Abandoning Existing Sewer Mains</u>. The Contract unit price for each sewer main pipeline that is abandoned shall constitute full compensation for all Work and materials required to complete the abandonment of the sewer main as required in the Special Provisions, shown on the Plans and specified herein.

SECTION 31: STORM DRAIN INSTALLATION

31-01 <u>SCOPE</u>. This work shall consist of furnishing and installing reinforced pipe, storm drains, manholes, inlets, underdrains, fittings and all other materials and appurtenances in accordance with the Plans and these Standard Provisions.

31-02 MATERIALS.

31-02.01 <u>Reinforced Concrete Pipe</u>. Reinforced concrete pipe shall conform to the requirements of ASTM C76, as amended to date. The wall design shall be at the option of the manufacturer. The manufacturer shall furnish to the City certificates showing that the pipe conforms to the specified ASTM designation. All pipe shall be Class III unless otherwise shown on the Plans. Nonreinforced concrete pipe meeting all requirements of reinforced concrete pipe may be substituted for all sizes twenty-four inches (24") in diameter and smaller.

Pipe designated by D-Load shall be marked as described in the ASTM Specifications except that the D-Load shall be marked on the pipe. The D-Load shall be determined during tests as described in the ASTM Specifications.

31-02.02 <u>**Reinforced Concrete Pipe Joints.**</u> Pipe shall be constructed with self-centering joints.

31-02.03 <u>Precast Manhole Sections</u>. Precast manhole sections shall conform to size, shape and details shown on the Standard Details. Precast reinforced concrete manhole risers, cones and grade rings shall conform to ASTM Designation C478 as amended to date.

31-02.04 <u>Castings</u>. Castings for manhole rings, cover and other purposes shall conform accurately to the form and dimensions shown on the Standard Details. The surface of casting shall be reasonably smooth, free from defects of any kind and the castings shall conform to the requirements of ASTM A48, Class 30B as amended to date. Bottom rim of cover and seat of frames shall be machined to form a close fit free from wobble. The combined weight of cover and frame shall exceed two hundred sixty-five (265) pounds.

Before leaving the foundry, all castings shall be thoroughly cleaned and coated by dipping in asphalt applied at a temperature of three hundred degrees (300°) Fahrenheit in such a manner as to provide a firm, durable, tenacious coating.

31-02.05 <u>Inlets</u>. All inlets shall conform to size, shape and details as shown on the Standard Details. The type of inlet shall be as specified on the Plans or in the Special Provisions.

31-02.06 <u>Inlet Grates and Grate Frames</u>. Inlet grates and grate frames shall conform to size, shape and details as shown on the Standard Details or on the Plans. Rectangular frames shall be fabricated from structural steel conforming to the requirements of ASTM A36. The bar portion of the frames may be fabricated from special quality, hot rolled steel bars conforming to the American Iron and Steel Institute Designation No. C1021. Frames and grates shall be match marked in pairs before delivery to the job site and the grates shall fit into their frames without rocking.

31-02.07 <u>Reinforcing Bars</u>. Reinforcing bars shall be deformed billet steel bars conforming to the specifications of ASTM A615, Grade 60, including Supplementary Requirement S1 and shall be of the size shown on the Standard Details or on the Plans. Bars shall be of the round deformed type; free from injurious seams, flaws or cracks; and shall be cleaned of all rust, dirt, grease, loose scale and any other coating of any character that would destroy or reduce the bond.

31-02.08 Portland Cement Concrete. Portland cement concrete for manhole bases, inlets and other concrete structures shall conform to the requirements of Section 90, "Portland Cement Concrete," of the Standard Specifications and specified herein.

The concrete shall be Class "A" containing six (6) sacks of Portland cement per cubic yard of concrete. The grading of the combined aggregate shall conform with the requirements of one and one-half inch (1-1/2") maximum. The consistency of the fresh concrete shall be such that the slump does not exceed four inches (4") as determined by Test Method No. California 520. The concrete shall have a minimum compressive strength of 3,300 PSI after twenty-eight (28) days.

31-02.09 <u>Mortar</u>. Mortar shall conform to the requirements of Section 65, "Reinforced Concrete Pipe," of the Standard Specifications.

31-02.10 <u>Underdrains</u>. Underdrains shall conform to Section 68, "Subsurface Drains," of the Standard Specifications.

31-02.11 <u>Underdrain Risers</u>. Underdrain risers shall conform to Section 68, "Subsurface Drains," of the Standard Specifications.

31-02.12 <u>**Curb Drains.**</u> Curb drains shall conform to the Standard Details and shall be located where shown on the Plans.

Three-inch (3") ductile iron pipe for curb drains shall conform to ASTM designation.

31-03 <u>CONSTRUCTION METHODS</u>.

31-03.01 <u>**Trenching.**</u> Trench excavation, shoring, grade control, backfill and resurfacing shall conform to the requirements of Section 24, "Trench Excavation, Backfill and Resurfacing," of these Standard Provisions.

31-03.02 <u>Handling of Material</u>. Reinforced concrete pipe, precast concrete manhole sections, inlet frames, grates and fittings must be carefully handled at all times. Only suitable and proper equipment and appliances shall be used for the safe loading, hauling, unloading, handling and placing of materials. Any material which is checked, spalled, out of round or damaged shall not be installed and such material must be permanently removed from the job site within twenty-four (24) hours after notification.

31-03.03 <u>**Pipe Laying.**</u> No pipe shall be laid until the Engineer inspects and approves the condition of the bottom of the trench. Pipe laying shall proceed upgrade with the tongue section of tongue-and-groove pipe pointed in the direction of flow.

Split pipe shall be used through a manhole except for changes in pipe grade, size, type or direction.

Each section of pipe shall be laid true to line and grade and in such a manner as to form a close, concentric joint with the adjoining pipe and to prevent sudden offsets in the flow line. As the work progresses, the interior of the storm drain shall be cleaned of all dirt and debris. Where clearing after laying is difficult because of small pipe size, a suitable swab or squeegee shall be kept in the pipe and pulled forward past every joint immediately after jointing has been completed. Pipe shall not be laid when the condition of the trench or the weather is unsuitable.

After the joint is assembled and if jetting is to be accomplished the same day as the pipe is installed, a moisture-resistant band of polyethylene, heavygauge sheeting, "Kordite" or approved equal, shall be placed around the outside of the pipe and centered over the joint to prevent damage to the joint and entry of water and dirt into the pipe.

Concrete pipe with elliptical reinforcement shall be laid with the minor axis of the reinforcement cage in a vertical position.

31-03.04 Joints. The joints shall be completely filled and compacted with mortar so as to make a strong joint. No mortar will be required in the outside joint

recesses of self-centering pipe. Unless otherwise approved by the Engineer, all joints shall be finished smooth on the inside of pipe.

In pipe sizes twenty-one inches (21") and larger, inside joint recesses shall be hand-pointed. In pipe sizes eighteen inches (18") and smaller, inside joint recesses shall be buttered prior to closure. After the closure is made, the joint shall be pointed inside the pipe and excess mortar removed by means of a long-handled brush, an inflated swab or squeegee.

31-03.05 <u>Manholes</u>. Manholes shall be located as shown on the Plans and installed in accordance with the Standard Details.

31-03.06 <u>Inlets</u>. Inlets shall be located as shown on the Plans and installed in accordance with the Standard Details and the following specifications. All the inside and exposed surfaces of concrete shall be smooth and uniform when finished and the concrete shall be thoroughly compacted around all reinforcing bars. Inlets installed in curb returns shall have angle anchors curved to conform to the curb return radius. Precast inlets will be permitted when meeting the above requirements and when approved by the Engineer.

31-03.07 <u>Television Inspection</u>. After completion of the pipe installation and cleaning, the storm drain line shall be televised with a color closed-circuit television with tilt-head camera recorded in VHS format. The original video tape and log sheets shall be provided to the Engineer.

31-04 MEASUREMENT.

31-04.01 <u>Reinforced Concrete Pipe</u>. Reinforced concrete pipe shall be measured horizontally by the linear foot for the various strengths and sizes along the centerline of the pipe less the design distance between the ends of the pipe in manholes and inlets through which the pipe does not continuously pass. Whenever split pipe is required through a manhole, such pipe shall be included in the measurement.

31-04.02 <u>Manholes</u>. Manholes shall be measured as one complete installed unit, including base, precast sections, frame and cover.

31-04.03 <u>Inlets</u>. Inlets shall be measured as one complete installed unit, including grate and frame.

31-04.04 <u>Underdrains</u>. Underdrains shall be measured by the linear foot, including excavation, pipe, fittings, backfill material, building paper and appurtenances.

31-04.05 <u>Underdrain Risers</u>. Underdrain risers shall be measured as one complete installed unit, including pipe, ells, fittings, cover and cleanout box, if required.

31-04.06 <u>Curb Drains</u>. Curb drains shall be measured as one complete installed unit, including inlet box and frame and grate, installation of outlet through face of curb or connection to existing inlet, pipe and wire mesh or reinforcing bars.

31-04.07 <u>**Trench Surfacing.**</u> Trench surfacing shall not be measured for payment and shall be considered as paid for in the various items of work.

31-04.08 <u>Rechanneling Manhole Bases</u>. Rechanneling manhole bases and breaking into manholes shall not be measured for payment and shall be considered as paid for in the various items of work.

31.04.09 <u>Television Inspection</u>. Television inspection shall not be measured for payment and shall be considered paid for in the various items of work.

31-05 <u>PAYMENT</u>.

31-05.01 <u>Reinforced Concrete Pipe</u>. The Contract unit price per linear foot for reinforced concrete pipe shall constitute full compensation for furnishing all labor, materials, tools and equipment and for doing all Work, including excavation, backfill, compaction, resurfacing and televising required to install the reinforced concrete pipe complete as required in the Special Provisions, shown on the Plans and specified herein.

31-05.02 <u>Manholes</u>. The Contract unit price paid for each manhole shall include full compensation for all labor, materials, tools and equipment and for doing all Work, including excavation, backfill and compaction and resurfacing, all as required in the Special Provisions, shown on the Plans and specified herein.

31-05.03 <u>Inlets</u>. The Contract unit price for each inlet shall include full compensation for labor, materials, tools and equipment and for doing all Work, including excavation, backfill and compaction and resurfacing, all as required in the Special Provisions, shown on the Plans and specified herein.

31-05.04 <u>Underdrains</u>. The Contract unit price per linear foot for underdrains shall include full compensation for furnishing labor, materials, tools and equipment and for doing all Work, including excavation, permeable material backfill and compaction required to install the underdrain pipe complete as required in the Special Provisions, shown on the Plans and specified herein.

31-05.05 <u>Underdrain Riser</u>. The Contract unit price per each underdrain riser shall include full compensation for labor, materials, tools and equipment and for

doing all Work, including pipe, ells, fittings, cover and cleanout box, if required, as required in the Special Provisions, shown on the Plans and specified herein.

Standard Details for Sanitary Sewers



















APPENDIX D

DOCUMENTS RELATED TO

SPILL EMERGENCY RESPONSE PLAN

- Spill Emergency Operations Response Plan (SERP) and Pump Station Emergency Response Plans (PSERP) Note: The above are kept under separate tabs in the SSMP binder
- 2. SSS Response & Reporting Form (City document)
- 3. Hazardous and Biohazardous Material Spill Policy and Procedure (City document)
- 4. Sample Warning Sign (City document)
- 5. Emergency Contractor Call-Out List (City document)
- 6. Sewer Backup Claims Procedures (City document)
- 7. Customer Relations Guidelines (City document)
- 8. Monitoring Plan

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SSO REPORT

Date:

Spill Type Category O 1 O 2 O 3

Street # St. Name: M/H#: D/I#:					
GPS Location: Longitude: Latitude:					
Time SSO Reported:					
Time Arrived at SSO: Time Cleanup Completed:					
Responding Crew: Supervisor/Lead:					
Estimated SSO Volume: Estimated SSO Volume Recovered:					
Explain How Volume was determined:					
Estimated Volume of SSO Discharged to Surface Waters: PICTURES ARE REQUIRED Pictures Taken: Yes No Water Quality Test Performed: Yes No					
Notified Office of Emergency Services (Required for Category 1 SSO) Time:					
OES: 800-852-7550 OES No.:					
Crew Hrs Crew Crew Hrs Hrs					
Crew Hrs Crew Hrs					
Equip Hrs Equip Hrs Equip					
Equip Hrs Equip Hrs Equip					
Notified Utilities Services Manager: Yes No Notified Public Works Director: Yes No C Email O Voicemail O Email O Voicemail					
If yes, date: Time: If yes, date: SEE OTHER SIDE					

Detail Description of SSO (Cause, Damage, Etc.):	
Detail Description of Cleanup Procedures:	
	Comments:

Print Form

Reset Form

Email Form

Hazardous and Biohazardous Material Spill Policy and Procedures

1. <u>Hazardous Materials Spills</u>

- On occasion, a spill response may involve hazardous materials. Hazardous materials include chemicals that are explosive, flammable, combustible, oxidizers, organic peroxides, water or air reactive, toxic, corrosive, radioactive, or are otherwise harmful to people or the environment.
- In the event of exposure to hazardous materials, contact 9-1-1 immediately.
- The Wastewater Duty Person will immediately notify the Fire Department through MV 3 Communications if any hazardous material, unknown substance, unlabeled container, large quantity of chemicals, and/or any other suspect items or circumstances are found. Be prepared to give all known information.
- Immediately thereafter, contact the Wastewater Supervisor.
- Once notified, the Fire Department will become the Incident Command and may give instructions to the Wastewater Section. The instructions may include traffic/perimeter control, blocking off drains, or removal of identified safe materials.
- The Wastewater Section will not be involved in hazardous material spill cleanup.
- Wastewater Section Personnel may transport identified household-type waste in closed containers back to the MOC as directed by the Fire Department. The waste must be labeled with name of waste, time, date, etc., and in a hazardous materials container/storage area for proper discharge.

Note: Sites of abandoned large quantities of hazardous materials should be treated as a crime scene. DO NOT TOUCH ANYTHING; PRESERVE EVIDENCE.

2. Biohazardous Materials SSOs/Spills

- On occasion, a spill response may involve biohazardous materials. Biohazardous materials may include blood, body tissues and organs, vomit, urine, feces, other body fluids, syringes, needles, etc.
- Immediately notify the Fire Department through MV 3 Communications if you find biohazardous material spills; unknown biological substances; unlabeled containers; large quantities of syringes, needles, or red biohazard bags; and/or any other suspect items or circumstance. Call if there is ANY reasonable doubt. Be prepared to give all known information. The Fire Department may become the lead agency and may coordinate with the Santa Clara County Health Services Department as the situation warrants.
- Do not perform any cleanup activities you have not been trained to do.

- 3. <u>Nonhazardous Materials Spills</u>
 - A nonhazardous material is one that is clearly identified and poses no threat.
 - If you have any doubt when called to clean up a spill/material, call the Fire Department through MV 3 Communications to confirm it is safe. Do not take any chances.
- 1. <u>Hazardous Materials Spills</u>
 - On occasion, a spill response may involve hazardous materials. Hazardous materials include chemicals that are explosive, flammable, combustible, oxidizers, organic peroxides, water or air reactive, toxic, corrosive, radioactive, or are otherwise harmful to people or the environment.
 - In the event of exposure to hazardous materials, contact 9-1-1 immediately.
 - The Wastewater Duty Person will immediately notify the Fire Department through MV 3 Communications if any hazardous material, unknown substance, unlabeled container, large quantity of chemicals, and/or any other suspect items or circumstances are found. Be prepared to give all known information.
 - Immediately thereafter, contact the Wastewater Supervisor.
 - Once notified, the Fire Department will become the Incident Command and may give instructions to the Wastewater Section. The instructions may include traffic/perimeter control, blocking off drains, or removal of identified safe materials.
 - The Wastewater Section will not be involved in hazardous material spill cleanup.
 - Wastewater Section Personnel may transport identified household-type waste in closed containers back to the MOC as directed by the Fire Department. The waste must be labeled with name of waste, time, date, etc., and in a hazardous materials container/storage area for proper discharge.

Note: Sites of abandoned large quantities of hazardous materials should be treated as a crime scene. DO NOT TOUCH ANYTHING; PRESERVE EVIDENCE.

2. <u>Biohazardous Materials SSOs/Spills</u>

- On occasion, a spill response may involve biohazardous materials. Biohazardous materials may include blood, body tissues and organs, vomit, urine, feces, other body fluids, syringes, needles, etc.
- Immediately notify the Fire Department through MV 3 Communications if you find biohazardous material spills; unknown biological substances; unlabeled containers; large quantities of syringes, needles, or red biohazard bags; and/or any other suspect items or circumstance. Call if there is ANY reasonable doubt. Be prepared to give all known information. The Fire Department may become

the lead agency and may coordinate with the Santa Clara County Health Services Department as the situation warrants.

- Do not perform any cleanup activities you have not been trained to do.
- 3. <u>Nonhazardous Materials Spills</u>
 - A nonhazardous material is one that is clearly identified and poses no threat.
 - If you have any doubt when called to clean up a spill/material, call the Fire Department through MV 3 Communications to confirm it is safe. Do not take any chances.

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Sample Warning Sign



CITY OF MOUNTAIN VIEW PUBLIC SERVICES DIVISION 650-903-6329

Emergency Contractor Call-Out List

(To be used only when directed by the Wastewater Supervisor/Utility Systems Manager)

WEST VALLEY CONSTRUCTION COMPANY, INC., 7:00 a.m. to 4:00 p.m. (650) 364-9464

PRESTON PIPELINES, INC., 6:00 a.m. to 6:00 p.m.

Emergency Contact Listing Preston – Main Office 133 Bothelo Avenue, Milpitas, California, 95035 (408) 262-1418

ABLE UNDERGROUND CONSTRUCTION, INC. Regular Work Hours: 7:30 a.m. to 4:30 p.m.

Call Office at (408) 377-9990

After Hours: All calls transfer to President's cell phone.

Dysert Environmental (Contract Analytical Lab)

Dysert Environmental, Inc. (Contract Lab and Field Services Company)

ELAP No. 2764

Hours: 7:30 a.m. to 4:30 p.m. Monday through Friday

Office Number: 650-799-9204

Office Fax: 650-827-4968

1202 South Amphlett Boulevard, Suite 2, San Mateo, CA 94402

ALPHA-ANALYTICAL Bay Area Satellite Laboratory ELAP No. 2728

Regular Work Hours: 7:30 a.m. to 4:30 p.m.

Office Number: 925-828-6226

Office Fax: 925-828-6309

6398 Dougherty Road, Suite 35, Dublin, CA 94568

Sewer Backup Claims Procedures

The following procedures will be observed for all sewer backup claims:

- It is the responsibility of the City of Mountain View staff to gather information regarding the incident. Upon notification of a filed claim, all information will be forwarded to the City Attorney's Office.
- In the event of personal injury or property damage in which the owner/occupant feels the City is responsible, an informational card on how to file a claim against the City will be provided. A sample form is attached.
- The claim form must be completed in its entirety and submitted in a timely manner.
- The claim form must be returned to the City Clerk's Office located on the third floor of City Hall at 500 Castro Street in Mountain View.
- Once the City receives a completed claim form, the City has 45 days to investigate the claim. Following this 45-day period, the City will accept or deny the claim. If the City fails to respond to the claim, State law states the claim has been deemed denied.
- Any and all questions concerning a claim or the claims process should be directed to the City Attorney's Office at (650) 903-6303.

Some suggested guidelines for customer relations can be found in this Appendix.

Sewer Backup Claim Information Form (How to file a claim)

For claims against the City of Mountain View (CMV)

Access a claim form at www.mountainview.gov.

Go to: DEPARTMENTS => City Clerk's Office => Claim Form

Follow the filing directions on the form. (Please see the reverse side of this card.)

RM-F002 (11-24-15)

You may have a claim form mailed to you by calling Risk Management at 650-903-6060.

Providing this information does not admit any liability on behalf of CMV. For claims against the City of Mountain View (CMV), contact:

CMV/Risk Management (650) 903-6053 Fax (650) 968-5472

Providing this information does not admit any liability on behalf of CMV.

To request an insurance claim form, please see reverse side of card.

FI-153^ (3-08)

To request an insurance claim form, please provide the following information and fax to (650) 968-5472 or call (650) 903-6053.

PLEASE PRINT:

- Full Name
- Complete address with zip code
- Telephone number with area code

CMV Employee's Name and Phone Number

Date and Location

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Customer Relations Guidelines

It is important for employees to communicate effectively with Mountain View customers, especially in an SSO situation. How we communicate – on the phone, in writing, or in person – is how we are perceived. Good communication with the homeowner results in greater confidence in staff's ability to address the problem satisfactorily and potentially reduces the time needed to resolve the claim.

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

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

A Few Communication Tips

- Give the homeowner ample time to explain the situation or to vent. Show interest in what the homeowner has to say, no matter how many times you have heard it before or how well you understand the situation.
- As soon as possible, let the homeowner know you will determine the cause of the sewer backup and correct it if possible.
- Acknowledge the homeowner's concerns. For example, if the homeowner seems angry or worried about property damage, explain that a PROFESSIONAL CLEANUP CREW can restore the area and, if it is determined that the City of Mountain View is at fault, the owner/occupant has a right to file a claim for any reasonable repairs or losses resulting from the incident.
- Express regret for any inconveniences caused by the incident, but do not admit fault.
- As much as possible, keep the homeowner informed on what is being done and will be done to correct the problem.
- Keep focused on the incident. Do not get involved with too much unnecessary small talk with the homeowner.
- Do not find fault or lay blame on anyone.
- Before you leave, make sure the homeowner has the name and telephone number of the Wastewater Supervisor at the City of Mountain View to call if he/she requires more detailed information.
- The Wastewater Supervisor will follow up with a telephone call to ensure everything is being handled as it should be.

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SSO Monitoring Plan

Purpose

This monitoring plan is to be used to guide the collection of surface water samples collected in the event of a sanitary sewer spill (SSS), in accordance with the 2022 Statewide General Waste Discharge Requirements General Order No. 2022-0103-DWQ (General Order). The General Order requires water quality sampling within 48 hours after initial SSO notification for Category 1 SSOs in which 50,000 gallons or more are spilled to surface waters. For smaller spills, sampling may be conducted at the City's option or at the direction of the Santa Clara County Department of Environmental. Guidance for when samples should be collected for smaller spills is provided in Element 6.D of the SSMP.

Protocols for Sampling and Analysis

General

The purpose of sampling is to aid in assessing the impact of an SSS on surface waters. The general approach is to collect samples at locations represent of conditions upstream, at the discharge point, and downstream. For large spills or in quickly moving water, samples should be collected at additional downstream locations. As a general rule, the upstream and downstream locations should be 100-feet from the point where the spill enters surface water, however, conditions at the site may dictate other distances. In tidally influenced channels, reverse flows may occur during an incoming tide, making identification of upstream and downstream directions more difficult. In such cases, a field conductivity meter may be useful to distinguish tidal (high salinity/conductivity) and freshwater (low salinity/conductivity) flows.

For large spills, multiple sampling events will typically be needed to demonstrate that impact of the spill has attenuated over time. The County may require ongoing sampling until the results indicate a return to "background" concentrations of bacterial indicators.

Sampling will normally be conducted by one of the contract sampling services listed below. City Environmental Safety Section staff may be available to assist, but do not routinely maintain the necessary sample containers, preservatives, etc.

Sample Parameters

<u>Bacterial Indicator</u>: Sampling for a bacterial indicator is required for SSOs where >50,000 gallons reach surface water. The preferred bacterial indicators are E. coli (for fresh water) and enterococcus (for salt water or estuarine samples). The County Department of Environmental Health may require that samples be tested for other indicators (e.g. fecal coliform).

<u>Ammonia</u>: Sampling for ammonia is required for SSSs where >50,000 gallons reach surface water. Ammonia samples must be preserved with an acid.

<u>Other</u>: Field measurement of dissolved oxygen may be useful to delineate the extent and/ or impact of an SSS. Field conductivity can be used to determine whether the locations is freshwater or estuarine.

Sampling Equipment

Sampling equipment typically includes the following sample containers and other items:

Pollutant	Sample Containers	Comment
Bacterial Indicator(s)	100 ml sterilized snap top plastic bottles with thiosulfate pellet preservative	Required for SSSs where >50,000 gallons reach surface water
Ammonia	500 or 1000 ml plastic with sulfuric acid preservative	Required for SSSs where >50,000 gallons reach surface water
Dissolved Oxygen	300 ml glass BOD bottle with stopper	Not required, but potentially useful to delineate SSS extent and impact

Other sampling equipment includes:

- Ice box and ice packs
- Sampling pole, extendable (dipper or sample bottle can be attached to end),
- Gloves, safety glasses, sample bottle labels
- Laboratory chain-of-custody forms

Sample Collection

Refer to the attached "Water Quality Samples for SSSs" for specifics related to sample collection.

Accounting for Spill Travel Time

In cases where surface water monitoring is required, estimate the rate of flow of the water body (if applicable) and document how the estimate was made. This should be done even if conditions do not permit actual sampling.

The simplest method to estimate flow rate is to observe the distance an object present in the water (or placed in the water) moves in a given period of time. For example, if an object moves 25 feet in 10 seconds, the flow rate is 25/10 = 2.5 ft/second. For best accuracy, measurement over a larger distance and longer time are preferred (e.g. 100 ft is preferable to 10 feet). For time, use a stopwatch rather than counting (most cell phones are equipped with a stopwatch). An object that is mostly submerged works best, as it will be less affected by wind and surface currents. An orange or brightly colored rubber ball (with dense sponge interior) works well for this purpose. Make sure to note if the surface water is tidally influenced, and if so, indicate whether the tide is incoming or outgoing at the time of sampling.

Information regarding spill travel time should be used to inform decisions about sampling locations, both initial and follow-up. If water is moving quickly, the distance to downstream sample locations should be increased. A stream moving at 1 ft/second will travel 3600 feet (approximately ³/₄ of a mile) in one hour. A spill into rapidly moving water would be expected to dissipate quickly, whereas impacts of a spill into a marshland may persist for a long period. For water bodies that are tidally influenced, the impact of the spill may extend in both the upstream and downstream directions.

Sample Transport and Chain-of-Custody

Samples should be placed in the cooler with frozen blue ice (or other means to keep samples at <10 °C) and keep in a location out of the sun. Transport samples as soon as possible to the laboratory. Prepare a chain-of-custody form using the contract lab's standard form. Analysis for bacterial indicator samples should begin within 8 hours of sample collection wherever possible. Hold time for preserved ammonia samples is less critical (28 days maximum).

Analytical Methods

The following analytical methods can be used:

- Enterococcus: (SM 9230B, C) or IDEXX Enterolert[®] (SM9230D)
- Total Coliforms /E. coli: IDEXX Colilert[®] alternative bacterial indicator for SSOs (SM 9223B Enzyme Substrate)
- Total Coliforms: Multiple Tube Fermentation alternative bacterial indicator for SSOs (SM 9221)
- Ammonia: Ammonia selective electrode with distillation (SM 4500-NH3-D)
- Ammonia (field test): Hach test strips
- Dissolved Oxygen: Luminescent dissolved oxygen probe (EPA 10360), membrane electrode (SM 4500-O G)
- Salinity: Electrical conductivity (SM2520 B)

Use of Accredited Laboratory

Samples for ammonia and bacterial indicators must be performed by accredited or certified laboratory.

Palo Alto Regional Water Quality Control Plant 2501 Embarcadero Way, Palo Alto, CA 94303 (650) 329-2598 Dysert Environmental, Inc. (Contract Lab and Field Services Company) 1202 South Amphlett Boulevard, Suite 2, San Mateo, CA 94402 650-799-9204 Alpha-Analytical 6398 Dougherty Road, Suite 35, Dublin, CA 94568 925-828-6226

Attachment: Water Quality Samples for SSSs (650) 329-2598

3

WATER QUALITY SAMPLES FOR SSSs

Initials

 Obtain, at a minimum, a sample at the discharge point, 100' upstream and 100' downstream. If the discharge is more than 1,000 gallons, select additional sites. Document sample locations using sewer (or storm drain) system maps and/or GPS coordinates
 Keep the sterile collection bottle (bacterial samples) closed until it's to be filled. Do not contaminate inner surface of the lid or bottle rim.
 Collect samples just below the surface in knee depth water - do not rinse the bottle out with sample
 Hold sampling bottle at its base, plunge it, neck downward, toward the current (being careful not to lose preservative). Turn bottle until neck turns slightly upward and mouth is directed toward the current. Fill bottle leaving about 1" of air. Collect a minimum of 100 mls (1 cup).
 immediately place cap on bottle to avoid leaks and contamination. Dry the bottle
 Repeat sample collection process for ammonia sample (500 ml plastic bottles). Be careful not to spill the acid preservative.
 Label containers with <u>distinctive</u> sample site, name, date and time collected. Make sure locations are clearly indicated.
 Place sample bottle in a cooler with frozen blue ice. If blue ice is unavailable use double bagged regular ice, or return samples immediately to contract laboratory.
 Bring bacterial samples to a State certified lab within 6 hours of collection. Complete the laboratory's chain-of-custody form with the required information.

APPENDIX E

DOCUMENTS RELATED TO

SEWER PIPE BLOCKAGE CONTROL PROGRAM

- 1. FOG Hotspot Areas
- 2. FOG Disposal Sites

Identified FOG Hot Spot Areas

Location	Potential FOG Sources	Comments
Ehrhorn Avenue between El Camino Real and Church Street	1 restaurant	Low flow line
San Antonio Road between El Camino Real and Fayette Drive	2 restaurants	6-month cleaning schedule
Solace Place at intersection with South Drive	1 residential care facility with cafeteria	Low flow line 6-month cleaning schedule
Wild Cherry Lane between Villa Street and West Evelyn Avenue	7 restaurants 4 future restaurants	Limited space for grease interceptors 3-month cleaning schedule
Castro Street between El Camino Real and Evelyn Avenue		Limited space for grease interceptors 6-month cleaning schedule
California Street between Castro Street and Shoreline Boulevard	3 restaurants	Limited space for grease interceptors 6-month cleaning schedule
900 Block of El Camino Real	2 restaurants	6-month cleaning schedule
600 Block of El Camino Real	2 restaurants	6-month cleaning schedule
Remainder of El Camino Real		12-month cleaning schedule
El Monte Avenue between Marich Way and El Camino Real	4 restaurants	
Independence Avenue at intersection with Old Middlefield Way	4 restaurants	12-month cleaning schedule
North Rengstorff Avenue at intersection with Charleston Road	1 restaurant	12-month cleaning schedule

FOG Disposal Sites

The following locations accept grease from liquid waste haulers in the Mountain View area.

Business Name	Location / Address	Phone Number	Services
Sirona Fuels dba Blue Sky Bio-Fuel Inc.	Oakland	(510) 868-9229	Primarily yellow grease, some brown grease. Can accept 7,000 gallons per day.
East Bay Municipal Utility District	Oakland	(510) 287-1651	Accepts grease.
Palo Alto Wastewater Treatment Plant	Palo Alto	(650) 329-2598	Accepts FOG as part of it Hauled Liquid Waste Discharge Permit System. Special requirements apply. For information see <u>http://cleanbay.org/files/2016-10/hauled-</u> <u>liquid-waste-discharge-permit-fy-17.pdf</u>
Salinas Tallow	Salinas	(831) 422-6436	Will consider accepting grease from other reputable haulers. They purchase yellow grease and process the interceptor grease with residue going to landfill.
San Jose Tallow Company	San Jose	(408) 452-8777	Does not accept interceptor grease but would consider accepting from outside haulers if it would not impact any of their grease hauling routes.
Silicon Valley Clean Water Treatment Plant	Redwood City	(650) 591-7121	Accepts grease.

APPENDIX F

DOCUMENTS RELATED TO

CAPITAL IMPROVEMENTS PROGRAM

1. Recent CIP projects for Collection System

City of Mountain View CIP projects for Collection System						
Project No.	Project Name	Completed Projects	Budgeted (Design/ Construction)			
13-22	Annual Sewer Main Replacements	Х				
14-22	Annual Sewer Main Replacements	Х				
14-30	Central Sewage Trunk Main - Inspection and Cleaning	Х				
14-31	West Sewage Trunk Main - Inspection and Cleaning	Х				
14-32	Sewage Pump Station Replacement Analysis	Х				
14-33	Interceptor Force Trunk Main - Manhole Construction, Inspection, & Cleaning	Х				
15-22	Annual Sewer Main Replacements	Х				
16-05	Wastewater System Improvements	Х				
16-52	MOC Dewatering Pad	Х				
16-22	Annual Sewer Main Replacements	Х				
16-22 (19-41)	Leong Drive Sewer Main Replacements	Х				
16-61	Water and Sewer Main Replacement at U.S. 101, Design	Х				
16-58	Shoreline Boulevard Interim Bus Lane & Utility Improvements, Design		Х			
17-05	Wastewater System Improvements	Х				
17-22	Annual Sewer Main Replacements	Х				
17-48	Immediate Repairs to Sewage Pump Station	Х				
17-50	San Antonio Sewer Improvements Design	Х				
18-05	Wastewater System Improvements	Х				
18-55	San Ramon and San Marcos Inflow and Infiltration Study	Х				
18-22	Annual Sewer Main Replacements	Х				
18-43	Shoreline Boulevard Interim Bus Lane & Utility Improvements, Construction		Х			
19-05	Wastewater System Improvements	Х				
19-22	Annual Sewer Main Replacements		Х			
19-45	San Antonio Area Sewer Main Improvements		Х			
20-05	Wastewater System Improvements	Х				
20-41	Water and Sewer Main Replacement at U.S. 101, Construction	Х				
20-42	Interceptor Force Trunk Main Rehabilitation	Х				
20-43	Water and Sewer Master Plan Update		Х			
21-05	Wastewater System Improvements	Х				
21-22	Miramonte Sewer Improvements	Х				
22-07	Wastewater System Improvements	Х				
22-40	Trash Capture, Phase II		Х			
22-42	Middlefield and Moffett Sewer Replacement		Х			
23-07	Wastewater System Improvements		Х			
23-09	Annual Sewer Main Replacements		Х			
24-07	Wastewater System Improvements		Х			
24-39	East Sewage Trunk Main, Inspection & Cleaning		Х			
25-09	Annual Sewer Main Replacements		X			
25-07	Wastewater System Improvements		X			
	City of Palo Alto Joint Interceptor Sewer Project - CMV Fixed Cost Share		Х			

APPENDIX G

DOCUMENTS RELATED TO

MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS

(SSO STATISTICS AND PERFORMANCE DATA)

- 1. SSS Cause by Calendar Year (Table and Chart)
- 2. SSS Volumes by Calendar Yea
- 3. Gravity Sewer, Pump Station, and Force Main SSSs by Calendar Year
- 4. O&M Performance Data

SSS Statistics and O&M Performance Data

Calendar Year	Total SSS Volume	Volume Reaching Sufrace Water	Volume Recovered	% Recovered
2015	172	0	172	100%
2016	0	0	0	N/A
2017	1545	200	1530	99%
2018	56	0	56	100%
2019	1499	0	1499	100%
2020	10	0	10	100%
2021	505	0	495	98%
2022	0	0	0	N/A
2023	0	0	0	N/A
2024	1735	1045	690	40%

SSS Volumes by Calendar Year



SSS Cause by Calendar Year

Calendar Year	Roots	Debris	Grease	Capacity	PS Failure	Pipe Failure	Other	Total
2015	3	0	0	0	0	0	3	6
2016	0	0	0	0	0	0	0	0
2017	2	2	2	0	0	0	0	6
2018	0	1	1	0	0	0	0	2
2019	0	2	0	0	0	0	2	4
2020	1	0	0	0	0	0	0	1
2021	3	0	2	0	0	0	0	5
2022	0	0	0	0	0	0	0	5
2023	0	0	0	0	0	0	0	5
2024	0	0	1	0	0	0	1	5
2025	0	0	0	0	0	0	0	5



Gravity Sewer, Pump Station, and Force Main SSSs by Calendar Year

Calendar Year	Gravity Sewer SSSs	Pump Station SSSs	Force Main SSSs
2015	4	1	0
2016	0	0	0
2017	6	0	0
2018	2	0	0
2019	4	0	0
2020	1	0	0
2021	5	0	0
2022	0	0	0
2023	0	0	0
2024	2	0	0

O&M Performance Data

Calendar Year	WW Sewer Service Calls	Sewer Main Stoppages	Sewer Main Spills	Sewer Main Flushing Total
2015	629	9	5	715,591
2016	574	5	0	653,731
2017	612	8	6	549,834
2018	522	5	2	941,075
2019	510	7	4	1,044,842
2020	550	5	1	871,289
2021	565	9	5	882,451
2022	640	6	0	699,789
2023	641	6	0	968,551
2024	634	2	2	1,072,563

APPENDIX H

SSMP AUDITS

1. 2024 Audit

Sewer System Management Plan 2024 Audit Report Adapted from format developed by BACWA

Name of agency	City of Mountain View				
WDID #	255010111				
Date of audit	June 29, 2024				
Name of auditor(s)	Mike Vasquez (Utilities Services Manager)				
System Overview					
LF of public gravity sewer mains		829,000 (157.0 miles)			
LF of public force mains		~100 (0.019 miles)			
Total LF of all public sewer lines		829,100 (160 miles)			
Number of pump stations		2			
LF of private sewer mains, excl. laterals		23,682 LF (4.49 miles) **			
LF of private sewer laterals		<i>Est. 608,000 (based on 35 ft/connection)</i>			
Population served		83,601 (CA Dept. of Finance)			
Number of service lateral connections		17,373			
Current average monthly single family		<i>\$54.60 per dwelling unit per month</i>			
residential sewer rate					

This audit includes information regarding the status of the City's SSMP and its implementation for calendar years 2021-2023. Complete details of SSSs that occurred in this audit period are provided in Attachment A of this audit. Annual SSS statistics for the audit period are summarized in Figure 1. The order of headings below is based on SSMP requirements as stated in Statewide Order 2022-0103-DWQ.

1. SEWER SYSTEM MANAGEMENT PLAN GOAL AND INTRODUCTION

The goal of the Sewer System Management Plan (Plan) is to provide a plan and schedule to: (1) properly manage, operate, and maintain all parts of the Enrollee's sanitary sewer system(s), (2) reduce and prevent spills, and (3) contain and mitigate spills that do occur. The Plan must include a narrative Introduction section that discusses the following items:

- 1.1 Regulatory Context
- 1.2 Sewer System Management Plan Update Schedule
- 1.3 Sewer System Asset Overview

Audit findings: While the SSMP meets the general requirements as described above, the overall document was written for the previous WDR and edited to meet current requirements. The next SSMP update will restructure the document to better align with the current WDR. In terms of update schedules, the SSMP will be due for an update by 8/2/2025 (see SSMP update table below). The sewer system asset overview is generally correct but will be updated to the latest footages available in the Wastewater GIS layer.

Performance Review: Not applicable to this section.

Action Items: Complete required SSMP update for approval by City Council.

Sewer System Management Plan & Subsequent Update Due Dates							
System Name	we WDID Number Original Plan Require		Required Plan Update Due Date	Required Plan Update Due Date	Required Plan Update Due Date*		
Mountain View City CS	2SSO10111	8/2/2009	8/2/2014	8/2/2019	8/2/2025		

2. ORGANIZATION

The Plan must identify organizational staffing responsible and integral for implementing the local Sewer System Management Plan through an organization chart or similar narrative documentation that includes:

- Name of LRO's
- Contact information for staff implementing section of the SSMP
- Organizational lines of authority
- Spill reporting responsibilities

Audit findings: The positions and their roles listed in the SSMP are correct and current. Specific contacts in the CIWQS database are also current with the exception of retirees that need to be removed.

Performance Review: The City does a good job of keeping contacts up to date within CIWQS. Attempts to remove retirees were unsuccessful.

Action Items: Remove retirees from CIWQS database.

3. Legal Authority

The Plan must include copies or an electronic link to the Enrollee's current sewer system use ordinances, service agreements and/or other legally binding procedures to demonstrate the Enrollee possesses the necessary legal authority to:

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

Audit findings: The SSMP outlines the City's legal authority through specific City Code references, but does not include active hyperlinks.

Performance Review: Over the audit period, the City had no issues with its legal authority as it relates to the requirements noted above.

Action items: Add hyperlinks to City Code references.

4. OPERATION AND MAINTENANCE PROGRAM

The Plan must include the items listed below that are appropriate and applicable to the Enrollee's system.

- 4.1 Updated Map of Sanitary Sewer System
- 4.2 Preventive Operation and Maintenance Activities
- 4.3 Training
- 4.4 Equipment Inventory

Audit findings: While old, the provided sewer map is generally accurate with discrepancies typically being minor accuracy corrections. Due to the constant updating and dynamic nature of GIS based utility mapping, any snapshot map will soon become out of date. The maintenance section needs revision to reflect the new CCTV structure. The updated CCTV program split the sewer system into 8 equal zones that are rotated through each year.

Performance Review: This new CCTV program has put the City back on pace to CCTV the entire system every 8 years. In addition, CCTV findings are now loaded into GIS to help with operations and CIP planning. Sewer main flushing footages have varied from year to year, but overall maintenance performance is very good and SSS have been minimal over the review period. **Action items:** Update SSMP with current CCTV program information.

Calendar Year	Wastewater Service Calls	Sewer Main Stoppages	Sewer Main SSSs	SS Main Cleaning, ft
2005	876	38	21	
2006	765	31	14	
2007	754	18	10	
2008	693	13	7	
2009	776	7	3	
2010	700	9	6	662,044
2011	547	3	0	801,529
2012	590	6	0	520,471
2013	655	4	3	902,064
2014	713	7	5	530,265
2015	629	9	6	715,591
2016	574	5	0	653,731
2017	612	8	6	549,834
2018	522	5	2	941,075
2019	510	7	4	1,044,842
2020	550	5	1	871,289
2021	565	9	5	882,451
2022	640	6	0	699,789
2023	641	6	0	968,551

Table 1. O&M Performance Data

5. DESIGN AND PERFORMANCE PROVISIONS

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

5.1 Updated Design Criteria and Construction Standards and Specifications

5.2 Procedures and Standards

Audit findings: The City's sewer design criteria, standards and specifications are up to date, however the link included in the SSMP is not working.

Performance Review: Over the audit period, the City had no issues with its sewer system design as it relates to the requirements noted above.

Action items: Update the link to the City's standards and specifications in the SSMP.

6. SPILL EMERGENCY RESPONSE PLAN

The Plan must include an up to date Spill Emergency Response Plan to ensure prompt detection and response to spills to reduce spill volumes and collect information for prevention of future spills. The Spill Emergency Response Plan must include procedures to:

- Notify primary responders, appropriate local officials, and appropriate regulatory agencies of a spill in a timely manner;
- Notify other potentially affected entities (for example, health agencies, water suppliers, etc.) of spills that potentially affect public health or reach waters of the State;
- Comply with the notification, monitoring and reporting requirements of this General Order, State law and regulations, and applicable Regional Water Board Orders;
- Ensure that appropriate staff and contractors implement the Spill Emergency Response Plan and are appropriately trained;
- Address emergency system operations, traffic control and other necessary response activities;
- Contain a spill and prevent/minimize discharge to waters of the State or any drainage conveyance system;
- Minimize and remediate public health impacts and adverse impacts on beneficial uses of waters of the State;
- Remove sewage from the drainage conveyance system;
- Clean the spill area and drainage conveyance system in a manner that does not inadvertently impact beneficial uses in the receiving waters;
- Implement technologies, practices, equipment, and interagency coordination to expedite spill containment and recovery;
- Implement pre-planned coordination and collaboration with storm drain agencies and other utility agencies/departments prior, during, and after a spill event;
- Conduct post-spill assessments of spill response activities;
- Document and report spill events as required in this General Order; and
- Annually, review and assess effectiveness of the Spill Emergency Response Plan, and update the Plan as needed.

Audit findings: The SERP was updated after the new WDR to align with regulatory changes. While the SERP covers all criteria required in the WDR, the SERP is lengthy and repetitive. Performance Review: Due to the limited number of spills during the reporting period, staff did not get to use the SERP much. However, when it was used all required information was effectively collected and spill responses were efficient. Staff feedback is that they felt the SERP was cumbersome and lengthy for a document that will ultimately be used in an emergency response situation.

Action items: Review the SERP to find opportunities to cut out redundant information and make the overall SERP shorter. Continue work to digitize the SERP workflow with the upcoming CMMS system.

7. SEWER PIPE BLOCKAGE CONTROL PROGRAM

The Sewer System Management Plan must include procedures for the evaluation of the Enrollee's service area to determine whether a sewer pipe blockage control program is needed to control fats, oils, grease, rags and debris. If the Enrollee determines that a program is not needed, the Enrollee shall provide justification in its Plan for why a program is not needed. The procedures must include, at minimum:

- An implementation plan and schedule for a public education and outreach program that promotes proper disposal of pipe-blocking substances;
- A plan and schedule for the disposal of pipe-blocking substances generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of substances generated within a sanitary sewer system service area;
- The legal authority to prohibit discharges to the system and identify measures to prevent spills and blockages;
- Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, best management practices requirements, recordkeeping and reporting requirements;
- Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the fats, oils, and grease ordinance;
- An identification of sanitary sewer system sections subject to fats, oils, and grease blockages and establishment of a cleaning schedule for each section; and
- Implementation of source control measures for all sources of fats, oils, and grease reaching the sanitary sewer system for each section identified above.

Audit findings: The SSMP adequately covers the City's FOG program administered and enforced through the City's Fire Department. However, information within the SSMP is outdated and in need of updating. Additionally, a formalized evaluation for rag and debris control needs to be better documented.

Performance Review: The City's sewer blockage control program is a joint effort between Public Works Utilities and Construction, and the Fire Department's Environmental Division. Working together these groups enforce City policies to prevent sewer blockages to the extent possible. When issues do occur, these groups have direct lines of communication and are well trained on response procedures to not only correct the issue at hand, but also work with the responsible party to avoid repeat offences.

Action items: Update the information in the SSMP and review rag and debris control programs.

8. SYSTEM EVALUATION, CAPACITY ASSURANCE AND CAPITAL IMPROVEMENTS

The Plan must include procedures and activities for:

- Routine evaluation and assessment of system conditions;
- Capacity assessment and design criteria;
- Prioritization of corrective actions; and
- A capital improvement plan.
- 8.1. System Evaluation and Condition Assessment
- 8.2. Capacity Assessment and Design Criteria
- 8.3. Prioritization of Corrective Action
- 8.4. Capital Improvement Plan

Audit findings: The SSMP is based off of a legacy sewer system evaluation. Updated information is available and needs to be included in the SSMP update.

Performance Review: The City completed a Sewer Master Plan update in 2021 that reanalyzed the system's capacity to serve the City through 2050. A CIP plan was also created to address any system deficiencies. In addition, the City requires large developments to complete a utility impact study to determine if system improvements are required to provide adequate service to the development.

Action items: Update section 8 with information from the 2021 Sewer Master Plan.

9. MONITORING, MEASUREMENT AND PROGRAM MODIFICATIONS

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

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

Audit findings: The City monitors the performance metrics noted in section IX of the SSMP on a continuous basis, with year over year analysis performed and an annual basis.

Performance Review: The primary measure of the effectiveness of the SSMP is the number of spills in a given year. The City's performance for this review period was exceptional, going two years with no spills from the City's sewer system.

Action items: At this point, no modification to the monitoring element is required.

10. INTERNAL AUDITS

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

Audit findings: The SSMP includes audit provisions sufficient to meet the regulatory requirements. Overall system performance does not indicate a need to increase the complexity of the SSMP audit, although the audit template is likely due for review.

Performance Review: SSMP audits, while performed, were historically late due to unclear understanding of audit due dates. The new SSMP due date tool has corrected that issue and clear timelines for SSMO updates and audits are now in place.

Action items: Review the SSMP audit template for opportunities for improvement.

Audit Due Dates								
System Name	WDID Number	Original Required Plan Audit Due Date	Required Plan Audit Due Date	End of Required 3-Year Audit Period**				
Mountain View City CS	2SSO10111	8/2/2011	8/2/2013	8/2/2015	8/2/2017	8/2/2019	8/2/2021	8/2/2024

11. COMMUNICATION PROGRAM

The Plan must include procedures for the Enrollee to communicate with:

- The public for:
 - Spills and discharges resulting in closures of public areas, or that enter a source of drinking water, and
 - The development, implementation, and update of its Plan, including opportunities for public input to Plan implementation and updates.
- Owners/operators of systems that connect into the Enrollee's system, including satellite systems, for:
 - System operation, maintenance, and capital improvement-related activities.

Audit findings: The SSMP covers the required elements of communication in regards to sewer performance, public health and SSMP updates. However, additional tools and procedures related to new or refined public outreach avenues are not covered. This includes social media, email lists and updated website information.

Performance Review: Over the review period, the primary outreach need was performance related where the City uses CIWQS and OES as the avenue to disseminate information to interested parties. With the upcoming SSMP update, the City will go through the City Council meeting outreach protocols to ensure interested parties get the information they need. **Action items:** Update the SSMP section to include information about all outreach tools available to the City. Utilize the appropriate outreach for the SSMP update.


APPENDIX A

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You are logged-in as: mvasquez2. If this account does not belong to you, please log out.

System Performance Analysis Graphs (WDID = 2SSO10111)

The following System Performance Analysis Graphs represent the enrolled system's Category 1, 2, and 3 total spill volume and total number of spills on a running 10-year basis. The Enrollee shall include these graphs in its Annual Report per section 5.11 of the General Order.

Click to Print This Page (Select Printer as Adobe PDF and Orientation as Landscape)

Graph 1 - Total Spill Volume Per Year Per Category



Graph 2 - Total Number Of Spills Per Year Per Category



Category 1 - Total Spill Volume per Year



Category 2 - Total Spill Volume per Year



Category 3 - Total Spill Volume per Year



Category 1 - Total Number of Spills per Year



Category 2 - Total Number of Spills per Year



APPENDIX I

DOCUMENTS RELATED TO SSMP CERTIFICATION

- 1. SSMP Implementation schedule, October 23, 2007
- 2. SSMP certification, August 19, 2008
- 3. SSMP recertification, June 11, 2013
- 4. SSMP recertification , June 26, 2018
- 5. SSMP recertification, June 24, 2025 (to be added after Council approval)



Approve the City of Mountain View Sanitary Sewer Management Plan as required by the State Water Resources Control Board.

FISCAL IMPACT—None.

BACKGROUND AND ANALYSIS

The Public Works Department maintains and operates the City's sanitary sewer system and maintains records of sewer overflows and is required to report any overflow of the public sanitary sewer to the State Water Resources Control Board (SWRCB).

The SWRCB adopted new State-wide sanitary sewer overflow (SSO) requirements on May 2, 2006 to ensure system operators manage wastewater collection systems effectively and minimize the number of overflows. As part of these requirements, the City must also develop a Sanitary Sewer Management Plan (SSMP) that describes how the City:

- Maintains and improves the condition of the collection system to provide reliable long-term service;
- Minimizes infiltration/inflow to the sewer system and provides adequate capacity to accommodate sewer flows; and
- Minimizes the number and impact of sanitary sewer overflows.

In addition to describing how the City operates the sewer system, the SSMP also outlines the City's standard procedures for responding to spills and overflows to protect public health and to prevent spills from reoccurring. The SSMP is comprised of the following 11 elements:

- Goals
- Organization/Responsible Party
- Emergency Response Plan

AGENDA: August 19, 2008 PAGE: 2

- Legal Authority (to administer SSMP)
- Operations and Maintenance Plan
- Fats, Oils and Grease Control Plan
- Design and Performance Standards
- System Capacity Plan
- Monitoring and Program Modifications
- Program Audits
- Communication Program

A complete copy of the SSMP is available on the City's web site.

The SSMP adoption schedule was approved by the City Council on October 23, 2007. In the San Francisco Bay region, plans must be adopted and submitted to the State by August 31, 2008.

Per the SSMP requirements, staff will also submit to the City Council an annual report, summarizing all SSOs during the year, identifying trends or problem areas within the collection system and describing the status of efforts to address such problems. The annual report is due to the City Council by March 15.

AGENDA: August 19, 2008 PAGE: 3

<u>PUBLIC NOTICING</u>—Agenda posting.

Prepared by:

VE

Dave Serge Utilities Services Manager

Reviewed by:

Hafell q a.

Gregg A. Hosfeldt ' Assistant Public Works Director

DS/9/CAM 747-08-19-08M-E^

Attachment: 1.

October 23, 2007 Staff Report

Approved by:

Cathy R. Lazarus

Public Works Director

Kevin C. Duggan City Manager



AGENDA: October 23, 2007 CATEGORY: Consent

DEPT.: Public Works

TITLE: Sanitary Sewer Management Plan Schedule Approval

Attachment 1

RECOMMENDATION

Approve the City of Mountain View's Sanitary Sewer Management Plan schedule as required by the State Water Resources Control Board.

FISCAL IMPACT – None.

BACKGROUND AND ANALYSIS

The Public Works Department maintains and operates the City's sanitary sewer system and maintains records of sewer overflows. The City is required to report any overflow of the public sanitary sewer to the State Water Resources Control Board (SWRCB).

The SWRCB adopted new State-wide sanitary sewer overflow requirements on May 2, 2006 to ensure the system operators manage the wastewater collection effectively and minimize the number of overflows. The new requirements include 11 elements that are combined to form the Sanitary Sewer Management Plan (SSMP). The State-mandated goals of the SSMP are to describe how the City:

- 1. Maintains or improves the condition of the collection system to provide reliable longterm service.
- 2. Minimizes infiltration/inflow to the sewer system and provides adequate capacity to accommodate sewer flows.
- 3. Minimizes the number and impact of sanitary sewer overflows.

These objectives will become the core goals of the plan developed by the City, and the Utilities Services Manager will be designated as the responsible party to assure appropriate preparation and implementation of the plan.

The following table shows the 11 elements with the required completion dates:

Required Schedule for SSMP Implementation				
SSMP Element	Required Completion Date			
GoalsOrganization/Responsible Party	November 2, 2007			
 Emergency Response Plan Legal Authority Operations and Maintenance (O & M) Plan Fats, Oils and Grease (FOG) Control Plan 	May 02, 2009			
 Design and Performance Standards System Capacity Plan Monitoring and Program Modifications Program Audits Communications Program 	August 2, 2009			

The SWRCB requires the City to approve the SSMP development schedule by November 2, 2007 and approve the entire SSMP by August 2, 2009.

Staff is working with Larson Consulting to complete the SSMP and will return to the City Council for final SSMP approval before August 2009.

PUBLIC NOTICING - Agenda posting.

Prepared by:

David Serge Utilities Services Manager

Reviewed by:

Gregg W. Hosfeldt' Assistant Public Works Director

DS/LG/8/CAM/945-10-23-07M-E^

Approved by

Cathy R. Lazarus Public Works Director

Kevin C. Duggan City Manager



Approve the City of Mountain View's Sanitary Sewer Management Plan schedule as required by the State Water Resources Control Board.

FISCAL IMPACT - None.

BACKGROUND AND ANALYSIS

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AGENDA: October 23, 2007 PAGE: 2

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PUBLIC NOTICING – Agenda posting.

Prepared by:

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David Serge Utilities Services Manager

Reviewed by:

19 G. Gregg W. Hosfeldt

Assistant Public Works Director

DS/LG/8/CAM/945-10-23-07M-E^

Approved by

Cathy R. Lazarus Public Works Director

Kevin C. Duggan City Manager



Approve the City of Mountain View's Sanitary Sewer Management Plan schedule as required by the State Water Resources Control Board.

FISCAL IMPACT - None.

BACKGROUND AND ANALYSIS

The Public Works Department maintains and operates the City's sanitary sewer system and maintains records of sewer overflows. The City is required to report any overflow of the public sanitary sewer to the State Water Resources Control Board (SWRCB).

The SWRCB adopted new State-wide sanitary sewer overflow requirements on May 2, 2006 to ensure the system operators manage the wastewater collection effectively and minimize the number of overflows. The new requirements include 11 elements that are combined to form the Sanitary Sewer Management Plan (SSMP). The State-mandated goals of the SSMP are to describe how the City:

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- 3. Minimizes the number and impact of sanitary sewer overflows.

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AGENDA: October 23, 2007 PAGE: 2

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• • •	Design and Performance Standards System Capacity Plan Monitoring and Program Modifications Program Audits Communications Program	August 2, 2009		

The SWRCB requires the City to approve the SSMP development schedule by November 2, 2007 and approve the entire SSMP by August 2, 2009.

Staff is working with Larson Consulting to complete the SSMP and will return to the City Council for final SSMP approval before August 2009.

PUBLIC NOTICING - Agenda posting.

Prepared by:

Hanie

David Serge Utilities Services Manager

Reviewed by:

egg a.

Gregg W. Hosfeldt' Assistant Public Works Director

DS/LG/8/CAM/945-10-23-07M-E^

Approved by

Cathy R. Lazarus Public Works Director

Kevin C. Duggan City Manager



DATE:	June 26, 2018
CATEGORY:	Consent
DEPT.:	Public Works
TITLE:	Sanitary Sewer Management Plan Approval

Approve updates to the City of Mountain View Sanitary Sewer Management Plan as required by the State Water Resources Control Board.

BACKGROUND

The Public Works Department maintains and operates the City's sanitary sewer system and maintains records of sanitary sewer overflows (SSOs). In 2006, the State Water Resources Control Board (SWRCB) adopted Statewide SSO requirements to ensure system operators manage wastewater collection systems effectively and minimize the number of overflows. These requirements include the development of a Sanitary Sewer Management Plan (SSMP) that must be approved by governing bodies and annual reporting of any overflow of the public sanitary sewer that impacts public property. The City Council approved the original SSMP in August 2008.

The SSMP describes how the City:

- Maintains and improves the condition of the collection system to provide reliable long-term service;
- Minimizes infiltration/inflow to the sewer system and provides adequate capacity to accommodate sewer flows; and
- Minimizes the number and impact of SSOs.

In addition to describing how the City operates the sewer system, the SSMP outlines the City's standard procedures for responding to spills and overflows to protect public health and to prevent spills from reoccurring. The SSMP is comprised of the following 11 elements:

Goals

The goals of the SSMP.

Organization

Identifies City staff responsible for implementing the SSMP and responding to and reporting SSOs.

Legal Authority

Discusses the City's authority for maintaining and operating a system. Lists the applicable City Codes and agreements with other agencies.

Operations and Maintenance Plan

Provides an overview of the City's operation and maintenance program.

Design and Performance Provisions

Outlines how to obtain detailed information on the City's sewer system design and construction standards.

Sanitary Sewer Overflow Response Plan

Provides information regarding how the City responds to and mitigates SSOs.

FOG (Fats, Oils, and Grease) Control Program

Discusses the type and frequency of SSOs caused by fats, oils, and grease in the system, and the elements of the City's efforts to control same.

System Evaluation and Capacity Assurance Plan

Discusses the City's efforts to evaluate sewer system capacity for new customers and plans to address needs for increased capacity.

Monitoring, Measurement, and Plan Modifications

Details how the City evaluates the effectiveness of the SSMP and incorporates updates needed to improve the plan.

SSMP Program Audits

Discusses how the City will periodically audit the SSMP for regulatory compliance.

<u>Communication Program</u>

Outlines the City's efforts to communicate to the public the details and effectiveness of the plan.

A measure of the effectiveness of the SSMP and the City's overall wastewater system maintenance, repair, and replacement program is demonstrated through the number of SSOs the City experiences. In Fiscal Year 2015-16 (the most recent year for which Statewide statistics are available), a sewer system the size of Mountain View's would average approximately 10 SSOs; the City reported 1 SSO.

ANALYSIS

The City is required to periodically review the SSMP and incorporate updates as necessary. The most significant update since Council last approved the SSMP in 2013 is a revision to the classification of SSOs. Prior to 2014, overflows were categorized as follows:

- Category 1: All discharges of sewage of 1,000 gallons or more resulting from a failure in the City's sanitary sewer system that discharge to a drainage channel and/or surface water, or discharge to a storm drain and are not fully recovered.
- Category 2: All other discharges of sewage resulting from a failure in the City's sanitary sewer system.
- Private Lateral Sewage Discharges: Sewage discharges that are caused by blockages or other problems in a privately owned lateral.

In 2014, the City revised the SSMP to reflect updated classifications. The SWRCB expanded the categories as shown below to capture additional information regarding the severity, cause and impact of SSOs:

- Category 1: Discharges of untreated or partially treated wastewater of any volume that: (1) reach surface water and/or reach a drainage channel tributary to surface water; or (2) reach a storm sewer system and are not fully recovered.
- Category 2: Discharges of untreated or partially treated wastewater of 1,000 gallons or more that do not reach surface water, a drainage channel, or stormwater system (unless the entire discharge is recovered).
- Category 3: All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition.
- Private Lateral Sewage Discharges: Discharges of untreated or partially treated wastewater resulting from blockages or other problems in a privately owned sewer lateral or from other private sewer assets.

The SWRCB also requires the City to periodically conduct third-party audits of the SSMP to ensure the City is meeting the plan goals, revise the SSMP as necessary, and obtain Council approval of the revisions. A 2016 audit identified numerous sections needing updates. The updates have been incorporated into the revised SSMP and include:

- Updates to Overflow Emergency Response Plans and adding plans for the City's sewage pump stations.
- Updates reflecting changes to the City's sewer system standard operating procedures and maintenance practices.
- Additional information regarding the City's capital replacement plans and processes.
- Updates reflecting changes in City personnel responsible for sewer system operation and management.
- Updates reflecting changes in the SWRCB organization and applicable State regulations.
- Updated statistical information regarding the sewer system.

- Additional information regarding new portions of the sewer system, e.g., new developments, etc.
- Additional information regarding anticipated changes to the system to accommodate new developments and add pipeline capacity.
- Updated system condition assessments based on recent system evaluations and studies.

The revised SSMP can be viewed at:

https://www.mountainview.gov/civicax/filebank/blobdload.aspx?BlobID=26636

To comply with SWRCB requirements, staff recommends that Council approve the updates to the SSMP. If approved, staff will submit the updated SSMP to the SWRCB and the revised SSMP will be uploaded to the State's website.

FISCAL IMPACT

There is no fiscal impact associated with the recommended action. Wastewater system maintenance activities are fully funded in the Public Works Department operating budget and the Capital Improvement Program.

ALTERNATIVES

Do not approve the SSMP changes and provide alternative direction to staff.

<u>PUBLIC NOTICING</u> – Agenda posting.

Prepared by:

Gregg A. Hosfeldt Assistant Public Works Director Approved by:

Michael A. Fuller Public Works Director

Audrey Seymour Ramberg Assistant City Manager

GAH/TS/2/CAM/943-06-26-18CR-E-1

APPENDIX H

SSMP CHANGE LOG

1. SSMP Change Log

SSMP Changelog					
Date	SSMP Element(s)	Description	Changed by		
8/19/2008	All	SSMP Certification	Public Works		
6/11/2013	All	SSMP Update/Recertification	Public Works		
2/10/2015	Various	Updated monitoring protocols and contact information	n/a		
3/2/2015	Various	Updated various staff position information	n/a		
6/26/2018	All	SSMP Update/Recertification	Public Works		
6/5/2023	SERP	Updated SERP to cover new General Order requirements	USM		