



CITY OF
HAYWARD
HEART OF THE BAY

SEWER SYSTEM MANAGEMENT PLAN



March 2021

Table of Contents

1	Goals
2	Organization
3	Legal Authority
4	Operation & Maintenance
5	Design & Performance Provisions
6	Overflow Emergency Response Plan
7	Fats, Oils, & Grease (FOG) Control Program
8	System Evaluation & Capacity Assurance Plan
9	Monitoring, Measurement & Program Modifications
10	SSMP Program Audits
11	Communication Program
12	Emergency Response Plan Bi-Weekly Training Logs

SEWER SYSTEM MANAGEMENT PLAN

GOALS

The goals of the Sewer System Management Plan (SSMP) are:

- To protect public health and the environment through proper management of the public wastewater collection system.
- To professionally manage, operate and maintain all parts of the public wastewater collection system.
- To implement measures to minimize the frequency of sanitary sewer overflows.
- To provide adequate capacity to convey peak flows.
- To respond to and mitigate the impacts of sewer system overflows.
- To provide an effective and efficient guidance document for responding to and managing sewer collection system emergencies.

SEWER SYSTEM MANAGEMENT PLAN

ORGANIZATION

A. Identify Agency Staff Responsible for Implementing, Managing, Updating, Responding and Reporting SSOs

Attached is the Organizational Chart showing the lines of authority of all the administrative and field staff and their responsibility during a sanitary sewer overflow.

Director of Public Works & Utilities-Utilities Administration		Has overall administrative responsibility for the department. Has ultimate decision-making authority. Receives information directly from the Utilities O&M Manager.
Utilities Operations & Maintenance Manager	-	Is the Legally Responsible Official for SSO reporting, responsible for keeping the SSMP up-to-date, reviews all spill reports prior to submission, and assures that reports are submitted in a timely manner. During a spill event, receives information from Wastewater Collections System Supervisor and will provide oversight and direction as required
Wastewater Collections System Supervisor	-	In addition to being responsible for all emergency response activities, the Wastewater Collections System Supervisor is responsible for providing day-to-day oversight of the field crews and is responsible for reviewing all spill reports prior to submission and assures that all reports are submitted to the proper agencies in a timely manner. During a spill event, receives information from field crews, and provides oversight and direction as required. Also responsible for providing direction and oversight to the field staff responsible for the day-to-day operation and maintenance of the sewer collection system
Water Pollution Source Control Staff	-	WPSC staff may assist in determining whether sewer from SSO has entered the City's storm drain system.
Sewer Collection System Field Crews	-	Implements emergency response, clears stoppage, stops overflow, clean up spill and gathers data for reporting.
Utilities Operations and Maintenance Supervisor	-	Receives information from Sewer Collection Supervisor and if necessary, modifies operation of sewer and storm water pump stations. Provides assistance with portable pumping equipment as necessary and provides specialty repair staff to include welders or equipment repair staff as necessary.
Utilities Operations & Maintenance Staff	-	Responsible for the day-to-day operation and maintenance of all City pump stations. During a spill event, staff may be asked to reduce, stop or set up for bypass pumping at a pump station while repairs are being made.
Utilities Field Services Supervisor	-	Provide assistance as necessary making repairs or with any construction activity or equipment operation.

B. Emergency Contact Information

All positions identified in this Organizational Chart can be reached 24-hour/day either at home or by assigned cell phone. Sewer and pump station field staff are on 24-hours/day stand by and can be reached through the Police Department Dispatcher by pager 24-hours/day. Stand by staff assignments rotate on a weekly basis.

Contact List

Bert Weiss Utilities O&M Manager Legally Responsible Official	Work: (510) 881-7901	Mobile: (510) 246-2827	Home: (650) 345-3336
Mark McGrath Wastewater Collections System Supervisor	Work: (510) 881-7970	Mobile: (510) 385-0191	Home: (925) 207-7325
Benji Foreman Utilities O&M Supervisor	Work: (510) 881-7978	Mobile: (510) 385-1091	Home: (510) 421-0054
Daryl Lockhart Utilities Field Services Supervisor	Work: (510) 881-7932	Mobile: (510) 385-1085	Home: (510) 471-6478
City of Hayward Water Pollution Source Control, Weekdays, 08:00-17:00			(510) 881-7900
City of Hayward Water Pollution Control Facility, Weekends & After Hours			(510) 293-5398
San Francisco Bay Section RWQCB		Direct: (510) 622-5633	Fax: 622-2450
California Office of Emergency Services (Cal OES)		Direct: (800) 825-7550	Fax: (916) 262-1677
California Department of Fish & Game Hotline			(888) 334-2258
City of Hayward Customer Services			(510) 583-4600
City of Hayward Police Dispatch			(510) 293-7000
Oro Loma Sanitary District			(510) 276-4700
Oro Loma Sanitary District Field Supervisor			(510) 667-5132
Oro Loma Sanitary District On Call Person			(510) 667-5248
Castro Valley Sanitary District			(510) 537-0757
Castro Valley Sanitary District On Call Person			(510) 506-5821
Union Sanitary District			(510) 477-7500
All sanitary sewer overflows shall be reported to the Wastewater Collections System Supervisor and Utilities O&M Manager.			(925) 207-7325

**SEWER SYSTEM MANAGEMENT PLAN
EMPLOYEE CONTACT LIST**

Employee	Title	Mobile	Home
Alex Ameri	Director PW & Utilities Department	(510) 385-1080	(650) 681-9377
Bert Weiss	Utilities O&M Manager	(510) 246-2827	(510) 881-7901
Mark McGrath	Wastewater Collection System Supervisor	(510) 385-0191	(925) 207-7325
Benji Foreman	Utilities O&M Supervisor	(510) 385-1091	(510) 421-0054
Daryl Lockhart	Utilities Field Services Supervisor	(510) 385-1085	(510) 415-1048

SEWER COLLECTIONS

VACANT	Senior Collection System Utility Leader		
Joe Estrada	Utility Leader	(510) 376-0732	(510) 435-1813
Steven Klausing	Utility Leader	(510) 376-0210	(510) 432-8687
Peter Villalobos	Utility Leader	(510) 385-1088	(209) 988-8983
Joseph Brennan	Utility Worker	(510) 362-4164	(925) 209-0513
Abraham Anaya	Utility Worker	(510) 362-4164	(650) 455-8425
Jeremy Sandoval	Utility Worker	(510) 385-0157	(510) 862-3146
VACANT	Utility Worker		
VACANT	Utility Worker		

UTILITIES OPERATIONS & MAINTENANCE

Barry Burke	Utilities Electrician II	(510) 385-0349	(510) 676-0648
Sean Bui	Utilities Electrician II	(510) 385-1092	(408) 892-2340
Dan Kring	Utilities Electrician II	(510) 385-0432	(510) 612-8744
Ignacio Salceda	Utilities Mechanic	(510) 224-8766	(510) 427-6300
Nano Velasquez	Utilities Mechanic	(510) 385-0008	(925) 348-0252
Gardner Halliburton	Utilities Mechanic	(510) 385-0341	(510) 612-1135
Louie Carreon	Utilities Mechanic	(510) 385-0775	(650) 504-3011
VACANT	Utilities Mechanic		
VACANT	Utilities Mechanic		
Jeffrey Bashir	Utilities Service Worker	(510) 828-2423	(510) 566-1293
Moises Muniz	Utilities Service Worker	(510) 476-7680	(510) 362-4285

C. Chain of Communication for Reporting Sanitary Sewer Overflows.

The protocol for the reporting of Sanitary Sewer Overflows is conducted per the City of Hayward Sanitary Sewer Overflow Emergency Response Plan, referenced in Chapter 6 of this manual.

A sewer problem can be reported to the Sewer Collection System by several different methods including:

- During normal work hours, customers call the Utilities Center directly.
- After normal work hours, weekends and holidays, customers call Hayward Police Dispatch which then contacts the Sewer Collections Standby person for response.
- Observation by City employee who then contacts the Utilities Center.
- Contact from a neighboring agency or city that has been contacted regarding a sewer problem and has determined it is outside their jurisdiction.

All calls for service are immediately responded to with a typical response time of 30 minutes and not more than an hour. Sewer collection staff are on 24 hours/day, 7 days/week standby to respond to after-hour, weekend, and holiday emergencies.

The First Responder has the responsibility of evaluating the overflow upon arrival, implementing best management practices to contain the overflow and if possible, prevent it from entering the storm drain, clearing the blockage, contacting the Sewer Collections Supervisor, and notifying California Office of Emergency Services (CalOES) of the event within two (2) hours of becoming aware of the overflow greater than or equal to 1,000 gallons.

The Sewer Collections Supervisor, upon notification will drive to the overflow site and take control of the containment and cleanup efforts, estimate the volume of the overflow for reporting to CalOES, make any follow-up reports to CalOES, and notify the Utilities Operations & Maintenance Manager.

The Sewer Collections Supervisor is also responsible for notifying the Utilities Operations & Maintenance Manager of the event and filling out the online Sanitary Sewer Overflow Report to California Integrated Water Quality System (CIWQS) within 3 business days for Category 1 and 2 SSOs, or within 30 days of the end of the month in which the spill occurred for Category 3 SSOs.

The Sewer Collection Supervisor is also responsible for ensuring all activities carried out during the event response are done safely, and in accordance with all laws, regulations and City ordinances and policies, and that an investigation is conducted to determine the cause of the SSO, and that the cause is rectified.

The Utilities Operations & Maintenance Manager is responsible for notifying the Utilities & Environmental Services Director of the event and ensuring all response activities are carried out safely and in accordance with all laws, regulations and City ordinances.

All Sewer Collection staff are equipped with mobile smart phones. Additionally, there are four line-of-sight radios for use when there are communications issues, or during events where the crews need radio communications such as confined space entries, main cleaning and televising and investigating canyons for sewer overflows or spills.



Director Public Works & Utilities Department
Alex Ameri

Environmental Services Manager
Erik Pearson

Utilities Operations & Maintenance Manager
Water System Chief Operator
Sewer Collection System Legally Responsible Official
Bert Weiss
D4 – **D5, T2, CSM4**

Senior Secretary
Hui-Nie Xiao

Secretary
Joy Medina

Water Pollution Source Control Program
Administrator
Elisa Wilfong

WPSC
Associate Engineer
VACANT

Utilities Operation & Maintenance Supervisor
Water System Shift Operator
Benjie Foreman
D4 – **D5, T2, CSR**

Wastewater Collections System Supervisor
Legally Responsible Official
Mark McGrath
CSM3 – **CSM4, D3, T2, CSR**

Senior WPSC Inspector
Jaime Rosenberg
EC13

Senior Utility Leader
Sewer Collections System Maintenance
VACANT
CSM3 –

WPSC Inspector
VACANT

WPSC Inspector
Bashir Sarwary

WPSC Inspector
William Freeman

- Utilities Mechanic
VACANT
D2 –
- Utilities Mechanic
Gardner Haliburton
D2 – **D3**
- Utilities Mechanic
Ingacio Salceda
D2 – **D3, CSM1, E/I1**
- Utilities Mechanic
Louie Carreon
D2 – **D3, T2, CSR**
- Utilities Mechanic
VACANT
D2 –
- Utilities Mechanic
Nano Velasquez
D2 – **D2, CSR**
- Electrician II
Dan Kring
D2 – **D4, E/I3**
- Electrician II
Barry Burke
D2 – **D3, E/L, C/O**
- Electrician II
Sean Bui
D2 – **D3, E/L, E/I3**
- Utility Svc Worker
Jeffrey Bashir
D2 – **D3, T2**
- Utility Svc Worker
Moises Muniz
D2 – **D1**

Utility Leader
Steve Klausung
CSM2 – **CSM2, CSR**

Utility Leader
Joe Estrada
CSM2 – **CSM2**

Utility Leader
Peter Villalobos
CSM2 – **CSM2, D3**

Utility Worker
Joseph Brennan
CSM1 – **CSM2, D3, T2, CSR**

Utility Worker
Abraham Anaya
CSM1 – **CSM1**

Utility Worker
VACANT
CSM1 –

Utility Worker
Jeremy Sandoval
CSM1 – **CSM3, D2**

Utility Worker
Vacant
CSM1 –

CERTIFICATION LEGEND	
D1-D5:	Water Distribution Operator, CA DOPH
T1-T5:	Water Treatment Operator, CA DOPH
BFT:	Backflow Prevention Assembly Tester, AWWA
XCS:	Cross-Connection Control Program, Specialist AWWA
WCP1-WCP3:	Water Conservation Practitioner, AWWA
CSM1-CSM4:	Collection System Maintenance Technologist, CWEA
MT2-MT4:	Mechanical Technologist, CWEA
E/I1-E/I4 :	Electrical/Instrumentation Tech, CWEA
EC11-EC14:	Environmental Compliance Inspector, CWEA
PMT 1:	Plant Maintenance Technologist, CWEA
E/L:	Electrician License, State of California
CSR:	Confined Space Rescue Certified

SEWER SYSTEM MANAGEMENT PLAN

LEGAL AUTHORITY

The City has sufficient legal authority to effectively implement its SSMP through the Sanitary Sewer System chapter of the [City of Hayward Municipal Code](#) and binding policy documents. The City can require system users to meet discharge standards, maintain user-owned facilities, and pay penalties for non-compliance. Specifically the City has authority to:

A. Control infiltration and connections from inflow sources.

The City requires all inhabited properties in its service area to connect to the public sewer system, except under very specific circumstances via [Section 11-3.201 of the City of Hayward Municipal Code](#). The City, in cooperation with the County Health Officer, may also take appropriate action, including limiting or suspending water service, in the event that a private sanitary sewer overflow is causing a dangerous and unsanitary condition via [Section 11-3.100 of the City of Hayward Municipal Code](#).

B. Require that sewers and connections be properly designed and constructed. The City requires that sewer system facilities and connections be designed and constructed in accordance with specific design standards and material specifications via the [Section 11-3.300 to 11-3.311 of the City of Hayward Municipal Code](#). Sewer connections must be permitted and constructed by a licensed sewer contractor per [Section 11-3.250 & 11-3.252 of the City of Hayward Municipal Code](#).

C. Ensure proper installation, testing and inspection of new and rehabilitated sewers. The City has specific criteria for construction of sewers and connections in [Section 11-3.350 to 11-3.362 of the City of Hayward Municipal Code](#). City inspectors are trained and experienced in construction of sanitary sewers and connections and have authority to stop construction if, in the inspector's opinion, the work does not meet City standards. The City also has specific requirements for inspecting and testing new connections in [Section 11-3.259 & 11-3.260 of the City of Hayward Municipal Code](#).

D. Regulate wastewater discharge, including limitations on fats, oil and grease.

Appendix A of the City's municipal code contains the City's [Wastewater Discharge Regulations](#) (WDR), are administered by the Utilities & Environmental Services Department's Water Pollution Source Control Program, which conducts regular inspection, monitoring, and permitting of certain industrial users. The WDR includes limitations on wastewater constituents, including fats, oil and grease. In addition, [Public Works Policy Memo 5-11](#) makes specific requirements for grease control devices in appropriate facilities. This policy is administered jointly by Utilities & Environmental Services Department, and Building Inspection Department staff.

SEWER SYSTEM MANAGEMENT PLAN

OPERATION AND MAINTENANCE PROGRAM

- A. **Collection System Map.** Comprehensive sewer and storm base maps are available to staff which show the location, size and installation date of sewer and storm mains, manhole locations with invert and rim elevations and property lines with addresses. Electronic maps have been updated in 2015. Paper map books in crew trucks were last distributed in 2016 and are constructed of a more durable plastic/paper hybrid pages. The City's Geographic Information System (GIS) is constantly updated as changes to the system occur. The printed map books were last produced in March 2016.
- B. **Prioritized Preventive Maintenance.** The Utilities Operations & Maintenance Manager has overall responsibility for the proper operation and maintenance of the Wastewater Collection System. The Collection System includes more than 320 miles of various diameter pipe, nine sewage pump stations, approximately 30,000 service connections, and a Water Pollution Control Facility. Adequate staffing is available for routine operations and maintenance of these facilities. Pipeline maintenance staff includes a Wastewater Collections System Supervisor, one Senior Utility Leader, two Utility Leaders, and six Utility Workers.

Mechanical operation & maintenance activities for pump station operation and maintenance staff includes one Utilities O&M Supervisor, three Electricians, six Utilities Maintenance Mechanics and two Utilities Service Workers, who are also responsible for all water pump station, reservoir, pipeline, and pressure reducing valve operation, maintenance and repair and storm water pump station operation, maintenance and repair. Pipeline and facilities personnel are available 24 hours/day, 7 days/week to respond to emergency conditions.

Current staffing levels would allow the entire collection system to be cleaned every 2 – 3 years if there were no interruptions for other work.

Areas requiring more frequent cleaning known as “High Frequency Areas” are cleaned as frequently as every 60 days.

Areas identified as needing repair or upgrade due to physical condition or flow restriction are scheduled for repair/upgrade as they are discovered. The City has funded an annual Line Replacement Capital Improvement Project (CIP) for this purpose.

Root control is accomplished through a chemical treatment program which targets those areas with known root intrusion and cleans/cuts roots then chemically treats the mains in accordance with industry standards.

All customer complaints are responded to as they are received.

CCTV inspection data including video are stored on a separate drive on the City's server.

C. Scheduled Inspections and Condition Assessment.

The Sewer Collections Group staff is constantly inspecting and assessing the condition of the City's sewer collection system. Root cutting and foaming are conducted as required in areas where root intrusion has been identified as a concern.

Areas that pose challenges with regards to flow, and which are not physically defective or in need of upgrade are placed on High-Frequency lists (2, 3, 4, 6 & 8-month frequency) based on their specific issue. These are usually areas that accumulate grease at a higher-than-normal rate and must be cleaned more frequently to keep flowing.

The Group also maintains a Selective Check List which includes areas identified during normal cleaning activities as possibly prone to stoppage. The List is checked quarterly until the area is televised and repairs are made.

D. Training. All Sewer Collection System staff receive regular training utilizing both in-house resources and outside vendors and wastewater organizations such as CWEA, WEF, and California State University, Sacramento (Office of Water Programs) courses. Currently due to COVID-19 restrictions we have implemented DKF virtual trainings in lieu of in person tailgates/trainings.

The City is also strongly encouraging all Sewer Collections staff to become certified as Collection System Maintenance Operators through CWEA. Currently all operators are certified.

Additionally, the Utilities O&M staff are encouraged to obtain CWEA certifications and two Electricians are certified as Grade III Electrical/Instrumentation Technologists and the O&M Supervisor is a certified Grade (IV Mechanical Technologist, Electrical/Instrumentation Technologist and Collection System Maintenance Technologist.

E. Contingency Equipment. All sewer lift stations and storm water pump stations (aside from our newly acquired Cal-Trans East/West Jackson which is scheduled on the next CIP) have been upgraded to facilitate a streamlined and simple process for bypass pumping. All stations have suction and discharge connections installed for portable trash pumps, with quick-connect couplings so that if a pump or pumps fail for any reason, a portable, trailer mounted trash pump can be towed to the site and hooked up in short order, re-establishing flow from the station.

Additionally, at stations without permanent emergency generators, the Motor Control Centers (MCCs) were set up with quick connect plugs in the event of a power failure, a portable, trailer mounted emergency generator can be towed to the site and quickly hooked up to get the station back in service.

SEWER SYSTEM MANAGEMENT PLAN

DESIGN AND PERFORMANCE PROVISIONS

A. Standards or Installation, Rehabilitation and Repair.

The City of Hayward Standards for the proper installation and inspection of sewer lines are contained in two documents; The [City of Hayward Public Works & Utilities Standard Details](#) and the [City of Hayward DEPARTMENT OF PUBLIC WORKS SPECIFICATIONS FOR THE CONSTRUCTION OF SANITARY SEWER MAINS AND APPURTENANCES](#).

B. Standards for Inspection and Testing of New Rehabilitated Facilities

The City of Hayward Standard Public Works contracts require that new and or rehabilitated facilities are not placed into service until inspection and testing is completed per [City of Hayward Municipal Code – Sec. 11-3.259 Tests](#).

The City of Hayward Public Works & Utilities Department is responsible for these inspections and testing, and maintains an adequate staff of Construction Inspectors to accomplish this task.

The Standard Test Requirement for Sanitary Sewers is detailed in the City of Hayward Detail SD-311 in the [City of Hayward Public Works & Utilities Standard Details](#) and [City of Hayward DEPARTMENT OF PUBLIC WORKS SPECIFICATIONS FOR THE CONSTRUCTION OF SANITARY SEWER MAINS AND APPURTENANCES](#).

[City of Hayward Municipal Code – Sec. 11-3.259 Tests](#).

Upon completion of the work, the City Engineer may require the house sewer to be subjected to appropriate tests, such as a water test or video test/inspection. The pressure for a water test shall be that imposed by a five-foot head of water. The house sewer shall be plugged before test at a point just before conversion is made to public sewer or place of disposal. Under test the water pressure shall remain constant for not less than fifteen (15) minutes without any further addition of water or indication of leaks.

The video camera and recording equipment used for video testing shall be suitable for the intended purpose and shall be equipment that is in common use at the time of the test. A complete and continuous taped record and written log of the inspection shall be made. The taped record shall be of such quality as to provide a clear, sharp image when playback on a conventional television set. The taped record shall conform to the owner's video recorder requirements. The image shall show sufficient detail to determine cracks in the pipe, offset joints, leaking joints, and other flaws in the installation of the sewer main. The video taping shall be done with no flow in the sewer.

SEWER SYSTEM MANAGEMENT PLAN

OVERFLOW EMERGENCY RESPONSE PLAN

A. Notification

A sewer problem can be reported to the Collection System by several different methods including:

- During normal work hours, customers call the Utilities Center directly.
- After normal work ours, weekends and holidays, customers call Hayward Police Dispatch which then contacts the Sewer Collections Standby person for response.
- Observation by City employee who then contacts the Utilities Center.
- Contact from a neighboring agency or city that has been contacted regarding a sewer problem and has determined it is outside their jurisdiction.

All calls for service are immediately responded to with a typical response time of 30 minutes and not more than an hour. Sewer collection staff are on 24 hours/day, 7 days/week standby to respond to after-hour, weekend and holiday emergencies.

B. Response

All sanitary sewer overflow (SSO) response activities will be in compliance with the [City of Hayward Sanitary Sewer Overflow Emergency Response Plan \(SSOERP\)](#).

All SSO reporting procedures are also covered in the [California Water Board's Enrollee's Guide to the SSO Database](#), as well as the City's [SSOERP](#).

For guidance in responding to, and reporting SSO events, refer to the City's [SSOERP](#).

SEWER SYSTEM MANAGEMENT PLAN

FATS, OILS, AND GREASE (FOG) CONTROL PROGRAM

Based on a comprehensive review of SSO incidents and sewer cleaning history, the City determined that FOG is not a major concern for the City's collection system. From 2010 - 2015, there were 35 SSO incidents in the City of Hayward's sewer collection system. Of these 14 were caused by fats, oils or grease (FOG).

The City will maintain its FOG identification and control program. In addition, to being proactive, the City has incorporated into its FOG Control Program some other elements as detailed below.

A. Identification and Sewer Cleaning

The City's Sewer Collections Group crews track areas that require increased frequency of cleaning. They note factors contributing to increased cleaning frequency such as structural problems, roots, or FOG.

Sewer lines identified as problematic with regard to grease are cleaned at a minimum frequency of once per year. Areas known to have problems are included on one of the City's High Frequency Main Cleaning Lists and are cleaned at a frequency ranging between 2 and 6 months. Sewer lines in the downtown area are cleaned semi-annually.

When crews discover areas with high grease buildup, or SSOs with a suspected FOG cause, they relay this information to the Water Pollution Source Control Division. Water Pollution Source Control Inspectors may conduct further investigation to discover possible contributors to the grease buildup, where feasible. In some cases Utilities crews utilize camera technology to help identify FOG source contributors (i.e. by televising lateral-main connections).

B. Source Control

The City has promulgated a Fats, Oils, and Grease (FOG) program as described in [Public Works Policy Memo 5-11](#). This memo, entitled "Grease Control Devices and Grease Handling Procedures in Food Service Facilities", outlines the City's policy regarding grease control devices in restaurants and other food service establishments (FSEs).

Based on information provided by prospective FSE proprietors, City staff incorporate grease control device requirements into building plan checks. The minimum requirement for an FSE is to install a grease trap. In some cases grease interceptors are required.

[Public Works Policy Memo 5-11](#) also details grease control device maintenance requirements, including those pertaining to frequency of cleaning and record retention.

In addition, the City also conducts public outreach activities to raise awareness of FOG-related problems. Efforts include distributing BMP posters to restaurants and other FSEs, mailing informational brochures to residents, and exhibiting a FOG informational display at public outreach events.

C. Facility Inspection

Water Pollution Source Control Inspectors conduct inspections of FSEs known or suspected to have caused FOG-related problems in the collection system. This is typically done in the course of an investigation as described above.

Permitted Industrial Users, some of whom have the potential to contribute FOG to the collection system, are regularly inspected on a frequency of at least once per year.

D. Legal Authority

The City has legal authority to prohibit discharges to the collection system through its [Wastewater Discharge Regulations](#), Appendix A of Chapter 11, Article 3 of City of Hayward Municipal Code.

In addition, the City also has authority through Section 11-3.104 (Abatement) of the [City of Hayward Municipal Code](#).

SEWER SYSTEM MANAGEMENT PLAN

SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

The Sewer Collection System Master Plan was completed in March 2015.

- (a) The sewer collection system is under constant analysis. As crews are cleaning and televising the system, they are noting any discrepancies and forwarding them for repair. The City has an active Capital Improvement Program (CIP), with projects specifically addressing system needs and allowing for rapid response in rectifying these needs as they are discovered.

Additionally, immediately following a Sanitary Sewer Overflow an investigation is undertaken to determine the cause-and-effect corrections to the system uncovered in this investigation.

The most current evaluation of capacity analysis is detailed in the Sewer Collection System Master Plan Chapter 4.

- (b) For information on sewer collection system design criteria, refer to the following sources; [City of Hayward, Department of Public Works SPECIFICATIONS FOR THE CONSTRUCTION OF SANITARY SEWER MAINS AND APPURTENANCES](#) and [City of Hayward Public Works & Utilities Department STANDARD DETAILS](#).
- (c) The City is constantly monitoring the system for capacity deficiencies. In addition to the recommendations outlined in Chapter 5 of the Sewer Collection System Master Plan Sewer Collection System Master Plan Chapter 5, improvements are made as deficiencies and defects are discovered during CCTV and sewer main cleaning activities.

Funding is reserved in Capital Improvement Projects specifically for the repairs/upgrades to the system discovered during day-to-day activities. The amounts of these funds are adjusted annually.

[CIP Directory](#)

- (d) A schedule of planned projects and system upgrades can be seen in the most recent Capital Improvement Program list of projects. [CIP Directory](#)

SEWER SYSTEM MANAGEMENT PLAN

MONITORING, MEASUREMENT AND PROGRAM MODIFICATIONS

Monitoring, Measurement, and Program Modifications:

The City of Hayward:

- (a) Maintains relevant information that can be used to establish and prioritize appropriate SSMP activities as demonstrated by the fact that the City's SSMP has been active since March 2006. In that time, it has been audited biennial, and underwent a major update in March 2012 and again in 2016.

A record of the audits can be found in Chapter 10.

- (b) Monitors the implementation and, where appropriate, measure the effectiveness of each element of the SSMP, which is evident when you refer to the table in item (c) below, which shows the trends over the most recent seven (7) years. The trend is generally downward, with the notable exceptions of 2018 when we had someone put a blanket into our manhole and the most recent 2020 increase was due to separations and limited staff during the COVID-19 pandemic with closures and shutdowns.

The 2014 larger volume spill can be explained in part by the departure of three high-tenure employees, one a Senior Lead, as well as older equipment (the only Vactor the Group had at the time was a 2001 model and was frequently down for repairs due to age).

Once the Group integrated the two new staff members along with the replacements for the three departed staff, and took ownership of a new Vactor combination truck, it became possible to have three vehicles cleaning the collection system as well as the CCTV truck televising to enhance the Group's ability to prioritize activities.

Main cleaning footage increased from 600,000 ft/year average to 1,200,000 ft/year average. The past year (2020) we did experience and drop in CCTV/Hydro cleaning footage due to separations and COVID-19 restrictions.

In addition, the High-Frequency Cleaning Schedules continue to be modified. We remove areas that are no longer need more frequent attention usually due to a repair or capacity improvements or we have, on occasion, added areas that seem to need more attention. Currently we have a 2,3,4,6 & 8 month list, as well as the Selective Check List which is simply an individual checking of designated areas identified during cleaning activities as having potential flow issues.

If during these Selective Checks an area is found to be free-flowing, and subsequent televising shows no obstruction or grease and/or sediment buildup, the site is removed from the Selective Check List. If the site has a grease accumulation issue that cannot be remedied by upgrading or repair, it is placed on one of the High Frequency Lists. If a defect or deficiency is discovered, the site is identified as needing repair and scheduled for the repair/improvement.

(c) Assesses the success of the preventative maintenance program, which is depicted in the table below showing the City's SSO trends and noting the drastic drop coinciding with the addition of staff and equipment.

	Cat 1	Cat 2	Cat 3	TOTAL	Notes	Total Spill Vol	Total Recovered	Total Reach S/W
2020			4	4	2 Separations / COVID-19 Restrictions / Limited Staff	1,420	1,300	0
2019	0	0	2	2		86	80	0
2018	0	0	2	2		916	601	0
2017	0	0	0	0		0	0	0
2016	0	0	1	1	May 15 New Vactor June 22 New CCTV	180	180	0
2015	1	1	0	2		1,501	1,510	0
2014	1	1	9	11	April New Vactor July Staff Upgrade (+2)	4,920	4,170	750

(d) Updates program elements, as appropriate, based on monitoring or performance evaluations. In fact, the City is constantly upgrading its system and making improvements as technology changes and practices are honed.

(e) Identifies and illustrates SSO trends, including frequency, location, and volume by reviewing the details of the past seven (7) years spills, the City's SSO activity is generally low volume, a testament to the initiative and work ethic of the people who operate and maintain the system. This is not surprising when the City's collection system cleaning and televising activities and the investigations conducted after any SSO are considered.

SEWER SYSTEM MANAGEMENT PLAN

SSMP PROGRAM AUDITS

The Utilities Operations & Maintenance Manager will conduct a biennial audit of the City of Hayward (CoH) SSMP document. The audit will cover the most recent calendar year.

The audit report will contain information about successes in implementing the most recent version of the SSMP and identify revisions that may be needed for a more effective program. The audit report will include the following:

- Progress made on development of SSMP elements and evaluation of whether the COH is on schedule in development of the SSMP.
- How the COH implemented SSMP elements in the past reporting year.
- The effectiveness of implementing SSMP elements.
- A description of the additions and improvements made to the sanitary system in the past reporting year.
- A description of additional improvements planned for the upcoming reporting year.

SSMP audits can be viewed by clicking [here](#).

SEWER SYSTEM MANAGEMENT PLAN

COMMUNICATION PROGRAM

- A. The City endeavors to maintain a good relationship with all customers. Staff at all levels will contact customers and answer questions or discuss customer concerns.
- B. The City recently developed a pamphlet [Sewer Lateral Maintenance Responsibility Handbook](#) to explain the responsibilities of the City and the Customer as they relate to the sewer mains and laterals. The pamphlet contains excerpts from the Hayward Municipal Code which explain the areas that the City is responsible for maintaining, and why the customer is responsible for their sewer lateral.
- C. The City also recently produced a pamphlet for plumbers and sewer contractors detailing the responsibilities of the contractors and plumbers when cleaning sewer laterals to prevent conditions that could lead to a sanitary sewer overflow. [City of Hayward Plumber and Sewer Contractors Responsibilities handout](#)
- D. As detailed in Chapter 2; Organization, the protocol for reporting Sanitary Sewer Overflows is as follows.

A sewer problem can be reported to the Collection System by several different methods including:

- During normal work hours, customers call the Utilities Center directly.
- After normal work hours, weekends and holidays, the customers call Hayward Police Dispatch which then contacts the Sewer Collections Standby person for response.
- Observation by City employee who then contacts the Utilities Center.
- Contact from a neighboring agency or city that has been contacted regarding a sewer problem and has determined it is outside their jurisdiction.

All calls for service are immediately responded to with a typical response time of 30 minutes and not more than an hour. Sewer collection staff maintains a 24 hours/day, 7 days/week standby person to respond to after-hour, weekend and holiday emergencies.

All Sewer Collection staff are equipped with mobile phones with a Push-to-Talk feature. Additionally, there are four line-of-sight radios for use when there are communications issues, or during events where the crews need radio communications such as confined space entries, main cleaning and televising and investigating canyons for sewer overflows or spills.