

Sewer System Management Plan December 2019

The Sewer System Management Plan, prepared by the Operations Services Department, outlines and documents the activities that the City utilizes to manage its wastewater collection system effectively. Effective management of a collection system includes:

- Minimizing the number and impact of sanitary sewer overflows (SSOs)
- Providing adequate sewer capacity to convey peak flows, and
- Maintaining and improving the condition of the collection system infrastructure to provide reliable service into the future.

DOCUMENT ORGANIZATION

This SSMP has been prepared by City of Pleasanton's Department of Operations Services in compliance with requirements of: STATE WATER RESOURCES CONTROL BOARD (SWRCB) ORDER NO. 2006-0003-DWQ.

STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS (WDR) FOR SANITARY SEWER SYSTEMS. Provision D.13

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

SSMP ELEMENTS

1. Introduction	
2.1 Element 1 Goals	
2.2 Element 2 Organization	page 10
2.3 Element 3 Legal Authority	page 15
2.4 Element 4 Operations and Maintenance Program	page 17
2.5 Element 5 Design and Performance Provisions	page 21
2.6 Element 6 Overflow Emergency Response Plan	page 22
2.7 Element 7 FOG Control Program	page 34
2.8 Element 8 System Evaluation and Capacity Assurance Plan	page 39
2.9 Element 9 Monitoring, Measurement and Program Modifications	page 41
2.10 Element 10 SSMP Program Audits	page 43
2.11 Element 11 Communication Program	page 45
3.0 SSMP Appendices	
Attachments	page 49
SSMP Audit Report Form	page 57

Sewer System Management Plan

December 2019

CIWQS WDID: 2SSO10167

Previously Updated in 2014

I. INTRODUCTION

A. Sewer System Management Plan

This Sewer System Management Plan (SSMP) has been prepared by the City of Pleasanton's Operations Services Department. It consists of policies, procedures, and activities that are included in the planning, management, operation, and maintenance of the City's sanitary sewer system.

The State Water Resources Control Board (SWRCB) has issued Statewide Waste Discharge Requirements for sanitary sewer systems, which include requirements for development of an SSMP. This SSMP is intended to meet the requirements of the San Francisco Bay Regional Water Quality Control Board and the State Water Resources Control Board. Specifically, it follows the General Waste Discharge Requirements (GWDR) for Wastewater Collection Agencies, State Water Resources Control Board Order Number 2006-0003 dated May 2, 2006 and amended by the revised Monitoring and Reporting Program (MRP) in Order WQ 2013-0058-EXEC, dated September 9, 2013. The format of the Plan was changed to conform to the 2015 "A Guide for Developing and Updating of Sewer System Management Plans"

The structure (element numbering and nomenclature) of this SSMP follows the General Waste Discharge Requirements (GWDR) for Wastewater Collection Agencies. The City's waste discharger identification number (WDID) in the California Integrated Water Quality System (CIWQS) is 2SSO10167.

B. Sanitary Sewer System Facilities

City of Pleasanton

The City operates a sanitary sewer system that serves a residential population of approximately 83,007 in a 24 square mile service area. The sewer system consists of about 250 miles of gravity sewers, approximately 25,192-feet of force main, and ten pump stations. Average Daily Dry Weather flow is 7 million gallons per day (MGD). The sewers range in size from 4-inch to 42-inch diameter.

The City also receives wastewater from the Castlewood Area of Alameda County.

Sewer service laterals are owned by, and therefore the responsibility of, the property owner to maintain and assure serviceability. The City may provide maintenance services to laterals located within the public right of way as a courtesy service if a property line cleanout exists, and the cleanout and adjacent area are accessible to City staff and equipment. The City will not perform repair, rehabilitation, or replacement of any portion of sewer service laterals located on private property. There are 20,820 lateral connections within the City.

Table 1-1 Gravity Sewer System Size Distribution

City Owned			
<u>Active</u> Pipe	Length	Length	Percent
Diameter	Feet	Miles	Of System
	-		
4	3,757	0.71	0.28%
6	145,058	27.47	10.92%
8	932,246	176.56	70.20%
10	106,341	20.14	8.01%
12	29,783	5.64	2.24%
14	341	0.06	0.03%
15	45,511	8.62	3.43%
16	325	0.06	0.02%
18	20,881	3.95	1.57%
21	7,089	1.34	0.53%
24	12,010	2.27	0.90%
27	15,638	2.96	1.18%
30	5,869	1.11	0.44%
33	3,122	0.59	0.24%
36	0	0.00	0.00%
39	0	0.00	0.00%
42	51	0.01	0.00%
48	0	0.00	0.00%
60	0	0.00	0.00%
Total	1,328,022	251.52	100.00%

City Owned

C. Definitions, Acronyms, and Abbreviations

Acrylonitrile Butadiene Styrene (ABS)

Asbestos-Cement Pipe (ACP)

Bay Area Clean Water Agencies (BAWCA)

Best Management Practices (BMP)

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

Calendar Year (CY)

California Integrated Water Quality System (CIWQS)

Refers to the State Water Resources Control Board online electronic reporting system that is used to report SSOs, certify completion of the SSMP, and provide information on the sanitary sewer system.

California OES Office of Emergency Management (Cal OES)

This refers to the California Office of Emergency Management.

Capital Improvement Plan (CIP)

This refers to the document that identifies future capital improvements to the City's sanitary sewer system.

Cast Iron Pipe (CIP)

City

This refers to the City of Pleasanton.

Closed Circuit Television (CCTV)

This refers to the process and equipment that is used to internally inspect the condition of gravity sewers.

Computerized Maintenance Management System (CMMS)

Refers to a database application used manage and document maintenance activities of a collection system.

Drain Inlet (D/I)

Ductile Iron Pipe (DIP)

Dublin San Ramon Service District (DSRSD)

This is the Public agency that provides treatment and disposal of City's wastewater stream. Administers and enforces Source Control within the City.

Duty Operator

This refers to the City of Pleasanton weekend and on-call worker.

Environmental Services Division (ESD)

This refers to City of Pleasanton Environmental Services Division, which is part of the Operations Services Department.

Fats, Oils, and Grease (FOG)

This refers to fats, oils, and grease typically associated with food preparation and cooking activities that can cause blockages in the sanitary sewer system.

Fiscal Year (FY)

Food Service Establishment (FSE)

Refers to commercial or industrial facilities where food is handled/prepared/served that discharge to the sanitary sewer system.

Full-time Equivalent (FTE)

This refers to the equivalent of 2,080 paid labor hours per year by a regular employee.

General Waste Discharge Requirements (GWDR)

Refers to the State Water Resources Control Board Order No. 2006-0003, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, dated May 2, 2006, and amended by the revised monitoring and reporting program (Order WQ 2013-0058-EXEC) dated September 9, 2013.

Geographical Information System (GIS)

Refers to the City's system that it uses to capture, store, analyze, and manage geospatial data associated with the City's sanitary sewer system assets.

Global Positioning System (GPS)

This refers to the handheld unit that can be used to determine the longitude and latitude of sanitary sewer overflows for use in meeting CIWQS reporting requirements.

Grease Control Devices (GRD)

Installed and engineered device to allow for the separation of lighter oils and greases from discharges to sewers

High Density Polyethylene Pipe (HDPE)

Infiltration/Inflow (I/I)

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

Lateral

This refers to the piping that conveys sewage from a building to the City sewer system. The distinction is sometimes made between the upper lateral (from building to public right-of-way) and the lower lateral (from public right-of-way to the sewer main).

Legally Responsible Official (LRO)

Refers to the individual designated by the City to certify SSO reports on the CIWQS system. The LRO must be formally designated by the City and registered with the SWRCB.

Manhole (M/H)

Million Gallons per Day (MGD)

Monitoring and Reporting Program (MRP)

Refers to the revised monitoring and reporting requirements included in Order WQ 2013-0058-EXEC, dated September 9, 2013.

Pleasanton Call Center and Communications Contacts

The City of Pleasanton operates two communication centers. During normal business operations, calls are received by Pleasanton Call Center. During all other hours, calls are received by Pleasanton Police directly, which is staffed 24/7. For the purpose of this SSMP, both may be referred to as Dispatch.

Private Lateral Sewage Discharge (PLSD)

Sewage discharges caused by blockages or other problems within privately owned laterals, collection systems or other private sewer assets that are tributary to the city's sanitary sewer system. This type of sewage discharge is the responsibility of the private lateral, private asset, or collection system owner.

Operations and Maintenance (O&M)

Operations Services Department (OSD)

Operations Service Center (OSC)

Overflow Emergency Response Plan (OERP)

For the purpose of this SSMP, this plan will be referred to as the Sanitary Sewer Overflow Response Plan (SSORP).

Polyvinylchloride Pipe (PVC)

Preventive Maintenance (PM)

Refers to maintenance activities intended to prevent failures of the sanitary sewer system facilities (e.g. cleaning, CCTV, repair).

Property Damage Overflow

This refers to a sewer overflow or backup that damages a property owner's premises.

Reinforced Concrete Pipe (RCP)

Supervisory Control and Data Acquisition (SCADA)

Data based computer controller, date compiler and Alarm system

Sanitary Sewer Overflow Response Plan (SSORP)

This refers to the City's Overflow Emergency Response Plan which is a component of this SSMP that addresses the City's response to SSO events.

Sanitary Sewer Overflows (SSOs)

This refers to the overflow or discharge of any quantity of partially treated or untreated wastewater from the sanitary sewer system at any point upstream from the wastewater treatment plant. SSOs are typically caused by blockages, pipe failure, pump station failure, or capacity limitation.

Sanitary Sewer System

This refers to the portion of the sanitary sewer facilities that are owned and operated by the City of Pleasanton.

Sewer System Management Plan (SSMP)

SSO Report

This refers to sanitary sewer overflow report.

State Water Resources Control Board (SWRCB)

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

Supervisory Control and Data Acquisition (SCADA)

This refers to the system that is employed by the City to monitor the performance of its pump stations and to notify the operating staff when there is an alarm condition that requires attention.

Utilities Division (UD)

This refers to City of Pleasanton Utilities Division. This is a division within the Operations Services Department.

Vitrified Clay Pipe (VCP)

Water of the State

Water of the State means any water, surface or underground, including saline waters, within the boundaries of California. In case of a sewage spill, storm drains are considered to be waters of the State unless the sewage is completely contained and returned to the sewer system. This may also be referred to as surface water(s) or State waterway.

D. References

A Guide for Developing and Updating of Sewer System Management Plans

https://www.waterboards.ca.gov/water_issues/programs/sso/docs/ssmp_guidance_091015.pdf

State Water Resources Control Board Order No. 2006-0003 Statewide General Waste Discharge

Requirements for Sanitary Sewer Systems, California State Water Resources Control Board, May 2, 2006, with Revised Monitoring and Reporting Program, Order WQ-2013-0058-EXEC.

General Order:

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

Revised Monitoring and Reporting Program

www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2013/wqo2013_0058exec.pdf

2.1 ELEMENT 1 - GOALS

2.1.1 Regulatory Requirements

State GWDR Requirement:

D.13.(i) **Goals**: The goal of the SSMP is to provide a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer system. This will help reduce and prevent SSOs, as well as mitigate any SSOs that do occur.

Goals for the Wastewater Collection System

Future Goals to be focus points in the upcoming year are:

- Replacement of CCTV Truck and Associated Software and Hardware
- Replacement of Sewer Flushing Vehicle
- Enhanced focus on maintenance activities
- Hiring additional personnel for FOG inspection and enforcement activities
- Coordinate efforts between Collections Crew and Environmental Services staff

Future Goals in ensuing years include:

- Capacity Evaluation (Model) in Fiscal Year 21/22
- Asset Management Plan in Fiscal Year 22/23.

On-going goals include:

Providing safe, responsive, and reliable sewage conveyance is a key component of the goals and objectives of the City's Operational Services Department.

The City's Sewer Collections Section has adopted the following goals. These goals outline responsibilities and provide direction and understanding for all sewer maintenance and cleaning activities.

- Provide for the reliable collection of sewage throughout the City to protect public health and the environment, to prevent sanitary sewer overflows and to minimize odors.
- Ensure all sanitary sewage is collected and transported to the DSRSD Wastewater Treatment Plant.
- Maintain and repair the City's Sanitary Sewer Collection System in a cost-effective, safe, reliable and timely manner.
- Comply with all federal, state, and local laws and regulations pertaining to sanitary sewer collection operation and maintenance.
- Respond to emergency events and provide assistance for residents and businesses.
- Provide administrative and support services to promote customer satisfaction and confidence. Continue to professionally manage, operate and maintain all parts of the sewer collection system.
- Provide adequate capacity to convey peak flows.

- Minimize the frequency of SSOs that can pose a threat to public health.
- Mitigate the impact of SSOs.

This SSMP supplements and supports the City's existing Maintenance and Operations Program and goals by providing high-level, consolidated guidelines and procedures for all the aspects of the City's wastewater system management. The SSMP will contribute to the proper management of the collections system and assist the City in minimizing the frequency and impacts of SSOs by providing guidance for appropriate maintenance, capacity management and emergency response.

The City's General Plan contains Goals, Policies and Action Statements applicable to the wastewater collection system. Refer to the City's General Plan web page at: https://www.cityofpleasantonca.gov/gov/depts/cd/planning/general.asp

2.2 Element 2 - Organization

2.2.1 Requirements

State GWDR Requirement:

D.13. (ii) Organization: The SSMP must identify:

(a) The name of the responsible or authorized representative as described in Section J of this Order (SSS WDR).

(b) The names and telephone numbers for management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP program. The SSMP must identify lines of authority through an organization chart or similar document with a narrative explanation; and

(c) The chain of communication for reporting SSOs, from receipt of a complaint or other information, including the person responsible for reporting SSOs to the State and Regional Water Board and other agencies if applicable (such as County Health Officer, County Environmental Health Agency, Regional Water Board, and/or State Office of Emergency Services (Cal OES)).

a. Legally Responsible Official

The City's authorized representative (also known as Legally Responsible Official or LRO) in all wastewater collection system matters is the Director of Operations Services and Water Utilities. For purposes of continuous coverage of CIWQS reporting and certification, the Director has authorized the Assistant Director of Operations and the Utilities Division Superintendent as additional LROs.

Responsibility for SSMP Implementation

The Director of Operations Services is responsible for ensuring over all implementation of this SSMP.

Table 2.1 Demonstrates primary responsibilities for each Element of the SSMP.

TABLE 2.1 CITY STAFF RESPONSIBLE FOR SSMP

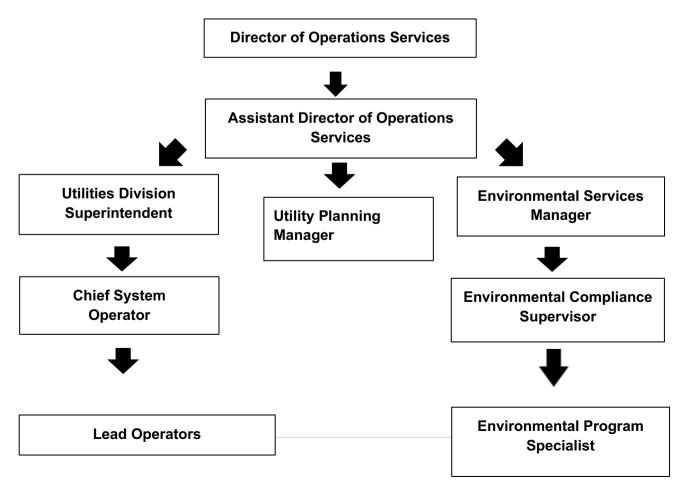
SSMP Element	Responsible Position	Contact Number
1- Goals	Director of Operations Services and Water Utilities	931-5506
2- Organization	Director of Operations Services and Water Utilities	931-5506
3-Legal Authority	City Attorney	931-5024
4- O&M Program	Utilities Division Superintendent	931-5523
5-Design & Performance Provisions	Engineering Department (separate department from	931-5676

	Operations Services)	
6- Overflow Emergency Response Program	Utilities Division Superintendent	931-5523
7- FOG Control Program	Environmental Services Manager	931-5513
8- System Evaluation & Capacity Assurance Plan	Utility Planning Manager	931-5542
9- Monitoring, Measurement, and Control Program Modifications	Utilities Division Superintendent	931-5523
10- SSMP Program Audits	Environmental Services Manager	931-5513
11- Communication	Public Information Officer (Separate department from Operations Services)	931-5044

b. Organization and Staffing

The organization chart for the management, operation and maintenance of the Department of Operations Service's Utilities Division and Environmental Services Division is shown on Figure 2-1. General Responsibilities are described below. Table 2-2 is a listing of telephone numbers for key positions.

Figure 2-1 Organization Chart for Operations Services Department, Utilities and Environmental Services Division



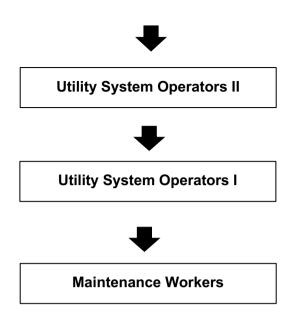


Table 2-2 Contact Numbers for Key OSD Positions

Call Center	931-5500
Police Department	931-5122
Director of Operations Services and Water Utilities	931-5506
Assistant Director of Operations Services	931-5519
Utilities Division Superintendent	931-5523
Environmental Services Manager	931-5513
Environmental Compliance Supervisor	931-5527
Chief System Operator	931-5529
On-Call Staff (Primary)	437-3991
On-Call Staff(Backup)	437-3992

Description of General Responsibilities

Director of Operations Services and Water Utilities

This position provides overall management of the Operations Services Department, consisting of Environmental Services, Utilities, Business Services, Parks, Streets and Signs, and Support Services.. Along with the City Manager, City Attorney, and other Department heads, serves as a member of the City's Executive Leadership Team.

Assistant Director of Operations Services

This position provides general direction to the Utilities and Environmental Services Divisions, and acts as the Director of Operations Services in the Director's absence.

Utilities Division Superintendent

Under general direction from the Assistant Director, the Utilities Division Superintendent provides general direction to the Water Distribution and Sewer Operations Supervisors and Lead Workers. This manager plans, organizes, directs, and coordinates the activities of the City's Water distribution and Wastewater Collections system programs.

Environmental Services Manager

Under general direction from the Assistant Director, the Environmental Services Manager provides oversight and implementation of environmental programs within the Operations Services Department.

Environmental Compliance Supervisor

Under direction from the Environmental Services Manager, the Environmental Compliance Supervisor implements provisions of environmental programs within the Operations Services Department, and coordinates operations with multiple OSD Divisions.

Environmental Program Specialist

Under direction from the Environmental Compliance Supervisor, the Environmental Program Specialist provides oversight and guidance to Food Service Establishments within the Operations Services Department.

Chief Utility System Operator

Under general direction from the Utilities Superintendent, supervises the activities of lead personnel, field crews and individuals in the maintenance and repair of public utilities within the Operations Services Department.

Lead Operators

Under general direction, works with and leads field crews and individuals in the maintenance and repair of public utilities including, but not restricted to water service distribution lines, works with and leads field crews and individuals in the maintenance and repair of public utilities including, but not restricted to, storm drains, sanitary sewers and water systems; does related work as required.

Utility System Operator II

Under general direction, performs skilled manual tasks in the construction, repair, and maintenance of water service distribution lines, sanitary sewers, storm drains, and supporting facilities; operates motorized equipment; occasionally leads small field crews; performs related work as required.

Utility System Operator I

Under general supervision, performs a variety of semi-skilled and skilled manual tasks in the construction, repair and maintenance of water service distribution lines, sanitary sewer and storm drain facilities; operates motorized equipment; performs related work as required.

Utilities Maintenance Worker

Under direct supervision this classification is a generalist that performs maintenance tasks supporting the work of the Lead Workers, and Utility Operator classifications.

Crew Assignments:

The Utilities Division Superintendent oversees the entire Program. The Chief Utility System Operator Supervisor oversees the day to day operation. The Lead Workers generally rotate duties which include: leading crews; operating hydro-flushers; operating CCTV equipment; performing underground utility locates (USA); and being on-call. Hydro-flushing, CCTV, locating, pump and lift station preventive maintenance, and general maintenance and construction duties are shared amongst Utility System Operators.

The construction crew makes needed repairs of the city water service lines and the sanitary sewer system which includes but is not limited to: mains, laterals, pump/lift stations, manholes, and repairs or installs property line clean outs. The hydro-flushing crew performs all cleaning of City sewer mains. Hydro-flushing uses high pressure water to clean the sewer mains.

The CCTV crew performs televising and condition assessment of the sanitary sewer collection system piping using a robotic pipe inspection camera system and software.

The Duty Operator performs routine rounds and receives and responds to water distribution, sanitary and storm sewer calls and emergency response requests for water and wastewater issues as required.

Employees also perform all city utility USA locates.

c. SSO Response and Reporting Chain of Communication

The SSO reporting process is described in Element VI: Overflow Emergency Response Plan. The Sanitary Sewer Overflow Response Plan (SSORP) also demonstrates the chain of communication for responding to and reporting SSO's from observation of an SSO to reporting the SSO to the appropriate agencies. Table 2-1 above lists the contact phone numbers for the parties involved in the chain of communication.

2.3 Element 3 - Legal Authority

2.3.1 Requirements

D.13. (iii) **Legal Authority**: Each Enrollee must demonstrate, through sanitary sewer system use ordinances, service agreements, or other legally binding procedures, that it possesses the necessary legal authority to:

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

(b) Require that sewers and connections be properly designed and constructed;

(c) Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the Public Agency;

(d) Limit the discharge of fats, oils, and grease and other debris that may cause blockages, and

(e) Enforce any violation of its sewer ordinances.

a - e. City of Pleasanton Municipal Code

The *Pleasanton Municipal Code*, Title 15, describes the City's current legal authorities. The legal authorities provided by the Municipal Code and other sources that address the regulatory requirements are summarized in Table 3-1.

Requirement	Municipal Code Reference	Meets GWDR Requirements
General		
Prevent illicit discharges into the wastewater collection system	Section. 15.28.010	Yes
	Section 15.28.010	
Limit the discharge of fats, oils, and grease and other debris that may cause blockages	Section 15.28.060	Yes
and other debris that may cause blockages	Section 15.44.010	
	Section 15.24.040	
Require that sewers and connections be properly designed and constructed	Section 15.32.010	Yes
property designed and constructed	Section 15.44.050	
Desuing another installation testing and	Section 15.32.020	
Require proper installation, testing, and inspection of new and rehabilitated sewers	Section 15.32.070	Yes
inspection of new and rendomated sewers	Section 15.32.080	
Maintenance and Inspection, including Laterals		

Table 3-1. Summary of Legal Authorities in Municipal Code and Other Source	es
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Clearly define City responsibility and policies	Section 15.32.100	Yes
Ensure access for maintenance, inspection, or repairs for portions of the service lateral owned or maintained by the City	Section 15.28.170	Yes
Fats, Oil and Grease (FOG) Source Control		
Requirements to install grease control devices (GCDs), design standards for the grease removal devices, maintenance, BMP, record keeping and reporting requirements	Section 15.44 Ordinance #1984 And Ordinance #2038	Yes
Authority to inspect grease producing facilities	Section 15.44.070	Yes
Enforcement		
Enforce any violation of sewer ordinances	Section 15.12 And Section 15.44.070	Yes

The City's legal authority does not require the control of infiltration and inflow (I/I) from private service laterals. (The GWDR has no equivalent requirement). However, inflow and infiltration is not currently a significant issue for the City. Average daily flows during rain events are typically only 10-30% above dry weather flows, and the sewer system has not historically experienced capacity-related SSOs.

Agreements with Other Agencies

The Dublin San Ramon Services District (DSRSD) and City of Livermore both provide for the treatment and disposal of wastewater emanating from the City of Pleasanton's sanitary sewerage service area.

Within the 1992 contract the City delegates all authority, rights and power to administer and enforce a Source Control program to DSRSD.

The City has mutual aid agreements and cooperation with the neighboring agencies including DSRSD, San Francisco Water Division, Alameda County Flood Control and Water Conservation District, Zone 7 and the City of Livermore.

2.4 Element 4 - Operation and Maintenance Program

2.4.1 Requirements

B. Regulatory Requirements

D.13. (iv) **Operation and Maintenance Program**. The SSMP must include those elements listed below that are appropriate and applicable to the Enrollee's system:

(a) Maintain an up-to-date map of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable storm water conveyance facilities;

(b) Describe routine preventive operation and maintenance activities by staff and contractors; including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventative Maintenance (PM) program should have a system to document scheduled and conducted activities, such as work orders;

(c) Develop rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short and long term plans plus a schedule for developing the funds needed for the capital improvement plan;

(d) Provide training on a regular basis for staff in sanitary sewer system operations, maintenance, and require contractors to be appropriately trained; and

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

a. <u>Collection System Maps</u>

The City has a Geographical Information System (GIS) that includes information for wastewater collection system assets including: gravity line segments, manholes, pumping facilities, and pressure pipes (force mains). The information garnered by CCTV software is linked to the City's GIS system. The City also has information in its GIS for the storm drainage system. The GIS information is available to internal City staff. In addition, staff carries a list and maps of identified sewer "Bad Spots"

The City's GIS team receives data from the Engineering Department as "As-Built" information is forwarded from them. This information is forwarded to a GIS consultant, is updated in the City's GIS map monthly and is available to all city employees.

b. Preventive Operations and Maintenance

The elements of the City's sewer system O&M program include:

• Proactive, preventive and corrective maintenance of gravity sewers;

- CCTV inspection;
- Rehabilitation and replacement of sewers that are in poor condition;
- Periodic inspection and preventive maintenance for the pump stations;
- All Utility employees are trained on the use of field equipment; and

Utility staff incorporates the use of Computerized Maintenance Management System (CMMS) to Monitor Preventative tasks performed associated with preventive O&M Tasks.

Gravity Sewers

The City proactively cleans "Bad Spot" sewers with a history of issues on an enhanced frequency cleaning interval as necessary. The City has one hydro-flusher and two combination (hydro/vacuum) units it uses for the cleaning and maintenance of its sewer mains. Enhanced frequencies are scheduled at 1,3,6 and 12 month intervals for main lines that require more frequent cleaning, and lines are placed into those frequencies depending upon specific conditions in individual main lines segments. Approximately 241,154 feet or about 23% of the system are in the enhanced frequencies ("Bad Spot") category.

CMMS is used to track history for sewer line maintenance, and provide other O&M related functions through the use of the Work Order System.

Utilities Division staff performs Root Cutting operations in defined areas every two years.

Previous years Gravity Sewer maintenance work is demonstrated in Table 4-1.

Year	Sewer Lines	Sewer Lines Flushed (feet)		"Bad S	pot" Clean	ing activities	5	
	Video (ft.)	Corrective	Preventive	Total	30 days	90 days	180 days	360 days
2015	31,845	31,676	241,154	272,830	28	3	14	13
2016	9,891	17,401	241,154	258,555	28	3	14	13
2017	37,994	86,759	241,154	327,913	28	3	14	13
2018	33,724	61,799	255,112	316,911	28	5	11	9

Table 4-1 Gravity Sewer Preventative Maintenance Summary

CCTV Inspection

Staff is currently in the process of replacing the CCTV Truck and associated software and hardware. It has also purchased a panoramic style camera that can be used extensively to analyze cleaning success as well as provide enhanced analysis of sewers for R&R and CIP candidacy.

Staff has completed NASSCO training to provide sewer rating standardization.

The intention in the previous SSMP was that staff would televise the entire system every 7 years. Unforeseen equipment failures precluded this from occurring and prompted staff to purchase a new CCTV vehicle and all related software and hardware replacement.

Wastewater Pump/Lift Stations Inspections and Maintenance

The Duty Operator inspects the operation of Sewage Lift Stations daily. Maintenance activities include: inspecting the site; verifying pump operation; rotating pumps and, grease and debris removal. The stations can be powered by trailer-mounted generators during power outages.

c. Rehabilitation and Replacement

The information gathered during the CCTV condition assessment will be used to select and prioritize individual gravity sewers for repair, rehabilitation, or replacement. The general criteria for sewer replacement are to focus on those areas identified as "Bad Spots". Additionally, as previously written, staff has purchased a panoramic style camera that can be used extensively to provide enhanced analysis of sewers for R&R and CIP candidacy. This purchase along with staff NASSCO (PACP) training will provide a consistent, repeatable and scientific approach to sewer condition analysis, allowing the city to rank pipe condition and prioritize rehabilitation schedules.

The replacement or rehabilitation is also considered each time water service line or street repairs (overlays) are performed.

The City will be enacting an Enterprise Asset Management System starting in FY 2020/2021 (with a focus on the sewer system in FY2022/2023) to closely track all assets and their conditions to improve protection and longevity to installed assets.

Funding for the Capital Improvement Program is derived from the City's Sewer Fund. The Sewer Fund is an Enterprise Fund; sewer fees are established on the basis of projected needs and are updated periodically. The budget and project description are currently included in the City's Capital Improvement Program. This listing is included in the Sewer System Master Plan.

d. <u>Training</u>

The City uses a combination of in-house classes, on the job training, CWEA conferences, seminars, and other training opportunities to train its Utilities staff. The City strongly encourages staff to advance their CWEA certification grade, provides financial support for certifications and CWEA memberships, and provides training and advancement opportunities. CWEA Certification is desired in some staff job descriptions and mandatory in others. Staff is actively involved in leadership roles in Bayworks (CWEA) and Alameda Clean Water Program. Staff Lead Operator and certain Operators hold certifications in NASSCO Pipeline Assessment Certification Program (PACP).

Annual training on the City's SSMP and SSORP is conducted for all Utility employees. The City also maintains an ongoing safety training program that addresses both general and task-specific safety issues. These include regular Safety Training in OSHA regulations, Traffic Control, MSDS, Haz-Mat, Electrical, Lock-out, Tag-out, Confined Space, CPR and First Aid.

The Tailgate Schedule lists safety training activities for the Utilities Division Program. This schedule is updated annually.

The City's contract language requires contractors working in the wastewater collection system to provide training for their employees in the activities that may cause SSOs and in responding to contractor-caused SSOs. The contractor must also follow OSHA Confined Space Protocols.

e. Replacement Parts and O&M Resources

The City has informal agreements with neighboring agencies for equipment support in the event the sewer maintenance equipment fails. However, the Division maintains an inventory of routine parts for repair of sewer mains and laterals and various electrical components for the City's lift stations.

Table 4-2 lists the major equipment currently used in the Operation and Maintenance of the collection system. The Utilities Division is in the process of replacing the CCTV van, Sewer Flusher and Utility Repair Vehicle and is in the process of updating the Vehicles and Equipment table to include all assets.

Table 4-2 Specialized Vehicles and Equipment

VEHICLES
Detail Description
Dump Truck, 1.5 ton w/crane
Stake Bed LG (8Wx12Lx4H)
Stepvan CCTV Truck
Utility bed, 1 1/2 ton w/mounted hoist and auxiliary fuel tank
12 ft. Dump Truck, 7-9 YD
Flusher
Utility Truck w/Scelzi Body (air compressor 369 ER)
12 ft. Dump Truck, 7-9 YD
Hydro-Excavator (2015)
Hydro Excavator (2015)

EQUIPMENT
Camera Inspection, Crawler
Camera Inspection, Crawler
Pump Hose Trailer
Sandbagger
Traffic Arrow Board
6" Trash Pump
Portable Generator
Compressor (on vehicle #314)
Light Tower
Portable Generator
Oswald, w/Kato 30 KW
Generator
Forklift
Backhoe
Backhoe
Equipment Trailer
125 kVa Portable Generator
Bobcat Loader

The Utilities Division stockpiles material necessary for normal operations and maintenance. Pipe, full circle clamps, and dresser couplings are stored and maintained in minimum quantities for most emergencies.

Outreach to Sewer Service Contractors

The City maintains an active list of available contractors as part of the "Emergency Water Plan". The water emergency in this context is any situation that would require immediate action beyond the scope of normal City operations.

2.5 Element 5 - Design and Performance Provisions

2.5.1 Requirements

D.13. (v) Design and Performance Provisions:

(a) Design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer systems; and

(b) Procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

a. Design and Construction Standards

2016 Edition of the Standard Specifications and Details

The scope and purpose of these City Standard Specifications are to provide minimum standards for materials used and methods of construction for the City's public infrastructure including streets, water, sanitary sewer, and storm drainage facilities. The City Standard Specifications are to be used in conjunction with the City Standard Details. These minimum standards shall apply to City capital improvement and private development projects.

b. Inspecting and Testing of new installations

The City uses consultants to design new stations and reviews their design standards. The City follows Caltrans standards for inspecting and testing. The City uses consultants to supplement city inspection staff to oversee the installation. For pipelines the City has its own standards and procedures which are located in the City Standard Plans.

2.6 Element 6 - Overflow Emergency Response Plan

2.6.1 Requirements

D.13. (vi) **Overflow Emergency Response Plan** - Each Enrollee shall develop and implement an overflow emergency response plan that identifies measures to protect public health and the environment. At a minimum, this plan must include the following:

(a) Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;

(b) A program to ensure appropriate response to all overflows;

(c) Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, regional water boards, water suppliers, etc....) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the MRP. All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board WDR or NPDES permit requirements. The SSMP should identify the officials who will receive immediate notification;

(d) Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;

(e) Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and

(f) A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.

<u>Purpose</u>

The Sanitary Sewer Overflow Response Plan (SSORP) is designed to ensure that every report of a confirmed sanitary sewer overflow (SSO) is immediately dispatched to the appropriate crews. This Plan provides a procedure that when enacted in response to the sewer overflow/spill, would reduce or eliminate public health hazards, prevent unnecessary property damage, and minimize the inconvenience of service interruptions. This plan provides procedures for City staff to follow when responding to, cleaning up and reporting SSOs.

COLLECTION SYSTEM SERVICE CALL RESPONSE, AND SANITARY SEWER OVERFLOW RESPONSE, HANDLING AND REPORTING

This procedure is intended to outline the minimum steps to be taken by City personnel. The procedural steps indicated are general in nature. All steps will not apply in all cases. Additional steps may be necessary in some cases. The procedures must be used with experience with the Collection System, training, and applicable regulatory provisions.

It is the responsibility of the Utilities Division Superintendent to ensure that the service calls are handled in the manner as herein described. The Environmental Services Manager will assure all appropriate reports are prepared and filed for City use or as may be required by regulatory agencies.

<u>Safety</u>

Whenever qualified City personnel respond to a report of an overflow/spill, they may encounter an emergency situation that requires immediate action. The most critical aspect of resolving an incident of this nature is to safely and competently perform the actions necessary to return the system or facility to normal operations as soon as possible. The most important item to remember during this type of incident is that safe operations always take precedence over expediency or shortcuts. Safety also takes precedence over regulatory notifications and reporting.

Upon arrival at an SSO, the Duty Operator will conduct a hazard assessment to determine potential safety hazards. There is always a possibility that a sewage overflow may contain unknown hazardous waste or chemicals. On rare occasions, gasoline and industrial solvents have been found in the sewer system. If a hazardous waste is suspected, the responding field crew should notify Public Safety Communications immediately and request the Fire Department's Hazardous Materials Response Team.

The Utilities Superintendent, Chief Utilities System Operator, and , Environmental Compliance Supervisor and should also be notified of a SSO via text to the Notification Group, as soon as possible. Personnel shall stay clear of any hazards and secure the area from the public.

Depending on the nature or cause of the SSO, personnel may be required to remove a mainline blockage with a hydro-flusher, repair a damaged section of pipeline, or wash/clean a City street. At this point, it is essential that all standard safety procedures and/or duties are followed as deemed appropriate.

Typical responses may require personnel to implement the following types of safety procedures:

- Standard personal protective equipment (PPE);
- Confined space entry procedures;
- Traffic control;
- Heavy equipment operation; and/or
- Adequate communication via two-way radio and/or cellular telephone.

RECEIVING A CALL/RECORDING VITAL INFORMATION

A. Calls Received by Call Center (Working Hours M-F 0700 to 1515 Hrs.)

Notify the Duty Operator or Chief Utility System Operator

B. <u>Calls received by Police Department Personnel; After Hours, Weekends, and Holidays</u> Contact Duty Operator at his/her home or standby cell phone (925) 437-3992.

The Chief Utility System Operator is responsible for insuring that a Duty Operator is always on call. Monday-to-Monday standby is rotated among the Duty Operators, and employees may trade this duty. When a trade is made the worker assuming standby duties shall notify the Chief Utility System Operator. The Police Department is informed of the Duty Operator schedule.

C. Lift Station Related Service Calls

Wastewater Lift Stations are equipped with a multiple alarms that send information of critical equipment to a centralized SCADA system. This, in turn, will inform the on-call Duty Operator of any problems associated with the lift stations on a 24/7 basis.

D. <u>General</u>

If at any time the Duty Operator or the Chief Utility System Operator cannot be reached, theUtilities Superintendent will be contacted.

RESPONDING TO A SERVICE CALL

A. Responder's Role

- 1. Protect public health and property from sewage spills and restore area back to normal as soon as possible.
- 2. Establish perimeters and control zones with cones, barricades, vehicles or terrain.
- 3. Contain sewage discharge to the maximum extent possible. Every effort must be made to prevent the discharge of sewage into surface waters.

Promptly notify Chief Utility System Operator, Enviornmental Compliance Supervisor and Utilities Superintendent of preliminary spill information and potential impacts.

B. Responder's Primary Duties

- 1. Always be sure to obtain adequate information from the dispatcher, including the name, address and telephone number of people who registered the complaint and the nature of the problem.
- 2. Review the City map to determine location of sewers in the area of the reported overflow or problem.
- 3. Upon arrival at the site of problem look for apparent overflows. If an overflow or surcharged sewer main is located, check downstream manholes until a dry (normal flow or less)

manhole is located. If a second person is needed to assist in clearing a stoppage, the responder should contact a second person.

- 4. Using the appropriate cleaning equipment, work upstream from the dry manhole to clear the blockage (in some cases it may be necessary to work downstream from the last surcharged manhole). The line should be cleaned after clearing the blockage, and cleaned again the following workday. Observe flows to ensure blockage does not reoccur downstream. Stay at job site until flows return to normal.
- 5. Contact homeowner or person who reported the problem. If damage or overflow onto private property exists, refer to the "Claim Presented to the City of Pleasanton" form (Attachment A). Where sewage has overflowed out of a manhole or cleanout, contain the area and collect all flow, paper and solids possible. Flush manhole steps and shelves to clear debris whether or not overflows have occurred. Video inspect line to help determine cause of the overflow.

OVERFLOW RESPONSE – QUICK REFERENCE (See Attachment B)

A. <u>Relieve the Cause of the Overflow</u>

- 1. Relieve the stoppage as soon as possible
- 2. Refer to and follow all Safety Regulations

B. Get Help if Necessary

- 1. Call additional Utilities personnel
- 2. Call Chief Utility System Operator, Enviornmental Compliance Supervisor and Utilities Superintendent
- 3. Call Street Division Personnel
- 4. Call mutual aid agency personnel

C. Spill Containment and Recovery

- 1. Install air plugs on storm drains whenever appropriate to contain the spill.
- 2. Divert spill with portable dams and/or by building small berms to change direction of flow back to sewer.
- 3. Divert spill by pumping around overflow and return to sewer.
- 4. Contain spill by letting it collect in naturally low area and recover sewage when time permits.
- 5. Dike/Dam spill by sandbagging or building dirt berm to collect spill.

D. <u>Cleanup and Disinfection</u>

- 1. Flush the area with potable water.
- 2. All sewage and flush water should be recovered by VAC truck or contained and returned to the sanitary sewer.

E. Sign Posting and Barricading

 Where contamination is significant in areas accessible to the general public, post the "Warning! Sewage Overflow Avoid Water Contact" signs (Attachment C) and secure the contaminated areas with yellow caution tape.

2. Do not remove signs until the results of the lab tests assess the extent and severity of any contamination and risk to the general public.

F. Sampling and Lab Tests

1. Follow Procedure "Sanitary Sewer Overflow – Water Quality Monitoring Program" (Attachment D).

OVERFLOW RESPONSE WHEN DAMAGE HAS OCCURRED

When, during a service call, it is found that a City sewer main has or is causing damage to private or public property, the **first priority must be to remove the stoppage and stop the inflow of sewage onto the property**. Where damage has occurred, the following steps should be taken after the stoppage is cleared:

- 1. Contact Utilities Superintendent and describe the conditions found, the extent of the damage. If unable to contact the Supervisor, call the Assistant Director of Operations Services. Summon other employees for assistance if necessary.
- 2. The Utilities Division Superintendent will notify the Assistant Director of Operations Services if there is damage or possible damages which may result in a major claim.
- 3. Do <u>NOT</u> acknowledge or discuss liability or responsibility for damages. Refer these questions to the, Utilities Superintendent or the Assistant Director of Operations Services.
- 4. Where flooding has occurred on public properties (streets, parks, school grounds, creek beds, etc.) remove any visible signs of the sewage by containing, washing down with potable water, and vacuuming the areas affected.
- 5. Where damage to private property occurs, provide a copy of a "Claim Presented to the City of Pleasanton" form (Attachment A).
- 6. Record damages with a video camera recorder. The responder may also take still photographs, if deemed necessary.

The responder will file a complete written report with the Chief Utility System Operator, describing details of the service call, who responded, what was found, and what was done. The Utilities Superintendent shall investigate the report and manage the initial claims process.

DOCUMENTATION OF A SPILL

A. Provide accurate flow measurements and estimate duration of spill.

It is extremely important to apply logic or a scientific approach when estimating Flow

- 1. If the flow is coming from a cleanout or a broken line, count the number of upstream connections and estimate the time that the flow has been occurring. Remember that the flow was probably flowing before it was noticed and reported. Each residence contributes between 160 and 200 gallons per day or about 8 gallons per hour/ (depending on the time of the day). Assuming no flow is going through the plug/break, multiply the number of residences by estimated gallons per hour times the number of hours. This gives you an approximate number of gallons.
- 2. If the flow is coming from a manhole, use the San Diego manhole overflow visual estimator to estimate the flow. (Attachment E).
- 3. If the flow is coming from a pump station, use the previous day's flow and pump capacity to estimate the flow. Refer to SCADA information.
- 4. Another estimating tool is to know that a 5/8 inch residential hose runs at about 11 gallons per minute.

B. Provide map of problem location

All manhole(s) involved - and where the spill discharged (e.g., storm drain, field, stream).

C. Take photos of events, if possible.

- **D.** <u>Complete the City Sewage Initial Overflow Report, (Attachment B)</u>.</u> Submit report to the Chief Utility System Operator as soon as possible.
- E. Complex claims will be referred to the City's's Claims Agent.

RESOURCES AND CONTACTS

A. Available Resources at the Operations Service Center

Sandbags – palletized and raw materials, Yellow Caution Tape, Warning/Spill Signs Barricades, Lighting, portable pumps, portable generators

B. Utilities Division Personnel Contacts (Contact as situation dictates)

Each Month a "Utilities Division Standby" sheet is distributed. This sheet updates all existing and future Duty Operators and provides staff with current contact numbers and data. Table 6-1 provides phone contacts as they currently exist.

Table 6-1 Emergency Personnel Phone Numbers

Responding Person	Cell Phone
Eric Amaro	925.437.3605
Ryan Ravalin	925.354.0476
Dave Peterson	925.519.9394
Scott Walker	925.998.2469
Danny Ward	925.519.9990
Leo Lopez	925.570.1420
Daniel McVey	925.519.0020
Todd Yamello	650.278.2525
Kathleen Yurchak	925.989.4163

MANDATORY SSO REPORTING REQUIREMENTS

A. SSO Categories

- 1. Category 1 Spills of any volume that reaches surface water
- 2. Category 2 Spills greater than or equal to 1,000 gallons that do not reach surface water
- 3. Category 3 Spills less than 1,000 gallons that do not reach surface water
- 4. Private Lateral Sewage Discharges Sewage discharges that are caused by blockages or other problems within a privately owned lateral (voluntarily reporting to SWRCB)

B. SSO Notification Timeframe

Refer to SWRCB Monitoring and Reporting Program (Table 6-3).

C. <u>2-hour Notification for Category "1" Spills</u>

For Category 1 spills greater than or equal to 1,000 gallons, call California Office of Emergency Services (Cal OES) to report overflow and to obtain control number, (800) 852-7550 or (916) 845-8911.

Following initial notification, update Cal OES of any substantial changes to estimated volume or known impacts of spill.

Additional Notification Telephone Number List

* Local Health Officers: Alameda County Health.
<u>aileen.mendoza@acgov.org</u> (510) 383-1708
OR
emily.hoe@acgov.org (510) 567-6765
AND
cynthia.bartus@acgov.org (510)567-6714

* Zone 7
Colter Anderson (Operations and Maintenance – Production Manager) <u>candersen@zone7water.com</u>
(925) 454-5003 (office)
(925) 337-6726 (cell)

Joe Seto (Flood Control – Flood Control Engineering Manager) jseto@zone7water.com (925) 454-5085 (office) (925) 519-1728 (cell)

D. Water Quality Monitoring

For spills greater than or equal to 50,000 gallons that reach surface water a Water Quality Monitoring must be conducted within 48 hours of Sanitary Sewer Overflow.

Follow Procedure "Sanitary Sewer Overflow – Water Quality Monitoring Program (Attachment D).

Submit SSO Technical Report within 45 days of spill.

F. Records to be maintained by City

- 1. Keep records for at least five years from the date of the SSO.
 - 2. Note: The five-year time period may be extended by SFRWQCB if there is an unresolved enforcement action.

REPORTING RESPONSIBILITY

A. Electronic Reporting to CIWQS (California Integrated Water Quality System)

All confirmed sanitary sewer overflows must be reported to the Director of Operations Services or designee, who will be responsible for notification and reporting to regulatory agencies. Notification and reporting requirements depend on the type of spill.

No Spill Certification

Even if there are no SSOs during the calendar month, the City must certify through CIWQS that there were no SSOs for the designated month. This "No Spill Certification" must be submitted within 30 days after the end of each calendar month.

CIWQS Questionnaire Annual Audit

The City must update the CIWQS Collection System Questionnaire annually, even if there are no changes.

Table 6-2 Summarizes Category Descriptions

Table 6-3 Summarizes Notification, Reporting, Monitoring, and Record Keeping Requirements

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

Table 6-2. Summary of SSO Spill Categories

Table 6-3. Notification, Reporting, Monitoring, and Record Keeping Requirements

ELEMENT	REQUIREMENT	METHOD
NOTIFICATION	 Within two hours of becoming aware of any Category 1 SSO greater than or equal to 1,000 gallons discharged to surface water or spilled in a location where it probably will be discharged to surface water, notify the California Office of Emergency Services (Cal OES) and obtain a notification control number. 	Call Cal OES at: (800) 852-7550
REPORTING	 Category 1 SSO: Submit draft report within three business days of becoming aware of the SSO and certify within 15 calendar days of SSO end date. Category 2 SSO: Submit draft report within 3 business days of becoming aware of the SSO and certify within 15 calendar days of the SSO end date. Category 3 SSO: Submit certified report within 30 calendar days of the end of month in which SSO the occurred. SSO Technical Report: Submit within 45 calendar days after the end date of any Category 1 SSO in which 50,000 gallons or greater are spilled to surface waters. "No Spill" Certification: Certify that no SSOs occurred within 30 calendar days of the end of the month or, if reporting quarterly, the quarter in which no SSOs occurred. Collection System Questionnaire: Update and certify every 12 months. 	Enter data into the CIWQS Online SSO Database (http://ciwqs.waterboards.ca.gov/), certified by enrollee's Legally Responsible Official(s).
WATER QUALITY MONITORING	• Conduct water quality sampling <u>within 48</u> <u>hours</u> after initial SSO notification for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters.	Water quality results are required to be uploaded into CIWQS for Category 1 SSOs in which 50,000 gallons or greater are spilled to

RECORD KEEPING

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

Self-maintained records shall be available during inspections or upon request.

2.7 Element 7 - FOG Control Program

2.7.1 Requirements

D.13. (vii) **Fats, Oils, and Grease (FOG) Control Program:** Each Enrollee shall evaluate its service area to determine whether a FOG control program is needed. If an Enrollee determines that a FOG program is not needed, the Enrollee must provide justification for why it is not needed. If FOG is found to be a problem, the Enrollee must prepare and implement a FOG source control program to reduce the amount of these substances discharged to the sanitary sewer system. This plan shall include the following as appropriate:

(a) An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;

(b) A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area;

(c) The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;

(d) Requirements to install grease removal devices (such as traps or interceptors) design standards for the removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements;

(e) Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the FOG ordinance;

(f) An identification of sanitary sewer system sections subject to FOG blockages and establish a cleaning maintenance schedule for each section; and

(g) Development and implementation of source control measures, for all sources of FOG discharged to the sanitary sewer system, for each section identified in (f) above.

a. Public Education and Outreach Program

Food Service Establishments (FSE) are given three publications along with BMP literature they receive. These include, "Guidelines for Food Handling Establishments", "How Your Food Service Facility Can Prevent Stormwater Pollution," and "What is a Grease Control Device and Why Do I Need One?".

Also available on the City's FOG webpage

(<u>https://www.cityofpleasantonca.gov/gov/depts/os/env/fog.asp</u>), is the application form to obtain a Wastewater Discharge Permit (WDP) from the City and a sample maintenance log.

The City's initial outreach to each potential food service establishment involves sending them a FOG introduction packet that includes a letter describing the City's FOG Program, an FSE's responsibility to install and maintain appropriate grease control devices (GCDs), and their need to obtain a WDP and keep/submit device maintenance records. An application form for the WDP is also provided as a part of the introduction packet

b. Disposal of FOG generated within the sanitary sewer system service area

Three Wastewater treatment plants accept hauled FOG products. These are City of Hayward Plant and East Bay Municipal Utility District (EBMUD) in Oakland and Dublin San Ramon Service District (DSRSD) in the near future.

City of Hayward 3700 Enterprise Ave, Hayward, CA 94545 Phone: (510) 293-5395

East Bay Municipal Utility District 2020 Wake Ave. Oakland, CA 94607 Phone: (510) 287-1632

Dublin San Ramon Service District 7035 Commerce Circle Pleasanton, CA Phone: (925) 846-4565

c. Legal Authority

The Pleasanton Municipal Code (PMC) Chapter 15.44 and its subsections along with Ordinances 1984 and 2038 identify FOG related Requirements and Enforcements.

d. Requirements to install grease removal devices

The Environmental Services Division has identified approximately 400 potential Food Service Establishments (FSE) in the City. Working through the City's Business License process, and through staff inspections, this list is modified on a regular basis as described below.

Due to staffing constraints, the Environmental Services Division is currently permitting and inspecting a small subset of all of the potential FSEs in the City. On a monthly basis, ESD staff reviews the new list of businesses that have recently acquired a Business License from the City and determine if any are potentially Food Service Establishments. Staff then conducts outreach by sending them an introduction packet as described above. Prospective FSEs have 30 days to respond to ESD's letter. A site inspection is then conducted by staff to verify the installed GCD's acceptability. Staff only issues a permit when the WDP application is found to be complete and GCD acceptable. A variance from the requirement to install a grease interceptor can be requested due to site and/or operational constraints.

The above process captures new FSEs. In addition, ESD relies on the Alameda County Department of Environmental Health (ACDEH) to provide mutual assistance in identifying potential violators of FOG requirements among existing FSEs. ACDEH conducts routine inspections of FSEs in Pleasanton

and informs ESD of potential FOG violations. They also exercise their authority to temporarily shut down FSE operations as necessary. ESD follows up by initiating the permitting process similar to one used for new FSEs.

Lastly, according to PMC Section 15.44.040, existing FSEs with planned modification with a building permit evaluation of \$50,000.00 or more are required to include plans to comply with the FOG requirements. Working with the City's Planning and Building groups to identify such existing facilities presents ESD staff with another opportunity to build its list of FSEs that need to comply with the City's FOG requirements.

These three processes together represent ESD's effort to gradually build up its FOG program, while allowing the City to tackle FOG-related issues as they arise, at a pace that can be sustained by the City's existing staffing level.

1. Grease Interceptor and Trap Installation Requirements

All GCDs (Grease Control Devices) installed or caused to be installed are sized in conformance with the currently adopted edition of the Uniform Plumbing Code (PMC 15.44.070).

2. Grease Interceptor and Trap Maintenance Requirements

All GDRs installed or caused to be installed shall be kept in good repair and shall be serviced and emptied of accumulated waste content as required in order to maintain minimum design capability. Grease interceptors shall be inspected at least monthly and maintained to ensure no collection system blockage, but at a minimum once every two months. Grease traps shall be inspected and maintained no less than bi-weekly. Inspection/maintenance records shall be kept for at least two years and submitted to the Environmental Compliance Supervisor by **6/30** and **12/31** of each year.

3. Grease Hauling and Disposal Requirements

It is unlawful for any person to dispose of any grease by discharge into any sanitary sewer or storm drainage system (PMC 15.44.030).

Environmental Services Inspectors review the contracted grease hauling and disposal company documents when conducting an FSE inspection.

FSEs conducting self-cleaning of GCDS are provided guidance regarding the proper disposal of the FOG.

4. Kitchen BMP Requirements

Kitchen BMP activities are observed and related inquiries are made during inspections of FSEs. All FSEs receive BMP documents regarding FOG reduction. These BMPs are bi-lingual.

e. Authority to inspect, enforcement authorities, and staffing

Enforcement actions are clearly outlined in the PMC 15.44.070, Enforcement elements include: Authority to Inspect, Administrative Enforcement Powers, and penalties for violation. The City has potentially up to 400 sources of FOG discharge to the collection system. Currently, only one temporary Environmental Program Specialist is involved in the FOG Program. The FOG Program's goal is to inspect, resource permitting, on an annual basis all of the FSEs identified through the processes described above. The City also relies on the submittal of maintenance records from the permitted FSEs to provide assurance of program compliance. Emphasis is on:

- a. GDC installation and maintenance
- b. Process information
- c. Grease management
- d. Best Management Practices
- e. Stormwater pollution prevention

As a necessity, inspection frequencies will be adjusted according to the FOG Program's staffing level. Currently, one temporary, part-time Environmental Program Specialist is assigned to the FOG Program. This individual is limited to 1,500 work hours per year and has the responsibility of ensuring the City's compliance with hazmat, fuel storage tank, and air emissions programs, in addition to FOG. ESD management will continue to seek funding for a permanent, full-time Program Specialist to further expand the City's ability to permit and inspect FSEs.

A summary of inspections and enforcement in the period of 2015 through 2018 is included in the following table:

Year	Inspections	Enforcement Actions
2015	147	50
2016	72	21
2017	2	0
2018	2	0

Table 7-1 FSE Inspection and Enforcement

f. An identification of sanitary sewer system sections subject to FOG blockages

The largest concentration of commercial FOG sources are food service establishments (FSEs) located on Main Street in the downtown area. Some of the FSEs are located in older buildings and have undersized grease traps. In addition, there are eating and drinking establishments, cafeterias, bakeries and, delis that are located throughout the City.

g. <u>Development and implementation of source control measures, for all sources of FOG discharged to</u> the sanitary sewer system, for each section identified in (f) above.

These areas located in FOG "hot spots," as identified by the Wastewater Collections Crew, receive attention through the City's existing Operations and Maintenance Program. These facilities receive information on BMPs, and their effectiveness is monitored.

The City includes line segments that have had FOG-related SSOs or surcharging on the "Bad Spots" cleaning list (30-day, 90-day, semi-annual, and annual), which are used by the Utilities Division to schedule

sewer lines preventive maintenance. The "Bad Spots" list is included in the Computerized Maintenance Management System (CMMS), is accessible by OS staff, and is periodically updated based on information collected during maintenance activities (and particularly the results of video inspections). Such periodic updating allows the City to edit cleaning frequencies to the needs of the particular line segment and more effectively utilize maintenance resources.

2.8 Element 8 – System Evaluation and Capacity Assurance Plan

2.8.1 Requirements

D.13.(viii) **System Evaluation and Capacity Assurance Plan**: The Enrollee shall prepare and implement a capital improvement plan (CIP) that will provide hydraulic capacity of key sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design storm or wet weather event. At a minimum, the plan must include:

(a) Evaluation: Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs that escape from the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to the peak flows associated with overflow events;

(b) Design Criteria: Where design criteria do not exist or are deficient, undertake the evaluation identified in "a" above to establish appropriate design criteria; and

(c) Capacity Enhancement Measures: The steps needed to establish a short- and long-term capital improvement plan (CIP) to address identified hydraulic deficiencies including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, I/I reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding.

(d) Schedule: The Enrollee shall develop a schedule of completion dates for all portions of the capital improvement program developed in (a-c) above. This schedule shall be reviewed and updated consistent with the SSMP review and update requirements as described in Section D. 14.

a. Evaluation

The City completed a Sewer System Master Plan in 2007 (Master Plan). The master planning effort evaluated the capacity of the existing sanitary sewer system assets and provided capacity design criteria for future assets. The study included a sanitary sewer and flow monitoring and inflow and infiltration (I&I) analysis. The study concluded that no basins or sub-basins exceeded 5% inflow/infiltration into their sewage basin. Furthermore, the study concluded that the City's collection system does not appear to have high levels of ground water infiltration. Two basins were identified as prioritized areas of concern when corrective action is needed.

The City requires that redevelopment project proponents evaluate the offsite capacity impacts of their project through an engineering study.

Evaluation - Hydraulic Model. Overall, the City's collection system has adequate capacity to convey DWFs. Few deficiencies exist under dry weather flow conditions. Capacity deficiencies under WWF conditions represent less than 10 percent reaches of pipe that would be surcharged under modeling conditions of the collection system. The relatively few number of deficiencies can be attributed to a well-designed system without significant I/I problems.

1. b. Design Criteria

Section 13 of the City's Standard Specifications and details addresses requirements for materials and methods of installation for sanitary sewer mains (up to and including 15 inches in diameter), laterals, manholes, and appurtenances within the City's sanitary sewer system.

c. Capacity Enhancement Measures

City staff selected to improve the collection system to convey the PWWFs of the 10-year 24-hour design storm. The pipe criteria set for this alternative was to pass the PWWFs while allowing the surcharge level to rise up to one foot below the manhole rim elevation. A number of pipelines require improvements to meet the City's surcharge criteria.

2. d. Schedule

The City's 2007 hydraulic model demonstrates that the collection system has adequate capacity to convey dry weather flows (DWF). Capacity deficiencies under WWF conditions represent less than 10 percent of the modeled collection system. The relatively few number of deficiencies can be attributed to a well-designed system without significant I/I problems. The 2007 Wastewater Master Plan identified several pipeline improvements and capacity upgrades at several pump stations, but none were critical. Staff will re-assess potential deficiencies in two upcoming studies; a renewed Capacity Evaluation (Model) in Fiscal Year 21/22 and development of an Asset Management Plan in Fiscal Year 22/23. Future CIP projects will be identified from these efforts.

2.9 Element 9 - Monitoring, Measurement, and Program Modifications

2.9.1 Requirements

D.13. (ix) Monitoring, Measurement, and Program Modifications: The Enrollee shall:

(a) Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;

(b) Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;

(c) Assess the success of the preventative maintenance program;

(d) Update program elements, as appropriate, based on monitoring or performance evaluations; and

(e) Identify and illustrate SSO trends, including: frequency, location, and volume.

3. a. Maintain relevant information

The City will evaluate the performance of its wastewater collection system and SSMP effectiveness annually using the performance measures. Results of the evaluation will be recorded on the SSMP Audit Form. The City will also evaluate the effectiveness of individual SSMP elements. The primary tool for documenting the evaluation will be the SSMP audit. The City will prioritize its actions and initiate changes to this SSMP and the related programs based on the results of the evaluation. Examples of changes that could result from ongoing evaluation include:

- Revisions to frequency of cleaning cycles and/or FSE inspections based on field observations and CCTV inspections
- Reprioritization of rehabilitation and replacement projects based on the results of CCTV inspection, manhole inspections, and capacity analysis.
- Implementation of new methods and procedures based on experience developed in-house and from other agencies.
- Continued use of Information Technology (GIS GPS, and CMMS) for Administrative and Field operations.

b.- c. Monitor the implementation and measure the effectiveness of Preventive Maintenance

The indicators that the City will use to measure the performance of its wastewater collection system and the effectiveness of its SSMP are:

- Total number of SSOs
- Number of SSOs by cause (roots, grease, debris, pipe or pump station failure, and other)
- Volume of sewage spilled, recovered and reaching water(s) of the state

Table 9-1 Historical SSO Results. Mains only; PLSDs Excluded

Year	Total		Cause					
		Grease	Roots	Debris	Pipe Fail	Capacity	Other	
2015	4	1	2	1				
2016	5		3	1	1			
2017	5	1	4					
2018	4	4						

Capture					
100%	Partial	0%			
2	1	1			
2	2	1			
2	1	2			
2	2	0			

d. Update program elements

The City will prioritize its actions and initiate changes to this SSMP and the related programs based on the results of the evaluation. Examples of changes that could result from ongoing evaluation include:

- Revisions to frequency of cleaning cycles and/or FSE inspections based on field observations and CCTV inspections.
- Reprioritization of rehabilitation and replacement projects based on the results of CCTV inspection, manhole inspections, and capacity analysis.
- Implementation of new methods and procedures based on experience developed in-house and from other agencies.
- Continued use of Information Technology (GIS GPS, and CMMS) for Administrative and Field operations.

e. Identify and illustrate SSO trends

Table 9-2 History of Spill Volumes and Volumes Recovered

Year	Sanitary Sewer	Spill Volume,	Volume Recovered,	Percent
	Overflows, each	gallons	gallons	Recovered
2016	5	1793	886	49.4
2017	5	617	326	52.8
2018	4	7675	2471	32.2

2.10 Element 10 - SSMP Program Audits

2.10.1 Requirements

D.13. (x) **SSMP Program Audits** - As part of the SSMP, the Enrollee shall conduct periodic internal audits, appropriate to the size of the system and the number of SSOs. At a minimum, these audits must occur every two years and a report must be prepared and kept on file. This audit shall focus on evaluating the effectiveness of the SSMP and the Enrollee's compliance with the SSMP requirements identified in this subsection (D.13.), including identification of any deficiencies in the SSMP and steps to correct them.

An audit of the SSMP was performed in July 2018. The 2016 Audit was not performed as the Environmental Compliance Manager was not on staff. The highlights of the 2018 Audit are as follows:

Element 2, Organization

Contact information and roles and responsibilities of SSMP implementation have changed since the last update. The Operations Services Department also has a new reporting structure. All necessary changes have been incorporated into the updated SSMP.

Element 4, Operations and Maintenance

Staff is beginning to add videos to the City's network, so that conditions can be better identified and documented. The list of Major Specialized Equipment was updated in May 2018 as well as the Gravity Sewer Preventative Maintenance Summary.

Element 5, Design and Performance Standards

The 2018 updated SSMP references the November 2016 edition of the Standard Specifications and Details

Element 6, Overflow and Emergency Response

The Emergency Personnel Phone Numbers have been updated. In addition, Attachment D containing the Water Quality Monitoring Program has been modified as well to reflect changes to the field monitoring protocol (i.e., monitoring for pH instead of DO and adding one additional sampling location). There have been no Category 1 SSOs with 50,000 gallons or more spilled.

Element 7, Fats, Oils, and Grease (FOG) Control Program

As the City's Environmental Services Division has lost its sole Water Quality Technician, it lacks adequate staffing to fully implement the City's FOG program. One staffer currently is responsible for implementing the entire program and he has other environmental compliance responsibilities as well. Additional resources are needed to inspect all food service establishments, issue wastewater discharge permits, and track permit-compliance activities. Without additional staffing, the City, at best, can only inspect new FSEs when they come on-line and rely on stormwater inspections, the Building Permit process, and mutual aid provided by the Alameda County Department of Environmental Health to implement the FOG Program at existing FSEs. Some gaps would persist. Nevertheless, based on the limited number of SSOs attributable to grease, FOG does not appear to be a major cause of SSOs. The URL to the list of grease hauling services has been updated

Element 8 – System Evaluation and Capacity Assurance Plan

The existing master plan was developed in 2007 and will be updated in FY21/221. The City has added staffing to perform this task.

Element 9 – Monitoring, Measurement, and Program Modifications

Future CCTV sewer video work will be incorporated into a computerized mapping system. The City also regularly evaluates its training program to affect better staff response to spills.

Element 10 - SSMP Audits

The SSMP was last updated in December 2014 and adopted by City Council in early 2015. The City missed a bi-annual audit of the SSMP for 2016.. The 2018 audit was performed in July of 2018. This 2019 SSMP serves as an update to that prepared in 2014. The next SSMP audit is due in 2020.

Element 11 – Communication Program

The City makes its bi-annual audits of the SSMP available to the public via its website. Updates of the SSMP are required every 5 years. If the update includes significant changes then Council approval is required. In advance of such approval, a staff report is available to the general public through posting of the Council agenda on the City's official notice bulletin board, posting of the agenda and report on the City's website, and through the City Library and the City Clerk's Office. Council meetings are open to the public and include a public comment period.

The audit identifies unusual circumstances or data anomalies in the SSMP audit report that are outside normal operating conditions, may have been "unavoidable," or may "skew" the data or performance indicators. The audit also documents any changes in methodologies, baselines, or reporting requirements and how these changes affect data and performance indicators measured or compared to previous years.

The audit is retained by the Environmental Compliance Supervisor.

As part of the audit process, City staff will update critical information in the SSMP, such as contact information, names of the key staff in the response chain of communication, or other similar data as needed.

2.11 Element 11 - Communication Program

2.11.1 Requirements

D.13. (xi) **Communication Program**. The Enrollee shall communicate on a regular basis with the public on the development, implementation, and performance of its SSMP. The communication system shall provide the public the opportunity to provide input to the Enrollee as the program is developed and implemented.

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

Communication of SSMP Development and Updates

The City Council will be involved with the approval process of any significant changes in this SSMP at a future Council meeting. In advance of such approval, Operations Services personnel will be preparing a report to Council that provides background information including regulatory drivers for SSMP development, SSMP purpose and content, relationship to existing City policy as described in the Sewer Management Sub-element of the City's General Plan, and the SSMP implement schedule. The Council report will be available to the general public through posting of the Council agenda on the City's official notice bulletin board, posting of the agenda and report on the City Council web page, and through the City Library and the City Clerk's Office. This future Council meeting will open to the public and included a period for public comment.

The City enacted Ordinance No. 1984 and 2038 along with Section 15-44 and 15.44.70 to the Municipal Code to implement additional FOG Program elements. The proposed ordinance revisions were also publicly noticed and made available to the public through the channels listed above.

Ongoing Communication

Posting of Sewer Services on City Web Site: The City of Pleasanton maintains a website public about City Services, activities and events. Updates on the Operations Services and Environmental issues can be displayed there.

https://www.cityofpleasantonca.gov/gov/depts/os/env/default.asp

http://www.cityofpleasantonca.gov/documents/SSMP/Sewer%20System%20Management%20P lan%20-2018%20Audit_Final.pdf

The City's website is an effective communication channel for providing alerts and news to the public. The main page of the website provides important announcements, agendas and minutes for City Council meetings, and other key information for City residents.

SSO Reporting: Information on individual SSOs is available to the general public through a GISbased application on the State Board's web site at: <u>https://www.waterboards.ca.gov/water_issues/programs/sso/</u>

Citizen Interaction: Staff has a variety of opportunities to interact with the community at these functions: Earth Day Celebration Day, Alameda County Fair, Saturday Farmers Market, "Pleasanton Weekly" publication, Concert-in-the-Park events, and a recent 125th City anniversary event.

Dublin San Ramon Services provides wastewater treatment of the City's generated sewage. Operations Staff meets with their treatment plant personnel monthly.

3.0 SSMP Appendices

3.1 Requirements

MRP Section E. 3. - Records documenting all changes made to the SSMP since its last certification indicating when a subsection(s) of the SSMP was changed and/or updated and who authorized the change or update. These records shall be attached to the SSMP.

 Table 10-1
 Log of SSMP Updates and Changes

Date	SSMP Element #	Description of Update/Change Made	Authorizing Person
November 2019	Introduction	Reformatted the Plan, updated facilities data and acronyms and Waterboard reference sites	Director of Operations Services and Water Utilities
November 2019	#1, Goals	Named future goals	Director of Operations Services and Water Utilities
November 2019	#2, Organization	Updated designated person(s) responsible for SSMP Implementation, added Environmental Program Specialist and Utility Planning Manager to staff	Director of Operations Services and Water Utilities
November 2019	#3, Legal Authority	Changed Municipal Code References and added an additional Ordinance	Director of Operations Services and Water Utilities
November 2019	#4, O&M Program	Updated GIS/Operations linkage information, increased total number of flushing footage to demonstrate proper values, presented information regarding purchases of new equipment and enhanced NASSCO training, enhanced Specialized Vehicles and Equipment spreadsheet	Director of Operations Services and Water Utilities
November 2019	#5, Design and Performance Provisions	Cited the updated Edition of the Standard Specifications and Details	Director of Operations Services and Water Utilities
November 2019	#6, Overflow Emergency Response Plan	Staff amended 3 attachments that support the Plan. These are: B. Response Report Form, C. Posted Warning Sign and D. Water Quality Monitoring Program	Director of Operations Services and Water Utilities
November 2019	#7, FOG Control Program	Added another publication reference for FSEs, added another FOG disposal site for haulers, updated information regarding packets that are sent to new FSEs, discussed three processes that represent the city's effort to gradually build up its FOG program	Director of Operations Services and Water Utilities

November 2019	#8, System Evaluation and Capacity Assurance Plan	Demonstrated a schedule of projects and completion dates of upcoming CIP projects	Director of Operations Services and Water Utilities
November 2019	#9, Monitoring, Measurement, and Program Modifications	Updated Historical SSO Results and History of Spill Volumes and Volumes Recovered Tables	Director of Operations Services and Water Utilities
November 2019	#10, SSMP Program Audits	Highlighted results of the 2018 Audit	Director of Operations Services and Water Utilities
November 2019	#11, Communication Program	Updated Citizen interaction opportunities and Contact with local wastewater partner	Director of Operations Services and Water Utilities

Changes made to the SSMP will be documented in the SSMP Changes Log. See Table 10-1.

ATTACHMENT "A"

CLAIM PRESENTED TO THE CITY OF PLEASANTON

PRESENTING A CLAIM TO THE CITY OF PLEASANTON

⇒ PLEASE TYPE OR PRINT CLEARLY ALL OF THE INFORMATION REQUESTED ON THE CLAIM FORM.

 \Rightarrow YOU MUST COMPLETE EACH SECTION OR YOUR CLAIM MAY BE RETURNED TO YOU AS INSUFFICIENT.

- The following provides specific instructions for completing each section of the claim form.

- Attach additional pages if you need more room to provide the requested information.

1. NAME AND MAILING ADDRESS OF CLAIMANT – State the full name and mailing address of the person(s) claiming damage or injury. Please include a daytime and evening telephone number.

2. WHEN DID THE DAMAGE OR INJURY OCCUR? – State the exact month, date, year, and approximate time (if known) of the incident which caused the alleged damage/injury.

Under State law, claims relating to causes of action for personal injury, wrongful death, property damage, and crop damage must be presented to the City of Pleasanton no later than six months after the incident date. A claim may be presented in person or by mail.

When filing a claim beyond the six-month period, you must explain the reason the claim was not filed within the six-month period. This explanation is called "application for leave to present a late claim". In considering your claim, the City will first decide whether the late claim application should be granted or denied. (See Government Code Section 911.4 for the legally acceptable reasons a claim may be filed late.) Only if your late claim application is granted will the City then consider the merits of your claim.

Claims relating to any cause of action other than personal injury, wrongful death, property damage, and crop damage must be presented no later than one year after the incident date. (See Government Code Section 911.2).

3. AT WHICH LOCATION DID THE DAMAGE OR INJURY OCCUR? – Please include street address, city, county, intersection, etc. If possible, also include the Police Report number (if available).

4. WHAT HAPPENED AND WHY IS THE CITY RESPONSIBILE? – Please explain the circumstances that led to the alleged damage or injury. State all facts which support your claim that the City is responsible for the alleged damage or injury. If known, identify the name of the City Department(s) and/or City employee(s) that allegedly caused the damage or injury.

5. WHAT DAMAGE OR INJURY OCCURRED? – Provide in full a detailed description of the damage/injury that allegedly resulted from the incident. (What specific damage or injury do you claim resulted from the alleged actions?)

6. CLAIM AMOUNT: - State the specific total dollar amount you are claiming as result of the alleged damage/injury.

7. HOW DID YOU ARRIVE AT THE AMOUNT CLAIMED? – Provide a breakdown of how the total amount that you are claiming was computed. You may declare expenses incurred and/or future anticipated expenses. If you have supporting documentation (i.e., bills, payment receipts, cost estimates) please attach copies of them to your claim.

8. SIGNATURE: - The claim must be signed by the claimant or by the attorney/representative of the claimant. The City will not accept the claim without a proper signature. Government Code Section 910.2 provides: "The claim shall be signed by the claimant or by some person on his [or her] behalf."

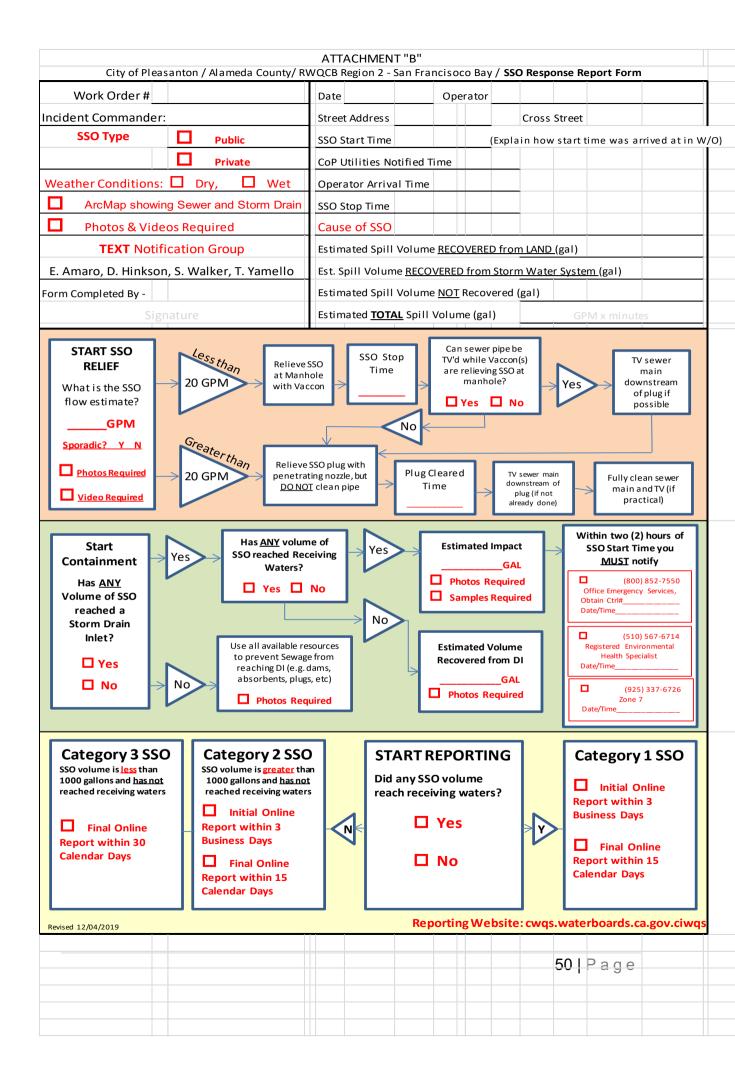
9. OFFICIAL NOTICES AND CORRESPONDENCE - Provide the name and mailing address of the person to whom all official notices and other correspondence from the City should be sent, only if other than claimant. Please provide telephone numbers for the representative, if applicable.

⇒ SUBMIT COMPLETED AND RELATED DOCUMENTATION TO: The City Clerk of the City of Pleasanton. Personal service of claims can be accomplished during regular City business hours 8:00 am to 5:00 pm, Monday through Friday (excluding City holidays). The claim may also be mailed to the City Clerk at P.O. Box 520, Pleasanton, CA 94566-0802.

 \Rightarrow If you wish to receive a stamped copy of your claim, return the form to the City Clerk with a cover letter along with a stamped, self-addressed envelope informing the City of your request.

 \Rightarrow Within 45 days of the presentation of your claim, you will receive a letter from the City Attorney's Office responding to your claim.

If, after reading these instructions, you have questions or need additional information regarding the filing of a claim with the City Clerk of Pleasanton; please contact the City Clerk's staff at (925) 931-5027.





PRECAUCION! AGUA DE DESPERDICIO MANTENGASE FUERA DEL AGUA

WARNING! SEWAGE OVERFLOW AVOID WATER CONTACT



ATTACHMENT "C"

ATTACHMENT "D"

SANITARY SEWER OVERFLOW – WATER QUALITY MONITORING PROGRAM

This procedure is intended to comply with SWRQB requirements for surface water monitoring and reporting in the event of a spill greater than 50,000 gallons to surface water. It will outline the basic steps to be taken by City personnel. Additional steps may be necessary in some cases. The procedures must be used with experience of the Collection System and applicable regulatory provisions.

Surface water monitoring and reporting is conducted by the Environmental Services Division of the Operations Services Department or specified alternate for SSO spills with a volume greater than 50,000 gallons to surface waters.

PROCEDURES:

I. WATER QUALITY MONITORING

- A. In the event of an SSO spill with a volume greater than 50,000 gallons to surface waters, the Environmental Compliance Supervisor, Chief Utility System Operator, Environmental Services Manager, Utilities Division Superintendent, or highest-ranking Utility Division crew member on duty, shall begin field monitoring of the effected water way.
- **B.** The Duty Operator or alternate (equipped with the SSO Cat. 1 Kit and pH meter from the City of Pleasanton's Water Quality Laboratory) will be dispatched to the spill site for sampling and analysis as soon as can be safely and practically dispatched. Ideally, the sampling shall initiate within four hours. In no event should the testing be delayed beyond 48 hours of becoming aware of the SSO.
- **C.** Water quality sampling shall only be conducted if it is safe to do so and access to the water way is not restricted. Unsafe conditions such as, but not limited to, heavy rains, slippery and or steep slopes and visibility issues. If sampling is not possible details of the situation shall be recorded within the field notes of the event for reporting purposes.
- **D.** The Duty Operator or alternate shall establish three sampling points Upstream, Source and Downstream. Upstream sampling point will be 50' to 200' upstream of the source. The source is the point 10' to 20' downstream of the point at which the SSO is entering the waterway. The downstream sampling point will 50" to 200' downstream of the source.

Chain of Custody Record shall be completed for the samples collected.

Samples shall be collected in sample bottles provided in the SSO Cat. 1 Kit for

- 1. Ammonia
- 2. Fecal Coliform
- 3. Enterococcus bacteria
- **E.** The following in-stream analyses will be conducted for each sample site using field analytical instrumentation:
 - 1. pH
 - 2. Temperature

Note: pH and Temperature shall be recorded on the Chain of Custody Record.

- **F.** All maintenance and calibration records are maintained and stored in the OSC laboratory to ensure instrumentation accuracy.
- G. Sample shall be taken to the OSC and stored in the laboratory refrigerator, till they are released to Alpha Analytical Laboratories' courier (M-F 8AM 4PM). <u>After hours</u> service is available from Alpha Analytical Laboratories by calling (650) 464-3237. Alpha Analytical Laboratories is located at 262 Rickenbacker Circle, Livermore CA.
- **H.** Results, sample locations notes, and other observations are to be recorded in the field notes.
- I. A visual assessment of detrimental impacts such as fish kill, odor, and presence of visual spill material will be conducted and recorded in the field notes. Site photos shall be taken of the sampling locations from two vantage points, at approximate right angles to each other. The individual taking the samples shall either take the photos directly or mark the location so that photos can be taken later by the Utilities Division personnel.
- J. The visual assessment should also include an estimate to determine the rate of flow in the surface water. The estimate shall be made by either observing floating debris or by dropping adjacent vegetation into the stream and recording the distance traveled in 5 or 10 second intervals. The average cross section of the water body shall also be measured and recorded in the area where the velocity data is observed. The observed velocity and measured area shall be reported in the field notebook. The estimated flowrate (Q=V*A) shall be reported in the final technical report for the spill. The flowrate shall be estimated and incorporated into the final technical memorandum by the Utilities Division Superintendent.
- **K.** Additional samples are taken each day for a total of ten days.

II. WATER QUALITY REPORT

- **A.** For a Major Spill, the first week of daily water quality monitoring results is reported to the applicable Health Department within five days of completion of these samples. The results are transmitted by the Environmental Services Manager.
- **B.** When all ten days' worth of laboratory results becomes available, the Environmental Services Manager shall incorporate the data into the Technical Report discussion and include the laboratory data in the Stream Monitoring Program Report Form for a Major Spill Event.
- **C.** Final corrective action(s) completed and/or planned to be completed, including a schedule for actions not yet completed." Any changes to the Preventive Maintenance Schedule could be included as a part of a corrective action plan. In addition, any Rehabilitation or Replacement needed could be listed as part of the corrective action(s) taken or planned. (2013 MRP)



Stream Monitoring Program Report Form for a Major Spill Event

Spill Location:	Work Order #
Date Spill Occurred:	
Spill Amount:	
Date Spill Reported to OES:	
Name of Receiving Waters:	

Attach sampling map to this report.

Work Order #_____

Upstream Sample Data

Date	Sampler	рН	Temp (deg C)	Ammonia (mg/I)	Enterococcus (#/100ml)	Fecal Coliform (#/100 ml)
1-						
2-						
3-						
4-						
5-						
6-						
7-						
8-						
9-						
10-						

Source Sample Data

Data	Consultant		Tamara ()	A		
Date	Sampler	рН	Temp (deg C)	Ammonia (mg/I)	Enterococcus (#/100ml)	Fecal Coliform (#/100 ml)
1-						
2-						
3-						
4-						
5-						
6-						
7-						
8-						
9-						
10-						

Downstream Sample Data

Date	Sampler	рН	Temp (deg C)	Ammonia (mg/l)	Enterococcus (#/100ml)	Fecal Coliform (#/100 ml)
1-	,	1				1
2-	,					
3-	,					1
4-	, T		1			
5-	ļ					
6-	,,					
7-	1					
8-			1	1		
9-	, T		1	1		
10-	<u>'</u>					

City of Pleasanton SSMP Audit Report Form

Introduction	Yes	No
Is the current system description complete and up to date? Are all infrastructure statistics current and complete?		
Discussion:		
Element 1 – Goals	Yes	No
A Are the goals stated in the SSMP still appropriate and accurate?		
Discussion:		

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

	Element 3 – Legal Authority	Yes	No
	es the SSMP contain current references to the Pleasanton's Code documenting the hority to:	e City's le	egal
A	Prevent illicit discharges?		
В	Require proper design and construction of sewers and connections?		
С	Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the City?		
D	Limit discharges of fats, oil and grease?		
E	Enforce any violation of its sewer ordinances?		
F	Were any changes or modifications made in the past year or since the last SSMP audit to City Ordinances, Regulations, or standards?		
Disc	cussion:	t	

	Element 4 – Operations and Maintenance	Yes	No
Col	lection System Maps		
A	Does the SSMP reference the current process and procedures for maintaining the City's sanitary sewer system maps?		
В	Are the City's wastewater collection system maps complete, current, and sufficiently detailed?		
Pric	pritized Preventive Maintenance		
С	Does the SSMP describe current preventive maintenance activities and the system for prioritizing the cleaning of sewer lines?		
D	Based upon the SSO information in CIWQS and the Annual SSO Report, are the City's preventive maintenance activities sufficient and effective in minimizing SSOs and blockages?		
Reh	abilitation and Replacement Program		I
E	Is there an ongoing condition assessment program sufficient to rank the condition of sewer pipes and schedule rehabilitation? Are the current components of this program documented in the SSMP?		
F	Does the rehabilitation and replacement plan include a capital improvement plan that addresses proper management and protection of the infrastructure assets? Does the plan include a time schedule for implementing the short and long-term plans plus a schedule for developing the funds needed for the capital improvement plan?		
Cor	tingency Equipment and Replacement Inventory		
G	Does the SSMP list the major equipment currently used in the operation and maintenance of the collection system?		
Н	Are contingency equipment and replacement parts sufficient to respond to emergencies and properly conduct regular maintenance?		

	Element 4 – Operations and Maintenance	Yes	No
Tra	ining		
Ι	Are the training records current?		
J	Does the SSMP document current training expectations and programs?		
Dis	cussion:		

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

	Element 6 – Overflow and Emergency Response Plan	Yes	No
A	Does the City's Sanitary Sewer Overflow Response Plan (SSORP) contain proper notification procedures so that the primary responders and regulatory agencies are informed of all sanitary sewer overflows (SSOs) as required by the WDR and MRP?		
В	Does the SSORP have a program to ensure an appropriate response to all overflows?		

Does the SSORP contain procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities of all SSOs that potentially affect public health or reach waters of the State in accordance with the MRP? Does the SSMP identify the officials who will receive immediate notification of such SSOs? Are staff and contractor personnel aware of the procedures of the SSORP? Does the SSORP contain procedures to address emergency operations such as traffic and crowd control and other necessary response activities?		
Does the SSORP contain procedures to address emergency operations such as		
Does the SSORP ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge?		
Considering SSO performance data, is the SSORP effective in handling SSOs in order to safeguard public health and the environment?		
Is the Water Quality Monitoring Plan current? Have staff been trained and practiced on response to an SSO of large volume?		
Was sampling conducted within 48 hours for all SSOs greater than 50,000 gallons and were results entered for these SSOs through the CIWQS website?		
Has the City prepared a Technical Report for all SSOs larger than 50,000 gallons? Have all Technical Reports been filed on the CIWQS website as required?		
	 waters of the United States and to minimize or correct any adverse impact on the environment resulting from SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge? Considering SSO performance data, is the SSORP effective in handling SSOs in order to safeguard public health and the environment? Is the Water Quality Monitoring Plan current? Have staff been trained and practiced on response to an SSO of large volume? Was sampling conducted within 48 hours for all SSOs greater than 50,000 gallons and were results entered for these SSOs through the CIWQS website? Has the City prepared a Technical Report for all SSOs larger than 50,000 gallons? Have all Technical Reports been filed on the CIWQS website as 	waters of the United States and to minimize or correct any adverse impact on the environment resulting from SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge?Considering SSO performance data, is the SSORP effective in handling SSOs in order to safeguard public health and the environment?Is the Water Quality Monitoring Plan current? Have staff been trained and practiced on response to an SSO of large volume?Was sampling conducted within 48 hours for all SSOs greater than 50,000 gallons and were results entered for these SSOs through the CIWQS website?Has the City prepared a Technical Report for all SSOs larger than 50,000 gallons? Have all Technical Reports been filed on the CIWQS website as required?

	Element 7 – Fats, Oils, and Grease (FOG) Control Program	Yes	No
A	Does the Fats, Oils, and Grease (FOG) Control Program include a description of public education outreach efforts that promote proper handling and disposal of FOG?		
В	Does the FOG program include a plan for the disposal of FOG generated within the sewer system service area?		
С	Does the City have sufficient legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG?		
D	Are there requirements to install grease removal devices (such as traps or interceptors), best management practices (BMP) requirements, record keeping, maintenance requirements and reporting requirements established in the City's FOG Control Program?		
E	Does the City have authority to inspect grease producing facilities and have sufficient staff to inspect and enforce the FOG ordinance?		
F	Does the FOG control program identify sections of the collection system subject to FOG blockages, establish a cleaning schedule and address source control measures to minimize these blockages?		
G	Does the FOG control program implement source control measures for all sources of FOG discharged to the collection system?		
Н	Is the current FOG program effective in minimizing blockages of sewer lines resulting from discharges of FOG to the system?		
Disc	ussion:		

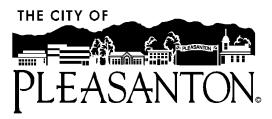
	Element 8 – System Evaluation and Capacity Assurance Plan	Yes	No
A	Does the System Evaluation and Capacity Assurance Plan evaluate hydraulic deficiencies in the system and provide estimates of peak flows associated with conditions similar to those causing overflow events, if applicable?		
В	Does the City's capital improvement program (CIP) establish a schedule of approximate completion dates for both short-term and long-term improvements and is the schedule reviewed and updated to reflect current budgetary capabilities and activity accomplishment?		
C	Does the City take steps needed to establish a short and long-term CIP to address hydraulic deficiencies, including prioritization, alternatives analysis, and schedules? Are repair and replacement projects developed based upon condition assessment and/or field maintenance results?		
Disc	ussion:	1	1

]	Element 9 – Monitoring, Measurement, and Program Modifications	Yes	No			
A	Does the City maintain relevant information that can be used to establish and prioritize appropriate SSMP activities?					
В	Does the City monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP?					
С	Does the City assess the success of the preventive maintenance program?					
D	Does the City update program elements, as appropriate, based upon monitoring or performance evaluations?					
E	Does the SSMP identify and illustrate SSO trends, including frequency, location and volume of SSOS?					
Disc	Discussion:					

	Element 10 – SSMP Audits	Yes	No		
A	Does the audit focus on the effectiveness of the SSMP? If not, what needs to be changed to increase the effectiveness of the overall collection system program?				
В	Were the audit results shared with the City Council? And the public, via the City website?				
С	Will the SSMP Audit be completed, reviewed, and filed as an Appendix to the SSMP on a biennial basis?				
D	Do any proposed changes to the SSMP require Council approval if they have a substantial change in the policies and procedures for collection system operations and maintenance?				
Discussion:					

	Element 11 – Communication Program	Yes	No
A	Does the City communicate on a regular basis with the public and other agencies about the development and implementation of the SSMP? Does the communication system provide the public the opportunity to provide input as the program is developed and implemented? Were annual progress reports and metrics of implementation of the SSMP provided to the City Council?		
Disc	cussion:		I

	Change Log	Yes	No	
A	Is the SSMP Change Log current and up to date?	x		
Discussion:				



Sewer System Management Plan CIWQS WDID: 2SSO10167

Certified December 2019

Updated as of July 11, 2023

The Sewer System Management Plan, prepared by the Operations Services Department, outlines and documents the activities that the City utilizes to manage its wastewater collection system effectively. Effective management of a collection system includes:

- Minimizing the number and impact of sanitary sewer overflows (SSOs)
- Providing adequate sewer capacity to convey peak flows, and
- Maintaining and improving the condition of the collection system infrastructure to provide reliable service into the future.

DOCUMENT ORGANIZATION

This SSMP has been prepared by City of Pleasanton's Department of Operations Services in compliance with requirements of:

STATE WATER RESOURCES CONTROL BOARD (SWRCB) ORDER NO. 2006-0003-DWQ, STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS (WDR) FOR SANITARY SEWER SYSTEMS. Provision D.13

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

SSMP ELEMENTS	
I. Introductionp	bage
$\underline{2}$	
2.1 Element 1 Goalsp	age
3	
2.2 Element 2 Organizationp	bage
10	
2.3 Element 3 Legal Authorityp	age
15	
2.4 Element 4 Operations and Maintenance Programp	bage
17	
2.5 Element 5 Design and Performance Provisions	bage
21	

2.6 Element 6 Sewer Spill Emergency Response Plan	
page 22	
2.7 Element 7 FOG Control Programpa	ge
34	
2.8 Element 8 System Evaluation and Capacity Assurance Planpag	ge
39	
2.9 Element 9 Monitoring, Measurement and Program Modificationspa	ge
41	
2.10 Element 10 SSMP Program Auditspa	ge
43	
2.11 Element 11 Communication Programpag	ge
45	
3.0 SSMP Appendicespag	ge
47	

Sewer System Management Plan

I. INTRODUCTION

A. Sewer System Management Plan

This Sewer System Management Plan (SSMP) has been prepared by the City of Pleasanton's Operations Services Department. It consists of policies, procedures, and activities that are included in the planning, management, operation, and maintenance of the City's sanitary sewer system.

The State Water Resources Control Board (SWRCB) has issued Statewide Waste Discharge Requirements for sanitary sewer systems, which include requirements for development of an SSMP. This SSMP is intended to meet the requirements of the San Francisco Bay Regional Water Quality Control Board and the State Water Resources Control Board. Specifically, it follows the General Waste Discharge Requirements (GWDR) for Wastewater Collection Agencies, State Water Resources Control Board Order Number 2006-0003 dated May 2, 2006 and amended by the revised Monitoring and Reporting Program (MRP) in Order WQ 2013-0058-EXEC, dated September 9, 2013. The format of the Plan was changed to conform to the 2015 "A Guide for Developing and Updating of Sewer System Management Plans"

The structure (element numbering and nomenclature) of this SSMP follows the General Waste Discharge Requirements (GWDR) for Wastewater Collection Agencies. The City's waste discharger

identification number (WDID) in the California Integrated Water Quality System (CIWQS) is 2SSO10167.

B. Sanitary Sewer System Facilities

City of Pleasanton

The City operates a sanitary sewer system that serves a residential population of approximately 83,007 in a 24 square mile service area. The sewer system consists of about 250 miles of gravity sewers, approximately 25,192-feet of force main, and ten pump stations. Average Daily Dry Weather flow is 7 million gallons per day (MGD). The sewers range in size from 4-inch to 42-inch diameter.

The City also receives wastewater from the Castlewood Area of Alameda County.

Sewer service laterals are owned by, and therefore the responsibility of, the property owner to maintain and assure serviceability. The City may provide maintenance services to laterals located within the public right of way as a courtesy service if a property line cleanout exists, and the cleanout and adjacent area are accessible to City staff and equipment. The City will not perform repair, rehabilitation, or replacement of any portion of sewer service laterals located on private property. There are 20,820 lateral connections within the City.

City Owned			
<u>Active</u> Pipe	Length	Length	Percent
Diameter	Feet	Miles	Of System
	-		
4	3,757	0.71	0.28%
6	145,058	27.47	10.92%
8	932,246	176.56	70.20%
10	106,341	20.14	8.01%
12	29,783	5.64	2.24%
14	341	0.06	0.03%
15	45,511	8.62	3.43%
16	325	0.06	0.02%
18	20,881	3.95	1.57%
21	7,089	1.34	0.53%
24	12,010	2.27	0.90%
27	15,638	2.96	1.18%
30	5,869	1.11	0.44%
33	3,122	0.59	0.24%
36	0	0.00	0.00%
39	0	0.00	0.00%
42	51	0.01	0.00%

Table 1-1 Gravity Sewer System Size Distribution

48	0	0.00	0.00%
60	0	0.00	0.00%
Total	1,328,022	251.52	100.00%

C. Definitions, Acronyms, and Abbreviations

Acrylonitrile Butadiene Styrene (ABS)

Asbestos-Cement Pipe (ACP)

Bay Area Clean Water Agencies (BAWCA)

Best Management Practices (BMP)

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

Calendar Year (CY)

California Integrated Water Quality System (CIWQS)

Refers to the State Water Resources Control Board online electronic reporting system that is used to report SSOs, certify completion of the SSMP, and provide information on the sanitary sewer system.

California OES Office of Emergency Management (Cal OES)

This refers to the California Office of Emergency Management.

Capital Improvement Plan (CIP)

This refers to the document that identifies future capital improvements to the City's sanitary sewer system.

Cast Iron Pipe (CIP)

City

This refers to the City of Pleasanton.

Closed Circuit Television (CCTV)

This refers to the process and equipment that is used to internally inspect the condition of gravity sewers.

Computerized Maintenance Management System (CMMS)

Refers to a database application used manage and document maintenance activities of a collection system.

Drain Inlet (D/I)

Ductile Iron Pipe (DIP)

Dublin San Ramon Service District (DSRSD)

This is the Public agency that provides treatment and disposal of City's wastewater stream. Administers and enforces Source Control within the City.

Duty Operator

This refers to the City of Pleasanton weekend and on-call worker.

Environmental Services Division (ESD)

This refers to City of Pleasanton Environmental Services Division, which is part of the Operations Services Department.

Fats, Oils, and Grease (FOG)

This refers to fats, oils, and grease typically associated with food preparation and cooking activities that can cause blockages in the sanitary sewer system.

Fiscal Year (FY)

Food Service Establishment (FSE)

Refers to commercial or industrial facilities where food is handled/prepared/served that discharge to the sanitary sewer system.

Full-time Equivalent (FTE)

This refers to the equivalent of 2,080 paid labor hours per year by a regular employee.

General Waste Discharge Requirements (GWDR)

Refers to the State Water Resources Control Board Order No. 2006-0003, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, dated May 2, 2006, and amended by the revised monitoring and reporting program (Order WQ 2013-0058-EXEC) dated September 9, 2013.

Geographical Information System (GIS)

Refers to the City's system that it uses to capture, store, analyze, and manage geospatial data associated with the City's sanitary sewer system assets.

Global Positioning System (GPS)

This refers to the handheld unit that can be used to determine the longitude and latitude of sanitary sewer overflows for use in meeting CIWQS reporting requirements.

Grease Control Devices (GRD)

Installed and engineered device to allow for the separation of lighter oils and greases from discharges to sewers

High Density Polyethylene Pipe (HDPE)

Infiltration/Inflow (I/I)

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

Lateral

This refers to the piping that conveys sewage from a building to the City sewer system. The distinction is sometimes made between the upper lateral (from building to public right-of-way) and the lower lateral (from public right-of-way to the sewer main).

Legally Responsible Official (LRO)

Refers to the individual designated by the City to certify SSO reports on the CIWQS system. The LRO must be formally designated by the City and registered with the SWRCB.

Manhole (M/H)

Million Gallons per Day (MGD)

Monitoring and Reporting Program (MRP)

Refers to the revised monitoring and reporting requirements included in Order WQ 2013-0058-EXEC, dated September 9, 2013.

Pleasanton Call Center and Communications Contacts

The City of Pleasanton operates two communication centers. During normal business operations, calls are received by Pleasanton Call Center. During all other hours, calls are received by Pleasanton Police directly, which is staffed 24/7. For the purpose of this SSMP, both may be referred to as Dispatch.

Private Lateral Sewage Discharge (PLSD)

Sewage discharges caused by blockages or other problems within privately owned laterals, collection systems or other private sewer assets that are tributary to the city's sanitary sewer system. This type of sewage discharge is the responsibility of the private lateral, private asset, or collection system owner.

Operations and Maintenance (O&M)

Operations Services Department (OSD)

Operations Service Center (OSC)

Overflow Emergency Response Plan (OERP)

For the purpose of this SSMP, this plan will be referred to as the Sanitary Sewer Overflow Response Plan (SSORP).

Polyvinylchloride Pipe (PVC)

Preventive Maintenance (PM)

Refers to maintenance activities intended to prevent failures of the sanitary sewer system facilities (e.g. cleaning, CCTV, repair).

Property Damage Overflow

This refers to a sewer overflow or backup that damages a property owner's premises.

Reinforced Concrete Pipe (RCP)

Supervisory Control and Data Acquisition (SCADA)

Data based computer controller, date compiler and Alarm system

Sanitary Sewer Overflow Response Plan (SSORP)

This refers to the City's Overflow Emergency Response Plan which is a component of this SSMP that addresses the City's response to SSO events.

Sanitary Sewer Overflows (SSOs)

This refers to the overflow or discharge of any quantity of partially treated or untreated wastewater from the sanitary sewer system at any point upstream from the wastewater treatment plant. SSOs are typically caused by blockages, pipe failure, pump station failure, or capacity limitation.

Sanitary Sewer System

This refers to the portion of the sanitary sewer facilities that are owned and operated by the City of Pleasanton.

Sewer System Management Plan (SSMP)

SSO Report

This refers to sanitary sewer overflow report.

State Water Resources Control Board (SWRCB)

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

Supervisory Control and Data Acquisition (SCADA)

This refers to the system that is employed by the City to monitor the performance of its pump stations and to notify the operating staff when there is an alarm condition that requires attention.

Utilities Division (UD)

This refers to City of Pleasanton Utilities Division. This is a division within the Operations Services Department.

Vitrified Clay Pipe (VCP)

Water of the State

Water of the State means any water, surface or underground, including saline waters, within the boundaries of California. In case of a sewage spill, storm drains are considered to be waters of the State unless the sewage is completely contained and returned to the sewer system. This may also be referred to as surface water(s) or State waterway.

D. References

A Guide for Developing and Updating of Sewer System Management Plans https://www.waterboards.ca.gov/water_issues/programs/sso/docs/ssmp_guidance_091015.pdf

State Water Resources Control Board Order No. 2006-0003 Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, California State Water Resources Control Board, May 2, 2006, with Revised Monitoring and Reporting Program, Order WQ-2013-0058-EXEC.

General Order:

www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2006/wqo/wqo2006_00 03.pdf

Revised Monitoring and Reporting Program

www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2013/wqo2013_0058ex ec.pdf

2.1 ELEMENT 1 - GOALS

2.1.1 Regulatory Requirements

State GWDR Requirement:

D.13.(i) **Goals**: The goal of the SSMP is to provide a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer system. This will help reduce and prevent SSOs, as well as mitigate any SSOs that do occur.

Goals for the Wastewater Collection System

Future Goals to be focus points in the upcoming year are:

- Replacement of CCTV Truck and Associated Software and Hardware
- Replacement of Sewer Flushing Vehicle

- Enhanced focus on maintenance activities
- Hiring additional personnel for FOG inspection and enforcement activities
- Coordinate efforts between Collections Crew and Environmental Services staff

Future Goals in ensuing years include:

- Capacity Evaluation (Model) in Fiscal Year 21/22
- Asset Management Plan in Fiscal Year 22/23.

On-going goals include:

Providing safe, responsive, and reliable sewage conveyance is a key component of the goals and objectives of the City's Operational Services Department.

The City's Sewer Collections Section has adopted the following goals. These goals outline responsibilities and provide direction and understanding for all sewer maintenance and cleaning activities.

- Provide for the reliable collection of sewage throughout the City to protect public health and the environment, to prevent sanitary sewer overflows and to minimize odors.
- Ensure all sanitary sewage is collected and transported to the DSRSD Wastewater Treatment Plant.
- Maintain and repair the City's Sanitary Sewer Collection System in a cost-effective, safe, reliable and timely manner.
- Comply with all federal, state, and local laws and regulations pertaining to sanitary sewer collection operation and maintenance.
- Respond to emergency events and provide assistance for residents and businesses.
- Provide administrative and support services to promote customer satisfaction and confidence. Continue to professionally manage, operate and maintain all parts of the sewer collection system.
- Provide adequate capacity to convey peak flows.
- Minimize the frequency of SSOs that can pose a threat to public health.
- Mitigate the impact of SSOs.

This SSMP supplements and supports the City's existing Maintenance and Operations Program and goals by providing high-level, consolidated guidelines and procedures for all the aspects of the City's wastewater system management. The SSMP will contribute to the proper management of the collections system and assist the City in minimizing the frequency and impacts of SSOs by providing guidance for appropriate maintenance, capacity management and emergency response.

The City's General Plan contains Goals, Policies and Action Statements applicable to the wastewater collection system. Refer to the City's General Plan web page at: https://www.cityofpleasantonca.gov/gov/depts/cd/planning/general.asp

2.2 Element 2 - Organization

2.2.1 Requirements

State GWDR Requirement:

D.13. (ii) **Organization**: The SSMP must identify:

(a) The name of the responsible or authorized representative as described in Section J of this Order (SSS WDR).

(b) The names and telephone numbers for management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP program. The SSMP must identify lines of authority through an organization chart or similar document with a narrative explanation; and

(c) The chain of communication for reporting SSOs, from receipt of a complaint or other information, including the person responsible for reporting SSOs to the State and Regional Water Board and other agencies if applicable (such as County Health Officer, County Environmental Health Agency, Regional Water Board, and/or State Office of Emergency Services (Cal OES)).

a. Legally Responsible Official

The City's authorized representative (also known as Legally Responsible Official or LRO) in all wastewater collection system matters is the Director of Operations Services and Water Utilities. For purposes of continuous coverage of CIWQS reporting and certification, the Director has authorized the Assistant Director of Operations and the Utilities Division Superintendent as additional LROs.

Responsibility for SSMP Implementation

The Director of Operations Services is responsible for ensuring over all implementation of this SSMP.

Table 2.1 Demonstrates primary responsibilities for each Element of the SSMP.

TABLE 2.1 CITY STAFF RESPONSIBLE FOR SSMP

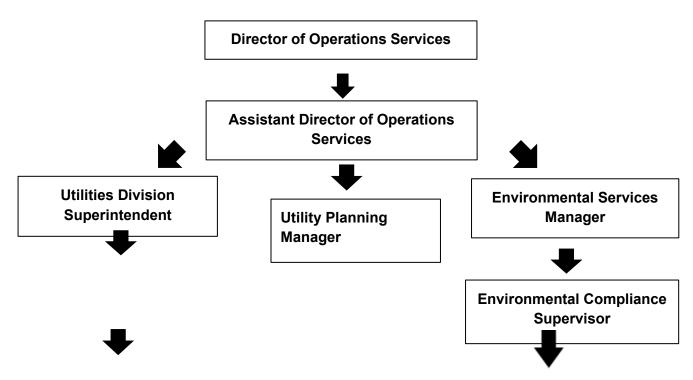
SSMP Element	Responsible Position	Contact Number
1- Goals	Director of Operations Services and Water Utilities	931-5506
2- Organization	Director of Operations Services and Water Utilities	931-5506
3-Legal Authority	City Attorney	931-5024
4- O&M Program	Utilities Division	931-5523

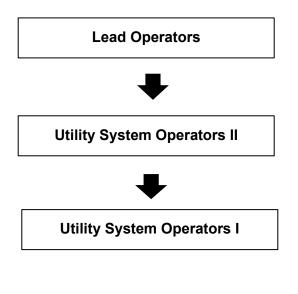
	Superintendent	
5-Design & Performance Provisions	Engineering Department (separate department from Operations Services)	931-5676
6- Overflow Emergency Response Program	Utilities Division Superintendent	931-5523
7- FOG Control Program	Environmental Services Manager	931-5513
8- System Evaluation & Capacity Assurance Plan	Utility Planning Manager	931-5542
9- Monitoring, Measurement, and Control Program Modifications	Utilities Division Superintendent	931-5523
10- SSMP Program Audits	Environmental Services Manager	931-5513
11- Communication	Public Information Officer (Separate department from Operations Services)	931-5044
	Operations Services	551-5044

b. Organization and Staffing

The organization chart for the management, operation and maintenance of the Department of Operations Service's Utilities Division and Environmental Services Division is shown on Figure 2-1. General Responsibilities are described below. Table 2-2 is a listing of telephone numbers for key positions.

Figure 2-1 Organization Chart for Operations Services Department, Utilities and Environmental Services Division





Environmental Program Specialist

Maintenance Workers

Table 2-2	Contact Numbers for Key OSD Positions
-----------	--

Call Center	931-5500
Police Department	931-5122
Director of Operations Services and Water Utilities	931-5506
Assistant Director of Operations Services	931-5519
Utilities Division Superintendent	931-5523
Environmental Services Manager	931-5513
Environmental Compliance Supervisor	931-5527
Chief System Operator	931-5529
On-Call Staff (Primary)	437-3991
On-Call Staff(Backup)	437-3992

Description of General Responsibilities

Director of Operations Services and Water Utilities

This position provides overall management of the Operations Services Department, consisting of Environmental Services, Utilities, Business Services, Parks, Streets and Signs, and Support Services. Along with the City Manager, City Attorney, and other Department heads, serves as a member of the City's Executive Leadership Team.

Assistant Director of Operations Services

This position provides general direction to the Utilities and Environmental Services Divisions, and acts as the Director of Operations Services in the Director's absence.

Utilities Division Superintendent

Under general direction from the Assistant Director, the Utilities Division Superintendent provides general direction to the Water Distribution and Sewer Operations Supervisors and Lead Workers. This manager plans, organizes, directs, and coordinates the activities of the City's Water distribution and Wastewater Collections system programs.

Environmental Services Manager

Under general direction from the Assistant Director, the Environmental Services Manager provides oversight and implementation of environmental programs within the Operations Services Department.

Environmental Compliance Supervisor

Under direction from the Environmental Services Manager, the Environmental Compliance Supervisor implements provisions of environmental programs within the Operations Services Department, and coordinates operations with multiple OSD Divisions.

Environmental Program Specialist

Under direction from the Environmental Compliance Supervisor, the Environmental Program Specialist provides oversight and guidance to Food Service Establishments within the Operations Services Department.

Chief Utility System Operator

Under general direction from the Utilities Superintendent, supervises the activities of lead personnel, field crews and individuals in the maintenance and repair of public utilities within the Operations Services Department.

Lead Operators

Under general direction, works with and leads field crews and individuals in the maintenance and repair of public utilities including, but not restricted to water service distribution lines, works with and leads field crews and individuals in the maintenance and repair of public utilities including, but not restricted to, storm drains, sanitary sewers and water systems; does related work as required.

Utility System Operator II

Under general direction, performs skilled manual tasks in the construction, repair, and maintenance of water service distribution lines, sanitary sewers, storm drains, and supporting facilities; operates motorized equipment; occasionally leads small field crews; performs related work as required.

Utility System Operator I

Under general supervision, performs a variety of semi-skilled and skilled manual tasks in the construction, repair and maintenance of water service distribution lines, sanitary sewer and storm drain facilities; operates motorized equipment; performs related work as required.

Utilities Maintenance Worker

Under direct supervision this classification is a generalist that performs maintenance tasks supporting the work of the Lead Workers, and Utility Operator classifications.

Crew Assignments:

The Utilities Division Superintendent oversees the entire Program. The Chief Utility System Operator Supervisor oversees the day to day operation. The Lead Workers generally rotate duties which include: leading crews; operating hydro-flushers; operating CCTV equipment; performing underground utility locates (USA); and being on-call. Hydro-flushing, CCTV, locating, pump and lift station preventive maintenance, and general maintenance and construction duties are shared amongst Utility System Operators.

The construction crew makes needed repairs of the city water service lines and the sanitary sewer system which includes but is not limited to: mains, laterals, pump/lift stations, manholes, and repairs or installs property line clean outs. The hydro-flushing crew performs all cleaning of City sewer mains. Hydro-flushing uses high pressure water to clean the sewer mains.

The CCTV crew performs televising and condition assessment of the sanitary sewer collection system piping using a robotic pipe inspection camera system and software.

The Duty Operator performs routine rounds and receives and responds to water distribution, sanitary and storm sewer calls and emergency response requests for water and wastewater issues as required.

Employees also perform all city utility USA locates.

c. SSO Response and Reporting Chain of Communication

The SSO reporting process is described in Element VI: Overflow Emergency Response Plan. The Sanitary Sewer Overflow Response Plan (SSORP) also demonstrates the chain of communication for responding to and reporting SSO's from observation of an SSO to reporting the SSO to the appropriate agencies. Table 2-1 above lists the contact phone numbers for the parties involved in the chain of communication.

2.3 Element 3 - Legal Authority

2.3.1 Requirements

D.13. (iii) **Legal Authority**: Each Enrollee must demonstrate, through sanitary sewer system use ordinances, service agreements, or other legally binding procedures, that it possesses the necessary legal authority to:

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

(b) Require that sewers and connections be properly designed and constructed;

(c) Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the Public Agency;

(d) Limit the discharge of fats, oils, and grease and other debris that may cause blockages, and

(e) Enforce any violation of its sewer ordinances.

a - e. City of Pleasanton Municipal Code

The *Pleasanton Municipal Code*, Title 15, describes the City's current legal authorities. The legal authorities provided by the Municipal Code and other sources that address the regulatory requirements are summarized in Table 3-1.

Requirement	Municipal Code Reference	Meets GWDR Requirements
General		
Prevent illicit discharges into the wastewater collection system	Section. 15.28.010	Yes
	Section 15.28.010	
Limit the discharge of fats, oils, and grease and other debris that may cause blockages	Section 15.28.060	Yes
and other debris that may cause blockages	Section 15.44.010	
Descriptions that according and according to	Section 15.24.040	
Require that sewers and connections be properly designed and constructed	Section 15.32.010	Yes
property designed and constructed	Section 15.44.050	
Denvine annual installation testing and	Section 15.32.020	
Require proper installation, testing, and inspection of new and rehabilitated sewers	Section 15.32.070	Yes
inspection of new and renabilitated sewers	Section 15.32.080	

Maintenance and Inspection, including Laterals		
Clearly define City responsibility and policies	Section 15.32.100	Yes
Ensure access for maintenance, inspection, or repairs for portions of the service lateral owned or maintained by the City	Section 15.28.170	Yes
Fats, Oil and Grease (FOG) Source Control		
Requirements to install grease control devices (GCDs), design standards for the grease removal devices, maintenance, BMP, record keeping and reporting requirements	Section 15.44 Ordinance #1984 And Ordinance #2038	Yes
Authority to inspect grease producing facilities	Section 15.44.070	Yes
Enforcement		
Enforce any violation of sewer ordinances	Section 15.12 And Section 15.44.070	Yes

The City's legal authority does not require the control of infiltration and inflow (I/I) from private service laterals. (The GWDR has no equivalent requirement). However, inflow and infiltration is not currently a significant issue for the City. Average daily flows during rain events are typically only 10-30% above dry weather flows, and the sewer system has not historically experienced capacity-related SSOs.

Agreements with Other Agencies

The Dublin San Ramon Services District (DSRSD) and City of Livermore both provide for the treatment and disposal of wastewater emanating from the City of Pleasanton's sanitary sewerage service area.

Within the 1992 contract the City delegates all authority, rights and power to administer and enforce a Source Control program to DSRSD.

The City has mutual aid agreements and cooperation with the neighboring agencies including DSRSD, San Francisco Water Division, Alameda County Flood Control and Water Conservation District, Zone 7 and the City of Livermore.

2.4 Element 4 - Operation and Maintenance Program

2.4.1 Requirements

B. Regulatory Requirements

D.13. (iv) **Operation and Maintenance Program.** The SSMP must include those elements listed below that are appropriate and applicable to the Enrollee's system:

(a) Maintain an up-to-date map of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable storm water conveyance facilities;

(b) Describe routine preventive operation and maintenance activities by staff and contractors; including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventative Maintenance (PM) program should have a system to document scheduled and conducted activities, such as work orders;

(c) Develop rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short and long term plans plus a schedule for developing the funds needed for the capital improvement plan;

(d) Provide training on a regular basis for staff in sanitary sewer system operations, maintenance, and require contractors to be appropriately trained; and

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

a. Collection System Maps

The City has a Geographical Information System (GIS) that includes information for wastewater collection system assets including: gravity line segments, manholes, pumping facilities, and pressure pipes (force mains). The information garnered by CCTV software is linked to the City's GIS system. The City also has information in its GIS for the storm drainage system. The GIS information is available to internal City staff. In addition, staff carries a list and maps of identified sewer "Bad Spots"

The City's GIS team receives data from the Engineering Department as "As-Built" information is forwarded from them. This information is forwarded to a GIS consultant, is updated in the City's GIS map monthly and is available to all city employees.

b. Preventive Operations and Maintenance

The elements of the City's sewer system O&M program include:

- Proactive, preventive and corrective maintenance of gravity sewers;
- CCTV inspection;
- Rehabilitation and replacement of sewers that are in poor condition;
- Periodic inspection and preventive maintenance for the pump stations;
- All Utility employees are trained on the use of field equipment; and

Utility staff incorporates the use of Computerized Maintenance Management System (CMMS) to Monitor Preventative tasks performed associated with preventive O&M Tasks.

Gravity Sewers

The City proactively cleans "Bad Spot" sewers with a history of issues on an enhanced frequency cleaning interval as necessary. The City has one hydro-flusher and two combination (hydro/vacuum) units it uses for the cleaning and maintenance of its sewer mains. Enhanced frequencies are scheduled at 1,3,6 and 12 month intervals for main lines that require more frequent cleaning, and lines are placed into those frequencies depending upon specific conditions in individual main lines segments. Approximately 241,154 feet or about 23% of the system are in the enhanced frequencies ("Bad Spot") category.

CMMS is used to track history for sewer line maintenance, and provide other O&M related functions through the use of the Work Order System.

Utilities Division staff performs Root Cutting operations in defined areas every two years.

Previous years Gravity Sewer maintenance work is demonstrated in Table 4-1.

Year	Sewer Lines	Sewer Lines Flushed (feet)		"Bad Spot" Cleaning activities		5		
	Video (ft.)	Corrective	Preventive	Total	30 days	90 days	180 days	360 days
2015	31,845	31,676	241,154	272,830	28	3	14	13
2016	9,891	17,401	241,154	258,555	28	3	14	13
2017	37,994	86,759	241,154	327,913	28	3	14	13
2018	33,724	61,799	255,112	316,911	28	5	11	9

Table 4-1 Gravity Sewer Preventative Maintenance Summary

CCTV Inspection

Staff is currently in the process of replacing the CCTV Truck and associated software and hardware. It has also purchased a panoramic style camera that can be used extensively to analyze cleaning success as well as provide enhanced analysis of sewers for R&R and CIP candidacy.

Staff has completed NASSCO training to provide sewer rating standardization.

The intention in the previous SSMP was that staff would televise the entire system every 7 years. Unforeseen equipment failures precluded this from occurring and prompted staff to purchase a new CCTV vehicle and all related software and hardware replacement.

Wastewater Pump/Lift Stations Inspections and Maintenance

The Duty Operator inspects the operation of Sewage Lift Stations daily. Maintenance activities include: inspecting the site; verifying pump operation; rotating pumps and, grease and debris removal. The stations can be powered by trailer-mounted generators during power outages.

c. Rehabilitation and Replacement

The information gathered during the CCTV condition assessment will be used to select and prioritize individual gravity sewers for repair, rehabilitation, or replacement. The general criteria for sewer replacement are to focus on those areas identified as "Bad Spots". Additionally, as previously written, staff has purchased a panoramic style camera that can be used extensively to provide enhanced analysis of sewers for R&R and CIP candidacy. This purchase along with staff NASSCO (PACP) training will provide a consistent, repeatable and scientific approach to sewer condition analysis, allowing the city to rank pipe condition and prioritize rehabilitation schedules. The replacement or rehabilitation is also considered each time water service line or street repairs (overlays) are performed.

The City will be enacting an Enterprise Asset Management System starting in FY 2020/2021 (with a focus on the sewer system in FY2022/2023) to closely track all assets and their conditions to improve protection and longevity to installed assets.

Funding for the Capital Improvement Program is derived from the City's Sewer Fund. The Sewer Fund is an Enterprise Fund; sewer fees are established on the basis of projected needs and are updated periodically. The budget and project description are currently included in the City's Capital Improvement Program. This listing is included in the Sewer System Master Plan.

d. <u>Training</u>

The City uses a combination of in-house classes, on the job training, CWEA conferences, seminars, and other training opportunities to train its Utilities staff. The City strongly encourages staff to advance their CWEA certification grade, provides financial support for certifications and CWEA memberships, and provides training and advancement opportunities. CWEA Certification is desired in some staff job descriptions and mandatory in others. Staff is actively involved in leadership roles

in Bayworks (CWEA) and Alameda Clean Water Program. Staff Lead Operator and certain Operators hold certifications in NASSCO Pipeline Assessment Certification Program (PACP).

Annual training on the City's SSMP and SSORP is conducted for all Utility employees. The City also maintains an ongoing safety training program that addresses both general and task-specific safety issues. These include regular Safety Training in OSHA regulations, Traffic Control, MSDS, Haz-Mat, Electrical, Lock-out, Tag-out, Confined Space, CPR and First Aid.

The Tailgate Schedule lists safety training activities for the Utilities Division Program. This schedule is updated annually.

The City's contract language requires contractors working in the wastewater collection system to provide training for their employees in the activities that may cause SSOs and in responding to contractor-caused SSOs. The contractor must also follow OSHA Confined Space Protocols.

e. Replacement Parts and O&M Resources

The City has informal agreements with neighboring agencies for equipment support in the event the sewer maintenance equipment fails. However, the Division maintains an inventory of routine parts for repair of sewer mains and laterals and various electrical components for the City's lift stations.

Table 4-2 lists the major equipment currently used in the Operation and Maintenance of the collection system. The Utilities Division is in the process of replacing the CCTV van, Sewer Flusher and Utility Repair Vehicle and is in the process of updating the Vehicles and Equipment table to include all assets.

Table 4-2 Specialized Vehicles and Equipment

VEHICLES
Detail Description
Dump Truck, 1.5 ton w/crane
Stake Bed LG (8Wx12Lx4H)
Stepvan CCTV Truck
Utility bed, 1 1/2 ton w/mounted hoist and auxiliary fuel tank
12 ft. Dump Truck, 7-9 YD
Flusher
Utility Truck w/Scelzi Body (air compressor 369 ER)
12 ft. Dump Truck, 7-9 YD
Hydro-Excavator (2015)
Hydro Excavator (2015)

EQUIPMENT		
Camera Inspection, Crawler		
Camera Inspection, Crawler		
Pump Hose Trailer		
Sandbagger		
Traffic Arrow Board		
6" Trash Pump		
Portable Generator		
Compressor (on vehicle #314)		
Light Tower		
Portable Generator		
Oswald, w/Kato 30 KW		
Generator		
Forklift		

Backhoe
Backhoe
Equipment Trailer
125 kVa Portable Generator
Bobcat Loader

The Utilities Division stockpiles material necessary for normal operations and maintenance. Pipe, full circle clamps, and dresser couplings are stored and maintained in minimum quantities for most emergencies.

Outreach to Sewer Service Contractors

The City maintains an active list of available contractors as part of the "Emergency Water Plan". The water emergency in this context is any situation that would require immediate action beyond the scope of normal City operations.

2.5 Element 5 - Design and Performance Provisions

2.5.1 Requirements

D.13. (v) Design and Performance Provisions:

(a) Design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer systems; and

(b) Procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

a. Design and Construction Standards

2016 Edition of the Standard Specifications and Details

The scope and purpose of these City Standard Specifications are to provide minimum standards for materials used and methods of construction for the City's public infrastructure including streets, water, sanitary sewer, and storm drainage facilities. The City Standard Specifications are to be used in conjunction with the City Standard Details. These minimum standards shall apply to City capital improvement and private development projects.

b. Inspecting and Testing of new installations

The City uses consultants to design new stations and reviews their design standards. The City follows Caltrans standards for inspecting and testing. The City uses consultants to supplement city inspection staff to oversee the installation. For pipelines the City has its own standards and procedures which are located in the City Standard Plans.

2.6 Element 6 - Sewer Spill Emergency Response Plan

See:

https://cityofpleasantonca.sharepoint.com/:b:/s/OSDManagementT eamSite/EX_RryHnYiJBrOwx3j8iGj8B3g802PG72bbQ9nmJWN4AEA ?e=9zsaX1

2.7 Element 7 - FOG Control Program

2.7.1 Requirements

D.13. (vii) **Fats, Oils, and Grease (FOG) Control Program:** Each Enrollee shall evaluate its service area to determine whether a FOG control program is needed. If an Enrollee determines that a FOG program is not needed, the Enrollee must provide justification for why it is not needed. If FOG is found to be a problem, the Enrollee must prepare and implement a FOG source control program to reduce the amount of these substances discharged to the sanitary sewer system. This plan shall include the following as appropriate:

(a) An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;

(b) A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area;

(c) The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;

(d) Requirements to install grease removal devices (such as traps or interceptors) design standards for the removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements;

(e) Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the FOG ordinance;

(f) An identification of sanitary sewer system sections subject to FOG blockages and establish a cleaning maintenance schedule for each section; and

(g) Development and implementation of source control measures, for all sources of FOG discharged to the sanitary sewer system, for each section identified in (f) above.

a. Public Education and Outreach Program

Food Service Establishments (FSE) are given three publications along with BMP literature they receive. These include, "Guidelines for Food Handling Establishments", "How Your Food Service Facility Can Prevent Stormwater Pollution," and "What is a Grease Control Device and Why Do I Need One?".

Also available on the City's FOG webpage

(<u>https://www.cityofpleasantonca.gov/gov/depts/os/env/fog.asp</u>), is the application form to obtain a Wastewater Discharge Permit (WDP) from the City and a sample maintenance log.

The City's initial outreach to each potential food service establishment involves sending them a FOG introduction packet that includes a letter describing the City's FOG Program, an FSE's responsibility to install and maintain appropriate grease control devices (GCDs), and their need to obtain a WDP and keep/submit device maintenance records. An application form for the WDP is also provided as a part of the introduction packet

b. Disposal of FOG generated within the sanitary sewer system service area

Three Wastewater treatment plants accept hauled FOG products. These are City of Hayward Plant and East Bay Municipal Utility District (EBMUD) in Oakland and Dublin San Ramon Service District (DSRSD) in the near future.

City of Hayward 3700 Enterprise Ave, Hayward, CA 94545 Phone: (510) 293-5395

East Bay Municipal Utility District 2020 Wake Ave. Oakland, CA 94607 Phone: (510) 287-1632

Dublin San Ramon Service District 7035 Commerce Circle Pleasanton, CA Phone: (925) 846-4565

c. <u>Legal Authority</u>

The Pleasanton Municipal Code (PMC) Chapter 15.44 and its subsections along with Ordinances 1984 and 2038 identify FOG related Requirements and Enforcements.

d. Requirements to install grease removal devices

The Environmental Services Division has identified approximately 400 potential Food Service Establishments (FSE) in the City. Working through the City's Business License process, and through staff inspections, this list is modified on a regular basis as described below.

Due to staffing constraints, the Environmental Services Division is currently permitting and inspecting a small subset of all of the potential FSEs in the City. On a monthly basis, ESD staff reviews the new list of businesses that have recently acquired a Business License from the City and determine if any are potentially Food Service Establishments. Staff then conducts outreach by sending them an introduction packet as described above. Prospective FSEs have 30 days to respond to ESD's letter. A site inspection is then conducted by staff to verify the installed GCD's acceptability. Staff only issues a permit when the WDP application is found to be complete and GCD acceptable. A variance from the requirement to install a grease interceptor can be requested due to site and/or operational constraints.

The above process captures new FSEs. In addition, ESD relies on the Alameda County Department of Environmental Health (ACDEH) to provide mutual assistance in identifying potential violators of FOG requirements among existing FSEs. ACDEH conducts routine inspections of FSEs in Pleasanton and informs ESD of potential FOG violations. They also exercise their authority to temporarily shut down FSE operations as necessary. ESD follows up by initiating the permitting process similar to one used for new FSEs.

Lastly, according to PMC Section 15.44.040, existing FSEs with planned modification with a building permit evaluation of \$50,000.00 or more are required to include plans to comply with the FOG requirements. Working with the City's Planning and Building groups to identify such existing facilities presents ESD staff with another opportunity to build its list of FSEs that need to comply with the City's FOG requirements.

These three processes together represent ESD's effort to gradually build up its FOG program, while allowing the City to tackle FOG-related issues as they arise, at a pace that can be sustained by the City's existing staffing level.

1. Grease Interceptor and Trap Installation Requirements

All GCDs (Grease Control Devices) installed or caused to be installed are sized in conformance with the currently adopted edition of the Uniform Plumbing Code (PMC 15.44.070).

2. Grease Interceptor and Trap Maintenance Requirements

All GDRs installed or caused to be installed shall be kept in good repair and shall be serviced and emptied of accumulated waste content as required in order to maintain minimum design capability. Grease interceptors shall be inspected at least monthly and maintained to ensure no collection system blockage, but at a minimum once every two months. Grease traps shall be inspected and maintained no less than bi-weekly. Inspection/maintenance records shall be kept for at least two years and submitted to the Environmental Compliance Supervisor by **6/30** and **12/31** of each year.

3. Grease Hauling and Disposal Requirements

It is unlawful for any person to dispose of any grease by discharge into any sanitary sewer or storm drainage system (PMC 15.44.030).

Environmental Services Inspectors review the contracted grease hauling and disposal company documents when conducting an FSE inspection.

FSEs conducting self-cleaning of GCDS are provided guidance regarding the proper disposal of the FOG.

4. Kitchen BMP Requirements

Kitchen BMP activities are observed and related inquiries are made during inspections of FSEs. All FSEs receive BMP documents regarding FOG reduction. These BMPs are bi-lingual.

e. Authority to inspect, enforcement authorities, and staffing

Enforcement actions are clearly outlined in the PMC 15.44.070, Enforcement elements include:

Authority to Inspect, Administrative Enforcement Powers, and penalties for violation. The City has potentially up to 400 sources of FOG discharge to the collection system. Currently, only one temporary Environmental Program Specialist is involved in the FOG Program.

The FOG Program's goal is to inspect, resource permitting, on an annual basis all of the FSEs identified through the processes described above. The City also relies on the submittal of maintenance records from the permitted FSEs to provide assurance of program compliance. Emphasis is on:

- a. GDC installation and maintenance
- b. Process information
- c. Grease management
- d. Best Management Practices
- e. Stormwater pollution prevention

As a necessity, inspection frequencies will be adjusted according to the FOG Program's staffing level. Currently, one temporary, part-time Environmental Program Specialist is

assigned to the FOG Program. This individual is limited to 1,500 work hours per year and has the responsibility of ensuring the City's compliance with hazmat, fuel storage tank, and air emissions programs, in addition to FOG. ESD management will continue to seek funding for a permanent, full-time Program Specialist to further expand the City's ability to permit and inspect FSEs.

A summary of inspections and enforcement in the period of 2015 through 2018 is included in the following table:

Year	Inspections	Enforcement Actions
2015	147	50
2016	72	21
2017	2	0
2018	2	0

Table 7-1 FSE Inspection and Enforcement

f. An identification of sanitary sewer system sections subject to FOG blockages

The largest concentration of commercial FOG sources are food service establishments (FSEs) located on Main Street in the downtown area. Some of the FSEs are located in older buildings and have undersized grease traps. In addition, there are eating and drinking establishments, cafeterias, bakeries and, delis that are located throughout the City.

g. <u>Development and implementation of source control measures, for all sources of FOG discharged</u> to the sanitary sewer system, for each section identified in (f) above.

These areas located in FOG "hot spots," as identified by the Wastewater Collections Crew, receive attention through the City's existing Operations and Maintenance Program. These facilities receive information on BMPs, and their effectiveness is monitored.

The City includes line segments that have had FOG-related SSOs or surcharging on the "Bad Spots" cleaning list (30-day, 90-day, semi-annual, and annual), which are used by the Utilities Division to schedule sewer lines preventive maintenance. The "Bad Spots" list is included in the Computerized Maintenance Management System (CMMS), is accessible by OS staff, and is periodically updated based on information collected during maintenance activities (and particularly the results of video inspections). Such periodic updating allows the City to edit cleaning frequencies to the needs of the particular line segment and more effectively utilize maintenance resources.

2.8 Element 8 – System Evaluation and Capacity Assurance Plan

2.8.1 Requirements

D.13.(viii) **System Evaluation and Capacity Assurance Plan**: The Enrollee shall prepare and implement a capital improvement plan (CIP) that will provide hydraulic capacity of key sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design storm or wet weather event. At a minimum, the plan must include:

(a) Evaluation: Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs that escape from the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to the peak flows associated with overflow events;

(b) Design Criteria: Where design criteria do not exist or are deficient, undertake the evaluation identified in "a" above to establish appropriate design criteria; and

(c) Capacity Enhancement Measures: The steps needed to establish a short- and long-term capital improvement plan (CIP) to address identified hydraulic deficiencies including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, I/I reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding.

(d) Schedule: The Enrollee shall develop a schedule of completion dates for all portions of the capital improvement program developed in (a-c) above. This schedule shall be reviewed and updated consistent with the SSMP review and update requirements as described in Section D. 14.

a. <u>Evaluation</u>

The City completed a Sewer System Master Plan in 2007 (Master Plan). The master planning effort evaluated the capacity of the existing sanitary sewer system assets and provided capacity design criteria for future assets. The study included a sanitary sewer and flow monitoring and inflow and infiltration (I&I) analysis. The study concluded that no basins or sub-basins exceeded 5% inflow/infiltration into their sewage basin. Furthermore, the study concluded that the City's collection system does not appear to have high levels of ground water infiltration. Two basins were identified as prioritized areas of concern when corrective action is needed.

The City requires that redevelopment project proponents evaluate the offsite capacity impacts of their project through an engineering study.

Evaluation - Hydraulic Model. Overall, the City's collection system has adequate capacity to convey DWFs. Few deficiencies exist under dry weather flow conditions. Capacity deficiencies under WWF

conditions represent less than 10 percent reaches of pipe that would be surcharged under modeling conditions of the collection system. The relatively few number of deficiencies can be attributed to a well-designed system without significant I/I problems.

1. b. Design Criteria

Section 13 of the City's Standard Specifications and details addresses requirements for materials and methods of installation for sanitary sewer mains (up to and including 15 inches in diameter), laterals, manholes, and appurtenances within the City's sanitary sewer system.

c. <u>Capacity Enhancement Measures</u>

City staff selected to improve the collection system to convey the PWWFs of the 10-year 24-hour design storm. The pipe criteria set for this alternative was to pass the PWWFs while allowing the surcharge level to rise up to one foot below the manhole rim elevation. A number of pipelines require improvements to meet the City's surcharge criteria.

2. d. Schedule

The City's 2007 hydraulic model demonstrates that the collection system has adequate capacity to convey dry weather flows (DWF). Capacity deficiencies under WWF conditions represent less than 10 percent of the modeled collection system. The relatively few number of deficiencies can be attributed to a well-designed system without significant I/I problems. The 2007 Wastewater Master Plan identified several pipeline improvements and capacity upgrades at several pump stations, but none were critical. Staff will re-assess potential deficiencies in two upcoming studies; a renewed Capacity Evaluation (Model) in Fiscal Year 21/22 and development of an Asset Management Plan in Fiscal Year 22/23. Future CIP projects will be identified from these efforts.

2.9 Element 9 - Monitoring, Measurement, and Program Modifications

2.9.1 Requirements

D.13. (ix) Monitoring, Measurement, and Program Modifications: The Enrollee shall:

(a) Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;

(b) Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;

(c) Assess the success of the preventative maintenance program;

(d) Update program elements, as appropriate, based on monitoring or performance evaluations; and

(e) Identify and illustrate SSO trends, including: frequency, location, and volume.

3. a. Maintain relevant information

The City will evaluate the performance of its wastewater collection system and SSMP effectiveness annually using the performance measures. Results of the evaluation will be recorded on the SSMP Audit Form. The City will also evaluate the effectiveness of individual SSMP elements. The primary tool for documenting the evaluation will be the SSMP audit. The City will prioritize its actions and initiate changes to this SSMP and the related programs based on the results of the evaluation. Examples of changes that could result from ongoing evaluation include:

- Revisions to frequency of cleaning cycles and/or FSE inspections based on field observations and CCTV inspections
- Reprioritization of rehabilitation and replacement projects based on the results of CCTV inspection, manhole inspections, and capacity analysis.
- Implementation of new methods and procedures based on experience developed inhouse and from other agencies.
- Continued use of Information Technology (GIS GPS, and CMMS) for Administrative and Field operations.

b.- c. <u>Monitor the implementation and measure the effectiveness of Preventive</u> <u>Maintenance</u>

The indicators that the City will use to measure the performance of its wastewater collection system and the effectiveness of its SSMP are:

- Total number of SSOs
- Number of SSOs by cause (roots, grease, debris, pipe or pump station failure, and other)
- Volume of sewage spilled, recovered and reaching water(s) of the state

Year	Total				Cause				Capture	
rear	Total									
		Grease	Roots	Debris	Pipe Fail	Capacity	Other	100%	Partial	
2015	4	1	2	1				2	1	
2016	5		3	1	1			2	2	
2017	5	1	4					2	1	
2018	4	4						2	2	

Table 9-1 Historical SSO Results. Mains only; PLSDs Excluded

d. Update program elements

The City will prioritize its actions and initiate changes to this SSMP and the related programs based on the results of the evaluation. Examples of changes that could result from ongoing evaluation include:

- Revisions to frequency of cleaning cycles and/or FSE inspections based on field observations and CCTV inspections.
- Reprioritization of rehabilitation and replacement projects based on the results of CCTV inspection, manhole inspections, and capacity analysis.
- Implementation of new methods and procedures based on experience developed inhouse and from other agencies.
- Continued use of Information Technology (GIS GPS, and CMMS) for Administrative and Field operations.

e. Identify and illustrate SSO trends

Table 9-2	History of Spill Volumes and Volumes Recovered
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Year	Sanitary Sewer	Spill Volume,	Volume Recovered,	Percent
	Overflows, each	gallons	gallons	Recovered
2016	5	1793	886	49.4
2017	5	617	326	52.8
2018	4	7675	2471	32.2

2.10 Element 10 - SSMP Program Audits

2.10.1 Requirements

D.13. (x) **SSMP Program Audits** - As part of the SSMP, the Enrollee shall conduct periodic internal audits, appropriate to the size of the system and the number of SSOs. At a minimum, these audits must occur every two years and a report must be prepared and kept on file. This audit shall focus on evaluating the effectiveness of the SSMP and the Enrollee's compliance with the SSMP requirements identified in this subsection (D.13.), including identification of any deficiencies in the SSMP and steps to correct them.

An audit of the SSMP was performed on September 2021.

Refer to:

https://cityofpleasantonca.sharepoint.com/:b:/s/OSDManagementTeamSite/EQSbBpWXzORLrlLEH0 Q6ETcB8niAPjzVRR97LR-898ulkA?e=cA8jUz

2.11 Element 11 - Communication Program

2.11.1 Requirements

D.13. (xi) **Communication Program**. The Enrollee shall communicate on a regular basis with the public on the development, implementation, and performance of its SSMP. The communication system shall provide the public the opportunity to provide input to the Enrollee as the program is developed and implemented.

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

Communication of SSMP Development and Updates

The City Council will be involved with the approval process of any significant changes in this SSMP at a future Council meeting. In advance of such approval, Operations Services personnel will be preparing a report to Council that provides background information including regulatory drivers for SSMP development, SSMP purpose and content, relationship to existing City policy as described in the Sewer Management Sub-element of the City's General Plan, and the SSMP implement schedule. The Council report will be available to the general public through posting of the Council agenda on the City's official notice bulletin board, posting of the agenda and report on the City Council web page, and through the City Library and the City Clerk's Office. This future Council meeting will open to the public and included a period for public comment.

The City enacted Ordinance No. 1984 and 2038 along with Section 15-44 and 15.44.70 to the Municipal Code to implement additional FOG Program elements. The proposed ordinance revisions were also publicly noticed and made available to the public through the channels listed above.

Ongoing Communication

Posting of Sewer Services on City Web Site: The City of Pleasanton maintains a website public about City Services, activities and events. Updates on the Operations Services and Environmental issues can be displayed there.

https://www.cityofpleasantonca.gov/gov/depts/os/env/default.asp

http://www.cityofpleasantonca.gov/documents/SSMP/Sewer%20System%20Managemen t%20Plan%20-2018%20Audit_Final.pdf The City's website is an effective communication channel for providing alerts and news to the public. The main page of the website provides important announcements, agendas and minutes for City Council meetings, and other key information for City residents.

SSO Reporting: Information on individual SSOs is available to the general public through a GIS-based application on the State Board's web site at: <u>https://www.waterboards.ca.gov/water_issues/programs/sso/</u>

Citizen Interaction: Staff has a variety of opportunities to interact with the community at these functions: Earth Day Celebration Day, Alameda County Fair, Saturday Farmers Market, "Pleasanton Weekly" publication, Concert-in-the-Park events, and a recent 125th City anniversary event.

Dublin San Ramon Services provides wastewater treatment of the City's generated sewage. Operations Staff meets with their treatment plant personnel monthly.

3.0 SSMP Appendices

3.1 Requirements

MRP Section E. 3. - Records documenting all changes made to the SSMP since its last certification indicating when a subsection(s) of the SSMP was changed and/or updated and who authorized the change or update. These records shall be attached to the SSMP.

Refer to Change Log at following location:

https://cityofpleasantonca.sharepoint.com/:w:/s/OSDManagementTeamSite/EYzI_HbAUrxPpxpxBU 2FzUwB_dXESpPc9XXAci_HKsN45g?e=GhQzKr

CITY OF PLEASANTON

SSMP CHANGE LOG

The City's SSMP was last certified in December 2019. The following table summarizes the changes to the SSMP since its last certification. These changes have been incorporated into the City's in-house working copy of the SSMP.

SSMP Element	Description of Change	Authorized By	Date
10 – SSMP	0 – SSMP Performed September 2021 Audit Report and		09/20/2021
Program Audit	replaced audit report template.		
6 - OERP	Updated and replaced OERP with SERP.	Todd Yamello	06/05/2023
Attachment A	Deleted subject attachments as they are	Todd Yamello	06/05/2023
through D	replaced with SERP.		
6 - OERP	Updated SERP as follows: spill report to match new CIWQS format, added a decision tree for spill categories, and misc. edits	Todd Yamello	07/10/2023