



# Sewer System Management Plan



City of San Diego  
Public Utilities Department  
Wastewater Collection Division  
July 21, 2023

## Table of Contents

<b>I.</b>	<b>Goal .....</b>	<b>1</b>
<b>II.</b>	<b>Organization .....</b>	<b>6</b>
<b>III.</b>	<b>Legal Authority .....</b>	<b>13</b>
<b>IV.</b>	<b>Operation and Maintenance Program .....</b>	<b>23</b>
<b>V.</b>	<b>Design and Performance Provisions.....</b>	<b>39</b>
<b>VI.</b>	<b>Spill Emergency Response Plan.....</b>	<b>41</b>
<b>VII.</b>	<b>Sewer Pipe Blockage Control Program .....</b>	<b>42</b>
<b>VIII.</b>	<b>System Evaluation and Capacity Assurance Plan .....</b>	<b>52</b>
<b>IX.</b>	<b>Monitoring, Measurement, and Program Modifications .....</b>	<b>62</b>
<b>X.</b>	<b>SSMP Program Audits .....</b>	<b>65</b>
<b>XI.</b>	<b>Communication Program.....</b>	<b>67</b>

## Attachments

- Attachment 1. SWRCB Order 2006-0003**
- Attachment 2. SWRCB Order 2007-0005**
- Attachment 3. SWRCB Order 2013-0058-EXEC**
- Attachment 4. SWRCB Order WQ 2022-0103-DWQ**
- Attachment 5. Change Log**
- Attachment 6. Certification**
- Attachment 7. SSMP Contact Information**
- Attachment 8. SSMP Spill Emergency Response Plan**



## I. GOAL

The City has established a level of service that complies with state and federal sanitary sewer regulations in order to ensure that the collection system within its service area meets public health and safety standards. This Sewer System Management Plan (SSMP) has been developed to comply with the noted regulations below.

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 Sanitary Sewer Spills, as well as mitigate any sewer spills that do occur.

The City's goals for the effectiveness of the SSMP program implementation include:

- Prevent adverse impacts from sewer spills to surface waters and their beneficial uses
- Minimize and mitigate the adverse impacts of sewer spills that may occur despite best efforts through timely and effective emergency response
- Actively partner with the City's Storm Water Division to investigate sources of human fecal contamination in the Municipal Separate Storm Sewer System (MS4) as part of the City's Tiger Team
- Maintain or improve the condition and performance of the wastewater collection system and provide adequate capacity to convey peak wastewater flows
- Identify, prioritize, and continuously renew and replace sewer system facilities to maintain reliability
- Meet all applicable regulatory notification and reporting requirements
- Perform all operation and maintenance activities in a safe manner
- Measure progress through performance measures so the plan can be adjusted as needed
- Develop trained City staff for effective implementation of SSMP programs and work activities

The mission of the City of San Diego's Public Utilities Department (PUD) is:

*"To provide reliable water utility services that protect the health of our communities and the environment."*

The PUD Vision statement is:

*"A world-class water utility for a world-class city"*

## Reference

PUD Strategic Business Plan Document, FY 2017-2021

One of the goals of the SSMP is to meet all applicable regulatory notification and reporting requirements. These regulatory requirements include the following federal and state regulations and certification requirements.

### **Federal Regulations**

The Federal Water Pollution Control Act, known as the Clean Water Act (33 United States Code [USC] sections 1251 et seq.), was widely accepted in 1972 and is the principal federal statute for water quality protection. The Clean Water Act requires the State to adopt water quality standards and to submit those standards for approval by the U.S. Environmental Protection Agency (U.S.EPA). For point source discharges to surface water, the Clean Water Act made it unlawful to discharge pollutants from a point source into navigable waters and it authorizes the U.S.EPA and/or approved states (such as California) to administer the National Pollutant Discharge Elimination System program.

### **State Regulations**

California's principal law governing water quality regulation is the Porter-Cologne Act. It establishes a comprehensive program to protect water quality and the beneficial uses of water. The Porter-Cologne Act applies to surface waters, wetlands, and ground water and to both point and nonpoint sources (NPS) of pollution, unlike the Federal regulation that only addresses point sources.

Pursuant to the Porter-Cologne Act (California Water Code section 13000 et seq.), the policy of the State is as follows:

- That the quality of all the waters of the State shall be protected,
- That all activities and factors affecting the quality of water shall be regulated to attain the highest water quality within reason, and
- That the State must be prepared to exercise its full power and jurisdiction to protect the quality of water in the State from degradation.

The Porter-Cologne Act established nine Regional Water Boards (based on hydrogeologic barriers) and the State Water Quality Control Board, which are charged with implementing its provisions and which have primary responsibility for protecting water quality in California. The City is located in the San Diego Regional Water Quality Control Board regional jurisdiction (Region 9). The Regional Water Boards regulate discharges under the Porter-Cologne Act primarily through issuance of NPDES permits for point source discharges and waste discharge requirements (WDRs) for NPS discharges.

On May 2, 2006, the SWRCB adopted Statewide General Waste Discharge (WDR) Requirements for Sewer Systems (Order No. 2006-0003-DWQ). This was followed up by Order R9-2007-0005 for the WDRs in the San Diego Region which included compliance measures for

monitoring and reporting as well as compliance with the Basin Plan. See Attachment 1 for Order No. 2006-0003-DWQ and Attachment 2 for Order No. R9-2007-0005. Reporting and notification requirements under Order No. 2006-0003-DWQ were later amended in Order No. 2008-0002 EXEC. Order No. 2008-0002 was superseded by Order No. WQ 2013-0058-EXEC (Attachment 3) which further updates and clarifies the notification and reporting requirements. ORDER WQ 2022-0103-DWQ. This General Order serves as statewide waste discharge requirements and supersedes the previous State Water Resources Control Board (State Water Board) Order 2006-0003-DWQ and amendments thereafter. The intent of the Order is to regulate all collections systems in the State in an effort to reduce or eliminate the number of Sewer Spills which, by their nature, pollute the environment. The Order is applicable for all publicly owned sewage collection systems with more than one mile of sewer pipe. The 2006 WDR Order requires public agencies that own or operate sanitary sewer systems to develop and implement SSMPs and report all sewer spills to the State Water Board's online sewer spill database.

The Order also contains a provision for a statewide Monitoring and Reporting Program (MRP). The MRP requires each local or regional sewer agency to appoint a legally responsible official (LRO) and establish a monitoring and reporting organization to monitor and report all sewer spills in accordance with the requirements of the Order and to have the LRO certify the sewer spill report using the California Integrated Water Quality System (CIWQS) website in the timeframe required by the Order. If no sewer spills occur during the course of any given month, the LRO is required to fill out, certify and send via the CIWQS website a "No Spill Certification" documenting that there were no sewer spills for the month reported.

In compliance with the orders, the City developed this SSMP that documents its approach to properly operating and maintaining its sanitary sewer system. This SSMP contains the following mandatory elements and is organized as follows:

- **Goal** - The goal is to prevent and/or reduce sewer spills and mitigate the effect of any sewer spills that do occur. The goal requires a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer collection system.
- **Organization** - The SSMP must identify the LRO or authorized representative as described in the Order. It must list and identify the organization responsible for operating and maintaining the sanitary sewer collection system including names and telephone numbers for management, administrative and maintenance positions and the chain of communication for reporting sewer spills.
- **Legal Authority** - Each Enrollee must demonstrate through legally binding procedures such as ordinances, agreements, etc. that it possesses the necessary legal authority to do what is required by the Order.
- **Operation and Maintenance Program** - The SSMP must include those elements that are required by the Order that are appropriate and applicable to the sewer agency's system.

- Design and Performance Provisions - The SSMP must demonstrate that the sewer agency has and appropriately uses design and construction standards and specifications for the installation of new sewer systems, rehabilitation and repair of existing sewer systems and has procedures and standards for inspecting and testing the installation of new sewers, pumps, etc. and for rehabilitation and repair projects.
- Spill Emergency Response Plan - Each Enrollee shall develop and implement a spill emergency response plan that identifies measures to protect public health and the environment and meets the minimum requirements of the Order.
- Sewer Pipe Blockage Control Program - Each Enrollee shall evaluate its sewer system and determine if a Fats, Oils and Grease control program is needed. The sewer pipe blockage control plan, if needed, must meet all the requirements of the Order.
- System Evaluation and Capacity Assurance Plan - The Enrollee shall prepare and implement a Capital Improvement Plan that will provide adequate hydraulic capacity for the sewer collection system required by the Order.
- Monitoring, Measurement, and Program Modifications – The Enrollee shall maintain relevant information to establish and prioritize SSMP activities, monitor the implementation and measure the effectiveness of the SSMP activities, and provide assessment of the performance and/or modification of the SSMP activities as required by the Order.
- SSMP Program Audits - The Enrollee shall conduct periodic internal audits appropriate to the size of the sewer system and the number of sewer spills. At a minimum, these audits must occur every two years as required by the Order.
- 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 sewer agency and shall also create a plan of communication with other local sewer agencies that may be tributary or satellite to the sewer agency's sewer collection system.

The SSMP must be audited every two years and updated every five years to include any significant program changes. Re-certification by the City's Council is required when significant updates to the SSMP are made. The City is required to provide an electronic copy of their SSMP to the Online CIWQS Spill Database.

Additional compliance performed by the City not directly associated with the Order is the Air Pollution Control Audits. This effort is undertaken by the Compliance Section of the Laboratory group to determine any issues and recommend corrective actions if needed.

## **Certification**

The City has met all the mandatory elements of the SSMP. The SSMP must be updated every six (6) years, and must include any significant program changes. Program changes that are not significant are captured in the change log included in Attachment 5.

Re-certification by the governing board of the City is required when significant updates to the SSMP are made. The certification is available in Attachment 6.



## II. ORGANIZATION

### THE SSMP MUST IDENTIFY:

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

The City owns and operates the municipal sanitary sewer system of the City of San Diego. It also provides wastewater conveyance and treatment services to 15 other cities and special districts (Participating Agencies) under contractual agreements but does not fund, operate or have control over the sanitary sewer systems of these communities. The City is not responsible for the organization of the satellite agencies, or for implementing WDR and SSMP measures within those organizations. The 15 satellite agencies own and operate sanitary sewer systems within their jurisdictions.

The City of San Diego is governed by the Mayor, who is the chief executive, and 9 full-time Council Members. The Mayor and the City Council authorize the necessary funding. The City Attorney provides legal advice and guidance to the City and City departments in implementing the City ordinances and exercising legal authorities, and represents the City, its departments, commissions and employees in legal matters, including enforcement actions. The Distribution and Collection Branch of the PUD reports to the Office of the Mayor through the Director of Public Utilities.

The Distribution and Collection Branch is comprised of two (2) divisions:

- Wastewater Collection Division
- Water Construction and Maintenance Division

The Wastewater Collection Division manages, operates and coordinates all activities associated with the municipal sanitary sewer system of the City of San Diego. All Capital Improvement Program (CIP) projects are designed and constructed through the Engineering Branch of the Public Works Department, and the Wastewater Collection Division works closely with the

Engineering Branch to ensure that all CIP projects meet the PUD Sewer Design Guide, are operator friendly and require minimal maintenance cost.

Many Wastewater Collection Division administrative functions are also coordinated and provided in conjunction with other PUD divisions such as the Engineering Program Management Division, Finance and IT Division, Employee Services and Quality Assurance Division, as well as other City departments, such as, Personnel, Purchasing and Contracts, Office of the City Comptroller, Risk Management and the Office of the City Attorney. This service arrangement is typical of other large governmental organizations.

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

The City has designated a Legally Responsible Official (LRO) pursuant to Section J., REPORT DECLARATION, of the State General WDR (Order No. 2006-0003). Contact information for the City's LRO is provided below:

Michael Rosenberg, Deputy Director  
 Kent Vian, Assistant Deputy Director  
 Wastewater Collection Division  
 9150 Topaz Way  
 San Diego, CA 92123  
 (858) 614-4046  
 858-654-4251

[MRosenberg@sandiego.gov](mailto:MRosenberg@sandiego.gov), [KVian@sandiego.gov](mailto:KVian@sandiego.gov)

**(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.**

Table 1 and Table 2 identify the management, administrative, and maintenance positions responsible for implementing specific measures of the SSMP program. Figure 1 is an organizational chart identifying the management, administrative, and maintenance positions responsible for implementing specific measures of the SSMP program, including lines of authority. For more specific or detailed information, see the City's master organization charts. Telephone numbers for these positions are included in Attachment .

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

The Public Utilities Department’s Wastewater Collection Division has procedures that provide for effective notification of each Category of sewer spills through a clear and step-by-step method of communication by Division staff at different levels of the Division’s organization. The policies and procedures for sewer spill reporting are reviewed and updated as needed to ensure that they are in full compliance with all regulatory and legal requirements.

These reporting procedures are incorporated herein and are detailed in Section 6: Sewer Spill and Tracking Plan.

**Table 1. Positions Responsible for SSMP Development and Implementation, Excluding Operations and Maintenance Program Element**

WDR Reference	SSMP Element/Measure	Responsible Positions
D.13	Overall SSMP Development and Implementation	WWC Deputy Director
D.13(i)	Goal	WWC Deputy Director
D.13(ii)	Organization	WWC Deputy Director
D.13(iii)	Legal Authority	Associate Civil Engineer – WWC Operations Engineering
D.13(v)	Design and Performance Provisions	Associate Civil Engineer – WWC Operations Engineering
D.13(vi)	Spill Emergency Response Plan	WWC PWUS, Emergency Response
D.13(vii)	Sewer Pipe Blockage Control Program	WWC FEWD Program Manager
D.13(viii)	System Evaluation and Capacity Assurance Plan – CIP and Schedule	Senior Civil Engineer – Engineering & Program Management
D.13(viii)	System Evaluation and Capacity Assurance Plan – Hydraulic Modeling and Capacity Assurance Planning	Associate Civil Engineer – Sewer Modeling
D.13(ix)	Monitoring, Measurement, and Program Modifications	WWC Deputy Director
D.13(x)	SSMP Program Audits	WWC Deputy Director
D.13(xi)	Communication Program – Public education	WWC Deputy Director

**Table 2. Positions Responsible for SSMP Operations and Maintenance (O&M) Program Development and Implementation**

WDR Reference	SSMP O&M Program Measure	Responsible Positions
D.13(iv)(a)	Mapping	Associate Civil Engineer – WWC Operations Engineering
D.13(iv)(b)	Preventative Maintenance – Gravity Sewers	WWC GWUS – Main Cleaning
D.13(iv)(b)	Preventative Maintenance – Planning and Scheduling for WWC	WWC GWUS – Planning and Scheduling
D.13(iv)(b)	Preventative Maintenance – WWC Pump Stations and Force Mains	WWC GWUS, Sewer Pump Stations
D.13(iv)(b)	Preventative Maintenance – WWTD Pump Stations No. 1 and No. 2 and Force Mains	PLWTP Principal Plant Technical Supervisor
D.13(iv)(b)	Preventative Maintenance – Other WWTD Pump Stations and Force Mains	NCWRP Principal Plant Technical Supervisor
D.13(iv)(c)	Condition Assessment; Rehabilitation and Replacement Program – Planning and Scheduling for WWC	WWC GWUS – Planning and Scheduling

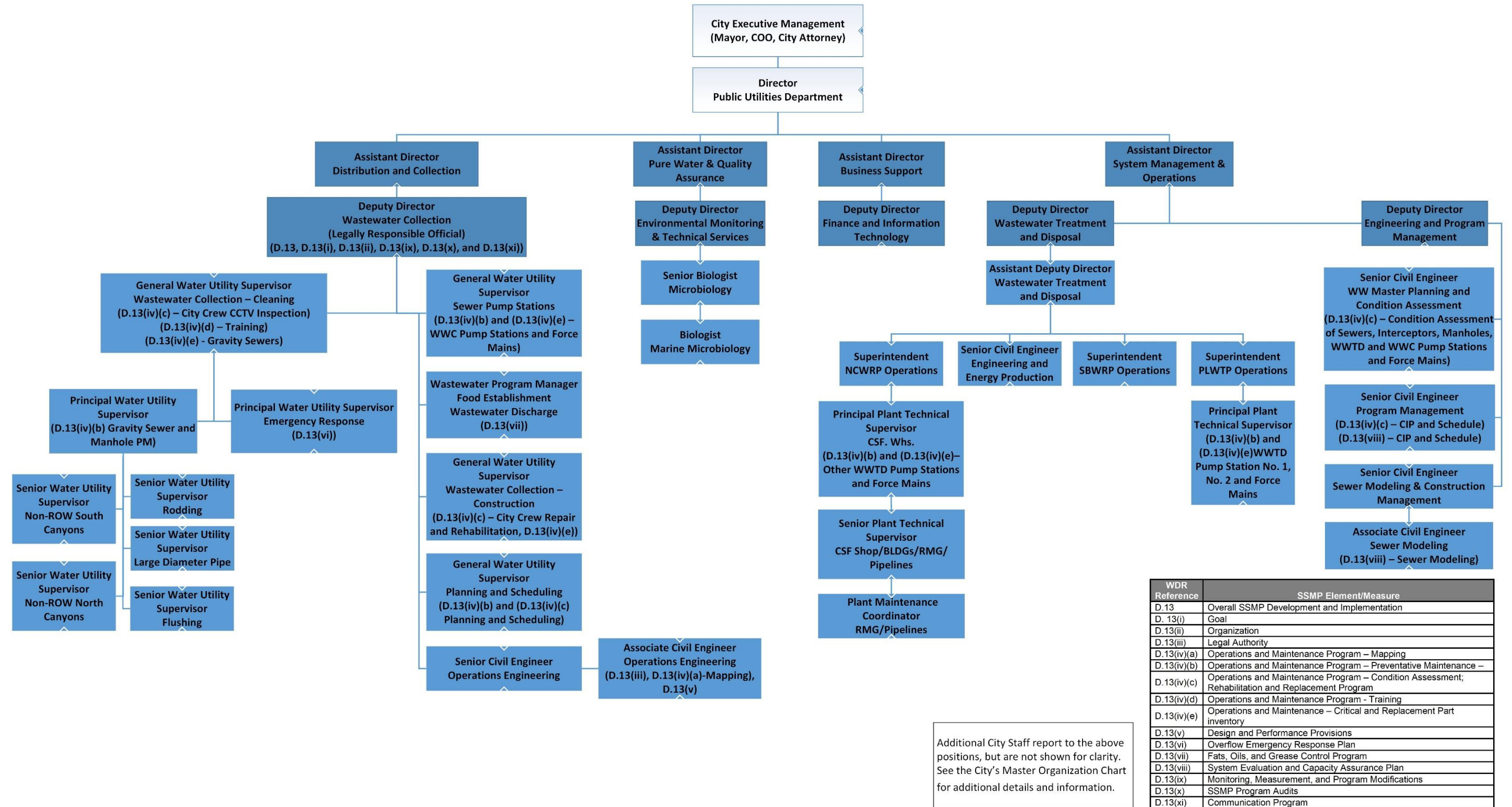
**Table 2. Positions Responsible for SSMP Operations and Maintenance (O&M) Program Development and Implementation**

WDR Reference	SSMP O&M Program Measure	Responsible Positions
D.13(iv)(c)	Condition Assessment; Rehabilitation and Replacement Program – Condition Assessment of Trunk Sewers, Interceptor Sewers, Gravity Sewer Mains, Manholes, WWTD and WWC Pump Stations and Force Mains	Senior Civil Engineer – WW Master Planning and Condition Assessment
D.13(iv)(c)	Condition Assessment; Rehabilitation and Replacement Program – CIP and Schedule	Senior Civil Engineer – Engineering & Program Management
D.13(iv)(c)	Condition Assessment; Rehabilitation and Replacement Program – City Crew Repairs and Rehabilitation	WWC GWUS, Construction
D.13(iv)(c)	Condition Assessment; Rehabilitation and Replacement Program – City Crew CCTV Inspection	WWC GWUS – Cleaning and Emergency Response
D.13(iv)(d)	Training	WWC GWUS, Cleaning and Emergency Response
D.13(iv)(e)	Critical and Replacement Part inventory – WWC Pump Stations and Force Mains	WWC GWUS – Sewer Pump Station
D.13(iv)(e)	Critical and Replacement Part inventory – WWTD Pump Stations No. 1 and No. 2 and Force Mains	PLWTP Principal Plant Technical Supervisor
D.13(iv)(e)	Critical and Replacement Part inventory – Other WWTD Pump Stations and Force Mains	NCWRP Principal Plant Technical Supervisor
D.13(iv)(e)	Critical and Replacement Part inventory Gravity Sewers	WWC GWUS, Cleaning and Emergency Response
D.13(iv)(e)	Critical and Replacement Part inventory Gravity Sewers	WWC GWUS, Construction



Figure 1. Organization Chart Identifying Positions and Staff Responsible for Implementing Specific Measures of the SSMP Program

City of San Diego Public Utilities Department SSMP Organization Chart



WDR Reference	SSMP Element/Measure
D.13	Overall SSMP Development and Implementation
D.13(i)	Goal
D.13(ii)	Organization
D.13(iii)	Legal Authority
D.13(iv)(a)	Operations and Maintenance Program – Mapping
D.13(iv)(b)	Operations and Maintenance Program – Preventative Maintenance –
D.13(iv)(c)	Operations and Maintenance Program – Condition Assessment; Rehabilitation and Replacement Program
D.13(iv)(d)	Operations and Maintenance Program - Training
D.13(iv)(e)	Operations and Maintenance – Critical and Replacement Part inventory
D.13(v)	Design and Performance Provisions
D.13(vi)	Overflow Emergency Response Plan
D.13(vii)	Fats, Oils, and Grease Control Program
D.13(viii)	System Evaluation and Capacity Assurance Plan
D.13(ix)	Monitoring, Measurement, and Program Modifications
D.13(x)	SSMP Program Audits
D.13(xi)	Communication Program

Additional City Staff report to the above positions, but are not shown for clarity. See the City's Master Organization Chart for additional details and information.



### III. LEGAL AUTHORITY

**Each enrollee must demonstrate, through sanitary sewer system use ordinances, service agreements, or other legally binding procedures, that it possesses the necessary legal authority to:**

- (a) Prevent illicit discharges into its sanitary sewer system (examples may include I/I, 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;**
- (e) Enforce any violation of its sewer ordinances.**

#### **Summary of Legal Authority**

The City's Legal authorities satisfy the requirements of the WDR and are included in the City's municipal codes, Sewer Design Guide, Clean Water Program Guidelines, and Council Policies. These codes, guides and policies provide the City with the authority to prevent illicit discharges, require sewers be properly designed, limit discharge of fats, oils, and grease, and enforce violations of sewer ordinances. Table 3 identifies linkages to the City of San Diego Municipal Code, City Council Policy, Wastewater Collection Division Operations and Maintenance Manual directives, regional wastewater disposal agreements, and engineering guidelines. The remainder of this section details the legal authorities the City has in place to support management, operation, and maintenance of the sewer system.



**Table 3. Summary of City Legal Authorities**

Requirement	Authority	Meets WDR Requirements?
<b>GENERAL</b>		
Prevent illicit discharges into the wastewater collection system	Municipal Code, Sections 64.0307, 64.05, 64.0501, and 64.0512	Yes
Limit the discharge of fats, oils, and grease and other debris that may cause blockages	Municipal Code, Section 64.0512 and 2016 California Plumbing Code 1014.0 Grease Interceptors	Yes
Require that sewers and connection be properly designed and constructed	Sewer Design Guide; Clean Water Program Guidelines	Yes
Require proper installation, testing, and inspection of new and rehabilitated sewers	Sewer Design Guide; Clean Water Program Guidelines	Yes
<b>LATERALS</b>		
Clearly define City responsibility and policies	Council Policy 400-10; Wastewater Collection Division, Operations and Maintenance Manual (WCD OPM) C.12, C.13, and C.14	Yes
Ensure access for maintenance, inspection, or repairs for portions of the service lateral owned or maintained by the City	Council Policy 400-10; WCD OPM C.12, C.13, and C.14	Yes
Control infiltration and inflow (I/I) from private service laterals	Municipal Code, Section 64.0512.b	Yes
<b>FOG SOURCE CONTROL</b>		
Installation of grease removal device (GRE)	Municipal Code, Section 64.0708 and 2016 California Plumbing Code 1014.0 Grease Interceptors	Yes
Design standards for GRE	Municipal Code, Section 64.0708 and 2016 California Plumbing Code 1014.0 Grease Interceptors	Yes
Maintenance and BMP requirements	Municipal Code, Section 64.0708 and 2016 California Plumbing Code 1014.0 Grease Interceptors	Yes
Record keeping and reporting	Municipal Code, Section 64.0709 and 2016 California Plumbing Code 1014.0 Grease Interceptors	Yes
Authority to inspect grease producing facilities	Municipal Code, Section 64.0709 and 2016 California Plumbing Code 1014.0 Grease Interceptors	Yes
<b>ENFORCEMENT</b>		
Enforce any violations of sewer ordinances	Municipal Code, Sections 11.0101-11.0401, Sections 12.0101-12.1101, Sections 13.0101-13.0401, and Section 64.0710	Yes

## **General Legal Authority of the City Of San Diego to Adopt and Enforce Ordinances:**

**The California State Constitution** provides in Article 11, Section 7 that “A county or city may make and enforce within its limits all local, police, sanitary, and other ordinances and regulations not in conflict with general laws”.

**The City of San Diego Charter** provides in Section 2 that “the City of San Diego, in addition to any of the powers now held by or that may hereafter be granted to it under the Constitution or Laws of this State, shall have the right and power to make and enforce all laws and regulations in respect to municipal affairs, subject only to the restrictions and limitations provided in this Charter; provided, however, that nothing herein shall be construed to prevent or restrict the City from exercising, or consenting to, and the City is hereby authorized to exercise any and all rights, powers and privileges heretofore or hereafter granted or prescribed by General Laws of the State”. Section 26.1 of the Charter establishes that “It shall be the obligation and responsibility of The City of San Diego to provide public works services....”

## **Regional Wastewater Disposal Agreement**

The Metropolitan Sewerage System (Metro System) is owned and operated by the City of San Diego, and provides wastewater transportation, treatment and disposal services to 15 Participating Agencies (PAs) that discharge wastewater into the system, in addition to the City. Since 1963 the City has entered into transportation and disposal agreement with each contributing jurisdiction. In 1998, new Regional Wastewater Disposal Agreement (RWDA) that supersede the 1963 agreements were executed with each of the PAs including, as amended: City of Chula Vista, City of Coronado, City of Del Mar, City of El Cajon, City of Imperial Beach, City of La Mesa, Lakeside /Alpine Sanitation District, Lemon Grove Sanitation District, City of National City, Otay Water District, Padre Dam Municipal Water District, City of Poway, Spring Valley Sanitation District, Winter Gardens Sewer Maintenance District, and East Otay Sewer Maintenance District. Section II F of the RWDA places limitations on the types and condition of wastewater discharged by the PAs to the Metro System, as described more fully, where applicable, below.

## **Participating Agency Sewage Transportation Agreements**

The Participating Agencies (PAs) and the City of San Diego (the City) are responsible for the “retail” wastewater collection operations within their respective jurisdictions. The PAs also send collected wastewater through large City-owned trunk lines (the Municipal System) to the City’s Metropolitan System for treatment and disposal. Transportation of wastewater through the City’s Municipal System to the Metropolitan System is facilitated by 11 separate transportation agreements, each between the City and an individual PA. Each PA is charged individually for such transport, utilizing a per gallon/per mile/per day rate that is intended to recover the PAs’ proportionate share of operations and maintenance expenses for the Municipal System.

Additionally, each PA contributes a proportionate share of capital improvement funds for improvements or rehabilitations to the specific infrastructure through which that PA's flows are transported.

### **Required Specific Legal Authorities**

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

#### **The City of San Diego Municipal Code (SDMC) Chapter 6: Public Works, Article 4: Sewers**

Provides for the maximum beneficial public use of the City's wastewater system through adequate regulation of sewer construction, sewer use, and industrial wastewater discharges.

The ordinance provides for the regulation of sewer construction in areas within the City's boundaries, the quantity and quality of discharged wastes, the degree of waste pretreatment required, the approval of plans for sewer construction, the issuance of Permits for Industrial Wastewater Discharge, and the establishment of penalties for violation of the ordinance.

Section 64.0307 establishes that any unauthorized entering, breaking, damaging, destroying, uncovering, defacing, or tampering with any structure, equipment or appurtenance which is a part of the City's wastewater system shall be a violation of the Sewer ordinance.

#### **Regional Wastewater Disposal Agreements, Section F.1**

Requires that each Participating Agency will comply with all applicable laws, rules, and regulations including its regulatory obligations associated with the discharge of wastewater into its respective system and from such system, into the Metro System.

- Industrial Wastewater Control Program

#### **40 CFR Parts 401 –476**

The Code of Federal Regulations at 40 CFR Parts 401 – 476 implement requirements of the 1972 Federal Water Pollution Control Act (P.L. 95-217) as amended by the 1977 Clean Water Act (P.L. 95-217) and the 1987 Water Quality Act (P.L. 100-4) Act to establish National Pretreatment Standards for discharges of industrial wastes.

The regulations provide for delegation of administrative and enforcement responsibilities to states and by states to local jurisdictions. California has an EPA-approved NPDES program, and has delegated to the State Water Resources Control Board the responsibility for administering and enforcing National Pretreatment Standards, and other standards or prohibitions established by state or local laws as long as the State or local requirements are not less stringent than any set forth in National Pretreatment Standards, or any other requirements or prohibitions established under the Clean Water Act. The SWRCB and EPA have further delegated

Pretreatment Program administrative and enforcement responsibilities to the City of San Diego through requirements established in RWQCB Order No R9-2017-0007, NPDES Permit No CA0107409 for the Point Loma Treatment Plant, and in RWQCB Order No R9-2013-0006, NPDES Permit No CA0109045 for the South Bay Water Reclamation Plant.

### **San Diego Municipal Code**

The San Diego Municipal Code establishes requirements and provides authority necessary to implement the Pretreatment Program required by the NPDES permits.

SDMC Section 64.05 requires that any person, municipality, sanitation district, or governmental agency desiring to discharge industrial waste into a public sewer, which may interfere with the operation and maintenance of the sewer system or with the wastewater treatment facilities, shall obtain a permit to discharge wastes into the system from the City.

Industrial User Discharge Permits are issued, administered, and enforced by the Industrial Wastewater Control Program. Permits include applicable federal categorical pretreatment discharge standards and requirements, local limits, and general and specific prohibitions.

SDMC Section 64.0501 establishes that “the Permit for Industrial Wastewater Discharge or Discharge Authorization shall require compliance with applicable National Pretreatment Standards and requirements, State discharge requirements, and local limits and requirements. It is unlawful to discharge industrial wastewaters in excess of the quantity or quality limitations set by the Permit for Industrial Wastewater Discharge or Discharge Authorization.

SDMC Section 64.0511 requires that each permittee shall provide protection from non-routine, episodic discharges of prohibited materials or other substances regulated by SDMC Division 5, including but not limited to an accidental spill or a non-customary batch discharge.

SDMC Section 64.0512 sets forth general and specific prohibitions which apply to each User introducing pollutants into a Publicly Owned Treatment Works, whether or not the User is subject to other national pretreatment standards or any national, state, or local pretreatment requirements. See Illicit Discharges and Inflow/Infiltration Prevention, below, for a detailed list of specific prohibitions.

SDMC Section 64.0513 requires that the Industrial Wastewater Control Program shall develop, apply, and enforce specific limits or Best Management Practice Requirements as necessary to implement the General and Specific Prohibitions; such limits are termed “Local Limits” and are enforceable as Pretreatment Standards.

SDMC Section 64.0511 requires that each permittee shall provide protection from non-routine, episodic discharges of prohibited materials or other substances regulated by SDMC Division 5, including but not limited to an accidental spill or a non-customary batch discharge.

### **Regional Wastewater Disposal Agreements, Section F.3**

Requires that each Participating Agency will insure that all industrial users of its wastewater system are regulated by an effective industrial pretreatment program that conforms to all applicable laws, rules, and regulations, and that is acceptable to the City.

### **Interjurisdictional Pretreatment Agreements**

The City has entered into Interjurisdictional Pretreatment Agreements (IJAs) with each Participating Agency comprising the Metro System. Condition (1) of these agreements require each Agency to adopt and diligently enforce an ordinance which conforms to the minimum legal requirements contained in the Federal Pretreatment Regulations (40 CFR Part 403) and which incorporates any other legal authorities necessary to implement procedures outlined in the IJA or in the Federal Pretreatment Regulations. Condition (3) requires that each PA adopt amendments to ordinances when necessary to ensure the effective administration and operation of the pretreatment program. Condition (4) requires that each PA shall adopt, as part of its ordinance, and enforce specific discharge limits at least as stringent as the specific discharge limits established in the City of San Diego ordinance. Condition (10) allows for a service agreement providing the City of San Diego with the legal authority and responsibility for performance of technical and administrative activities necessary for implementation of the pretreatment program within the PA; at this time, the City of San Diego implements the pretreatment program in all PAs.

### **Illicit Discharges and Inflow/Infiltration Prevention**

SDMC Section 64.0512 incorporates the Federal General and Specific Prohibitions for discharges to sewer set forth at 40 CFR 403.5. These General and Specific Prohibitions apply to all users of the Metropolitan Sewerage System. A User may not introduce into a public sewer which directly or indirectly connects to the City's wastewater system any pollutant which causes pass-through or interference. Specifically prohibited discharges include, but are not limited to: matter which may cause fire or explosion; toxic matter in quantities that could cause acute health and safety problems; matter which will cause corrosive damage; solid or viscous substances or other matter of such quality, size, or quantity that it may cause obstruction to flow in the sewer; rainwater, storm water, groundwater, and any other uncontaminated water; matter having a temperature higher than 150 degrees Fahrenheit; radioactive matter, except in conformance with CA Radiation Control Regulations; and trucked wastes, except at the City's designated dump site.

Currently, however, the City of San Diego has installed and operates several dry weather storm water diversion systems to ensure that pollutants present in dry weather urban runoff will not reach receiving waters. During wet weather, the dry weather flow diversion ceases and storm water is handled by the storm water drainage system.

## **Regional Wastewater Disposal Agreements, Section F.2**

Requires that each Participating Agency will minimize to the maximum extent practicable, the infiltration and inflow of surface, ground or storm waters into its respective wastewater systems. Each Participating Agency has included a specific prohibition in its governing legislative authority. Furthermore, Industrial User Discharge Permits issued to Users in Participating Agencies pursuant to Interjurisdictional Pretreatment Agreements specifically prohibit the discharge to the sanitary sewer of any rainwater, storm water, groundwater, street drainage, subsurface drainage, roof drainage, yard drainage, water from yard fountains, ponds or lawn sprays, or any other uncontaminated water.

### **(b) Require that sewers and connections be properly designed and constructed.**

SDMC Article 4: Sewers, Division 4: Construction, Maintenance, Funding, and Use of Wastewater Facilities establishes at 64.0400 that it is a misdemeanor for any person to connect any pipe on private property with any pipe in the street that is connected with the public sewer of City, or to construct any sewer in City, without first obtaining a permit from the City and provides that all connections shall be installed under City supervision. Application must be made in writing to the City, by the owner of the property, or his agent. A permit must be obtained prior to the installation of any plumbing fixtures.

SDMC Section 64.0401 establishes that only employees, contractors, or maintenance workers of the City may construct or cause to be constructed, or alter or cause to be altered, any public sewer, lateral sewer, house connection or industrial connection to sewer, or wastewater pumping station, within the City where existing or proposed wastewater flows will discharge directly or indirectly to the City's public sewer without first obtaining approval of wastewater facility construction plans from the City. The applicant must submit to the City for approval, construction plans and such specifications and other details as required to describe fully the proposed wastewater facility. The plans shall have been prepared under the supervision of and shall be signed by an engineer of suitable training registered in the State of California.

ORDINANCE NUMBER O-20897-3, passed on January 18, 2018, adopted the 2016 California Plumbing Code, with state and local amendments. Service connections must be designed and constructed to meet the 2016 California Plumbing Code, as adopted.

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

The City does not maintain private lateral sewer lines on private property or in easements or encroachments. Property owners are responsible for maintaining approved lateral installations. Engineering Branch, Field Engineering Division staff, performs site inspections during construction of all approved laterals in the public right-of-way.

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

SDMC Section 64.0512 (4) specifically prohibits the discharge to the sewer of “any solid or viscous substance or other matter of such quality, size, or quantity that it may cause obstruction to flow in the sewer or be detrimental to proper wastewater treatment plant operations.

These objectionable substances include, but are not limited to, asphalt, dead animals, offal, ashes, sand, mud, straw, industrial process shavings, metal, glass, rags, feathers, tar, wood, whole blood, paunch manure, bones, hair and fleshings, entrails, fatty acids, grease and oil, paper dishes, paper cups, milk containers, or other similar paper products, either whole or ground.

SDMC Section 64.0512 (8) prohibits fats, oils, and greases of animal or vegetable origin in a concentration that exceeds 500 mg/L.

SDMC Section 64.0512 (19) prohibits petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through.

As discussed earlier, the general and specific prohibitions set forth at SDMC 64.0512 apply to all users of the sewer system. They are also included in all Industrial User Permits issued for industries located within the City of San Diego and in the Participating Agencies.

### **Food Establishment Wastewater Discharge Program**

SDMC Article 4; Sewers, Division 7: The Food Establishment Wastewater Discharge program provides that (non-residential) facilities engaged in preparing food for consumption by the public desiring to discharge wastewater into the public sewer shall obtain a permit to discharge known as a permit for Food Establishment Wastewater Discharge (FEWD permit).

SDMC Section 64.0708 establishes that all permittees shall be required to install an approved type grease pretreatment device in the waste line leading from the food preparation area, or from sinks, drains, appliances, and other fixtures or equipment used in food preparation or cleanup where grease may be introduced into the sewerage system. Such grease pretreatment devices shall be installed to remove grease from wastewater and shall be maintained in efficient operating conditions by periodic removal of the accumulated grease. No such collected grease shall be introduced into any drainage piping or public sewer.

Each permittee shall also be required to provide a collection drum or container for the purpose of physically segregating oils, greases and greasy solids. Permittees shall establish procedures for personnel to practice maximum segregation of oils, greases, and greasy solids to the collection drum or container prior to washing and other water cleaning which goes into sewers. The permittee shall be responsible for the proper removal and disposal by appropriate means of the material captured from either grease pretreatment devices on wastewater lines or the collection drum for segregating oil, greases, and greasy solids.

#### **(e) Enforce any violation of its sewer ordinances.**

SDMC Section 64.0504 establishes that the conditions of Industrial Wastewater Discharge Permits shall be uniformly enforced by the City in accordance with the ordinance, and applicable

Local, State, and Federal regulations. The City of San Diego ensures compliance with permit requirements and general and specific prohibitions by taking administrative enforcement actions consistent with the Program's EPA-approved Enforcement Response Plan (ERP) in the event of non-compliance. The ERP was submitted to EPA On December 15, 1993.

The ERP describes criteria and other considerations for responding to violations of pretreatment regulations and discharge standards in a consistent and timely manner. The ERP provides for a range of enforcement responses including, but not limited to: Notice of Violation, administrative orders, permit suspension, permit revocation, sewer service termination, and / or referral for civil or criminal prosecution.

SDMC Section 64.0710 provides for penalties for violation and civil liability related to misdemeanor discharges of wastewater in any manner in violation of SDMC Article 4, Division 7.

SDMC Section 64.0301 establishes penalties for Violations of Chapter 6, Article 4: Sewers, and declares discharges of wastewater in any manner in violation of the ordinance to be a public nuisance and a misdemeanor. The section provides for relief through Injunction, Liability for Costs of Damage, Termination of Service, Civil Penalties not to exceed \$2,500 per day per violation; and Criminal Penalties in the amount of \$25,000 per day per violation or imprisonment for not more than one year, or both.

SDMC Division 8 of Article 2 of Chapter 1 governs the administrative assessment of civil penalties for violations of the Municipal Code and applicable state codes. Section 12.0803 (a) provides that any person violating any provision of the SDMC may be subject to the assessment of civil penalties pursuant to the administrative procedures provided in Sections 12.0804 through 12.0810 of Division 8. Section 12.0803 (b) provides that each and every day a violation of any provisions of the SDMC exists constitutes a separate and distinct violation. Section 12.0803 (c) provides that civil penalties may be directly assessed by means of a Notice and Order issued by the Director or affirmed by an Enforcement Hearing Officer. Civil penalties may be recovered by assessment of an Enforcement Lien or subsequent legal action brought by the City Attorney. Section (d) provides that civil penalties for violations of any provision of the Municipal Code or applicable state codes shall be assessed at a daily rate determined by the Director or Enforcement Hearing Officer. The maximum rate shall be \$2,500 per violation. The maximum amount of civil penalties shall not exceed \$250,000 per parcel or structure for any related series of violations. The Industrial Wastewater Control Program issues 2 types of Notice and Orders: Compliance Orders, and Penalty Orders.

Participating Agencies: Interjurisdictional Pretreatment Agreements provide that any inspector of the City of San Diego may enter and inspect at any reasonable time any part of the sewer system of the Participating Agency. The right of entry and inspection shall extend to public streets, easements, and property within which the system is located. Additionally, inspectors of the City of San Diego shall be permitted, as appropriate, to enter onto private property to inspect



industrial waste dischargers. When, based on the Program's approved Enforcement Response Plan, the Industrial Wastewater Control Program determines that an Administrative Penalty Notice and Order is appropriate, the Program prepares the Penalty Order and submits it to the Participating Agency's legal staff for issuance under the Agency's letterhead and collection.

**References**

City of San Diego Charter: Section 2; Section 26.1 - <https://www.sandiego.gov/city-clerk/officialdocs/legisdocs/charter>

Regional Wastewater Disposal Agreements

San Diego Municipal Code - <https://www.sandiego.gov/city-clerk/officialdocs/legisdocs/muni>

Interjurisdictional Pretreatment Agreements

## IV. OPERATION AND MAINTENANCE PROGRAM

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

The City has an effective operations and maintenance program that incorporates preventive and predictive maintenance strategies as well risk-driven repair, rehabilitation and replacement to manage system risk resulting in an sewer spill rate in the sewer system of less than 1.4 sewer spills per 100 miles of sewer pipelines per year over the last 2 years. The City's operations and maintenance program meets the requirements of the WDR and is recognized as one of the leading maintenance programs in California by the California Water Environment Association's Collection System Committee. The operation and maintenance program is monitored and updated as system performance changes.

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

A comprehensive set of sewer maps show all the features of the City's sanitary sewer systems. These maps have been converted to Geographic Information System (GIS) maps and are the basis for Environmental Systems Research Institute, Inc. (ESRI) based electronic files that can be used in the field for locating pipelines, maintenance holes, service connections and other features of the City's systems. Modern state-of-the-art customized electronic GIS maps of the entire sanitary sewer system and other information layers are actively used in system management, work prioritization, and management decisions. The maps are routinely updated to include new or rehabilitated sewers. The Public Utilities Department and Public Works Department are responsible for providing as-built information to the Water Department's Mapping Group for updating the maps on a continual basis.

The ESRI-based SHARQ and SAP software products are easy-to-use desktop applications that combine the power of electronic mapping with useful layers of data, linked databases and reports. This mapping is a valuable data source for field locating utilities, avoiding damage and service disruption. These software applications also are used for initial planning studies to locate potential conflicts to new construction or rehabilitation. The City of San Diego is planning a migration of these desktop computer applications to new SAP-based software within the next year. The Public Utilities Department utilizes GIS-based stormwater conveyance facility maps on-line on an as-needed basis. These GIS-based stormwater conveyance maps are provided by the Transportation and Storm Water Department

- (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;**

## **Collection System Characteristics**

The City operates and maintains a very large wastewater sanitary sewer system with the following characteristics:

- Population Served = Approximately 1.3 million
- Service Area = Approximately 342.4 square-mile service area
- Length of Sewer Mains = Approximately 3198 miles
- Number of Maintenance Holes = Approximately 61,234
- Number of Pump Stations = 73

In addition, there are about 280,000 privately-owned sewer laterals with a total length of more than 1500 miles. The City also provides wastewater conveyance and treatment services to 15 satellite agencies under contractual agreements but is not responsible for those agencies' sewer system management.

## **Information Systems Supporting Maintenance Program**

The Public Utilities Department's Wastewater Collection Division's computerized maintenance management system (CMMS) software and Standard Operating Procedures (in concert with equipment-specific operation and maintenance manuals) guide the frequency of sewer cleaning and maintenance of pump stations and equipment. Tasks and their frequency are determined based on operation and maintenance experience, past performance, manufacturer's recommendations and site-specific conditions. Scheduled and completed tasks are catalogued and tracked by work orders in SAP, FEWD scheduler tool Salesforce, and Sewer History and Research Query (SHARQ). The maintenance program includes preventive, proactive, predictive, and corrective maintenance; maintenance engineering; and quality control.

These software applications are used to manage work, track warehouse parts, and streamline maintenance related purchases. The Wastewater Collection Division also uses Global Positioning System (GPS) devices on its maintenance vehicles to enhance maintenance activities.

## **Gravity Sewer System Preventive and Proactive Maintenance**

The City has a proactive and preventive maintenance program for its sewer system. Two centralized maintenance yards are strategically located, - one in the Kearny Mesa area of the City and the other one in the Chollas area, south of I-8 - to improve the City's ability to service and respond to complaints in these areas by reducing travel time. Preventive maintenance is focused on critical and problematic areas. Problem sewers are identified, prioritized and scheduled for maintenance based on a comprehensive review of the maintenance history and system characteristics of all the sewers in the City including spills, blockages, excessive maintenance, age, material, condition, etc. Maintenance includes high velocity sewer flushing,

bucketing and sailing, and mechanical and manual rodding of sewers. The City's sewers are classified into two groups: trunk sewers (greater than 15 inches in diameter) and secondary sewers (15 inches or smaller in diameter). The City's sewers are maintained either on a 5 year cycle (System-wide Cleaning Program) or on a cycle of 24 months or less (Accelerated Cleaning Program), depending upon the individual maintenance history of each pipe. The City utilizes a semi-automated decision-support logic for optimizing cleaning frequencies based on the severity of cleaning findings and other information. This decision-support logic result is reviewed and updated by City staff. Maintenance hole inspections are also put on accelerated inspection programs based on previous findings typically with 3 to 12 month frequencies. Siphons are typically cleaned by contractors.

### **Non-Right-of-Way Maintenance**

The City has a robust preventive and corrective maintenance program for gravity sewer mains located in the City's non-right-of-way areas (NROW). The City has invested heavily in the development of a highly capable internal workforce dedicated to establishing access to NROW sewer maintenance holes as well as cleaning, inspection and corrective maintenance of NROW mains and maintenance holes. NROW maintenance crews have specialized equipment for performing NROW maintenance in canyons. The following list presents typical canyon preventative maintenance:

- Flushing and rodding sewer mains in the Canyon using a 4x4 Rodding Truck or flushing equipment.
- Cleaning large diameter sewer mains (18 inches to 24 inches).
- Performing confined space entries.
- Performing trail maintenance: removing vegetation from the Canyon Access trails and from around the maintenance holes.
- Replacing sewer maintenance hole frame and covers (24 inches and 36 inches).
- Working with the Environmental Section on long-term Canyon Access projects such as cutting in new access roads and improving old ones.
- Various additional projects as needed such as repairing walking trail improvements or repairing the canyon with Erosion Control including natural wood-chipping or mulching and hydroseeding after a water main break or other construction project.

### **Inspection of Sewers Associated with a Sewer Spill**

All problem sewers are inspected as soon as possible, usually within 24 hours after the initial occurrence of a spill including upstream and downstream pipes if appropriate, by closed circuit television (CCTV) to identify any necessary repairs or special, additional maintenance needs.

## **Sewer Spill Investigation and Root Cause Analysis**

Flow monitoring and CCTV inspection records are reviewed to identify deficiencies. Sewers that exhibit high flow levels or operational failure are identified. These may trigger further reviews to determine cause and/or immediate or accelerated corrective actions. Priorities and schedules are set based on the severity of the problem. The City has a pilot program to evaluate flow level maintenance hole covers and is piloting flow echo technology for maintenance hole wastewater level monitoring.

## **Proactive Maintenance Program**

In addition to the preventive maintenance program, the City implements a proactive maintenance program where “non-problem” sewers are also scheduled for maintenance and cleaning, but on a less frequent basis. The City’s proactive maintenance program provides cleaning and maintenance of the “non-problem” secondary sewers at least once every five years. Also, the City has developed and implemented a system-wide five-year maintenance hole inspection program.

Maintenance hole inspections are documented in maintenance hole inspection books.

## **Cleaning Quality Assurance and Quality Control**

The City implements a quality control/quality assurance test designed to examine the effectiveness of cleaning. After cleaning a sewer, a sampling of pipes are inspected by closed circuit television (CCTV) to ensure that cleaning has restored the flow area of the sewer to at least 95 percent of the pipe diameter. Any sewer that fails the test is re-cleaned and the crew is retrained as necessary on proper procedures. Personnel-related actions are taken on an as-needed basis.

## **Fats, Oils, and Grease (FOG) Cleaning**

Spills caused by blockages from FOG are monitored and reviewed for location and cleaning frequency. The City has increased the cleaning in sewers with repeated FOG-related blockages or spills. A more detailed description of the City’s FOG Program can be found in Section 7.

## **Root Control Strategy**

In 2010, the City implemented the use of more efficient mechanical main cleaning tools and equipment, and discontinued the use of chemical root control based on improved effectiveness of main cleaning techniques. This mechanical root control strategy has been successful at reducing root-related sewer spills in the wastewater collection system.

## **Odor Control Strategy**

The City investigates all complaints of bad sewer odors and employs a chemical odor control program to deal with noxious sulfide-generated odors in certain neighborhoods. This program

entails analyzing the best strategies to resolve the odor complaint, which includes injecting chemicals (Bioxide, Alkegen, ferric chloride, or hydrogen peroxide) at key locations, reducing the hydrogen sulfide (H<sub>2</sub>S) levels (source of the foul odors) in sewers. Ferrous chloride is used at Pump Station No. 1, North City Water Reclamation Plant, Penasquitos Pump Station, Pump Station No. 65, and East Mission Gorge Pump Station. Ferric chloride and hydrogen peroxide are used at Pump Station No. 2. The City's program has been effective in reducing the H<sub>2</sub>S levels in those key areas. The City also utilizes carbon odor scrubbers on an as-needed basis along several sewers in odor-prone, "hot-spot" areas. The City also seals sewer maintenance holes in specific areas where odors can be problematic. In addition, the City also installs collector sewer mains and replumbs sewer laterals to the collector mains or installs flapper valves on the sewer laterals to prevent sewer gases from travelling back up into sewer laterals and into resident's homes. Overall, the City is continuing to strive to be on the cutting edge of odor control efforts through the combined use of technology, engineering, and chemical solutions.

### **Pump Station and Force Main Maintenance**

Pump Station Operation and Maintenance is performed by WWTD and WWC. WWTD operates and maintains eight (8) wastewater collection system pump stations as shown in the following list:

#### **Pump Stations Operated and Maintained by Wastewater Treatment Division:**

- Pump Station No. 1 (Metro)
- Pump Station No. 2 (Metro)
- Grove Avenue Pump Station (GAPS) (Metro)
- Otay River Pump Station (ORPS) (Metro)
- East Mission Gorge Pump Station (EMG) (Municipal)
- Peñasquitos Pump Station (PPS) (Municipal)
- Pump Station No. 65 (Municipal)
- Pump Station No. 64 (Municipal)

The list identifies in parentheses which WWTD pump stations are funded by Metro and which are funded by Municipal funding sources. The remainder of lift stations are all operated by WWC and are funded by Municipal funding sources.

Any pump station within the fence line of a Wastewater Treatment Facility or Reclamation Plant and force mains or outfalls leaving a Wastewater Treatment Facility or Reclamation Plant are not included in this SSMP. These facilities include:

- Point Loma Wastewater Treatment Plant – outfall and digested sludge force main

- Metro Biosolids Center - centrate force main
- South Bay Water Reclamation Plant – outfall and blended sludge force main
- North City Water Reclamation Plant
- Future North City Advanced Water Purification Facility

### **Pump Station Site Visits and Operational Data Review**

Pump Station No. 1, 2, and 64 are staffed full time. All other pump stations are visited at least weekly by either WWTD or WWC pump station crews. In addition, operational data for all pump stations are reviewed continuously through SCADA alarms which are overseen by COM-C. SCADA alarms include flow rate, pumping pressure, wet well levels, motor overload and overheat, and check valve failure.

### **Information Management Supporting Pump Station Operation and Maintenance**

SAP software is used by both WWTD and WWC for all pump station asset management and preventative maintenance activities. Preventative maintenance frequencies have been established in SAP on pumps and appurtenances. These frequencies are modified and adjusted as conditions and performance changes and may include updates based on root cause analysis of equipment failure, operator input and maintenance observations, equipment failure rate and manufacturer recommendations.

### **Site-Specific Pump Station Response Plans**

The City has developed site-specific response plans to improve sewer spill response in the case of pump station failure. Each site-specific response plan identifies the location where the sewage will spill from the collection system or pump station, bypass pumping strategy, the amount of flow requiring bypass during average and peak flows during both wet and dry weather, and the location or where to place the bypass pumping inlet and outlet.

### **Constructed Spill Locations**

In four locations, the City has constructed facilities to increase resiliency of pump station operation by protecting the pump station equipment in the case of a pump station failure. Identified spill locations for large pump stations include the San Diego River, National City at 7<sup>th</sup> Street, Sweetwater and Otay River. These locations are visited on a semi-annual basis by WWTD.

### **Pump Station Back-Up Power**

Almost all of the City's 73 sewage pump stations have built-in backup emergency generators, back-up emergency storage, redundancy or response procedures in place to address pump station

failures. The 8 pump stations operated by WWTD include 7 pump stations with back-up generators. The pump station without a back-up generator, East Mission Gorge Pump Station, has a limited flow gravity by pass and a process in place to monitor when the pump station is turned on in high flow conditions. The four (4) pumps at East Mission Gorge Pump Station are exercised weekly for reliability. At other critical flow and pump station locations in the system, pre-rainy season and post-rainy season data is monitored. WWTD maintains a monthly call out list with contacts for emergency response for 24/7 on call. WWC also has 24/7 standby personnel.

### **Comfort Pump Stations with Automatic Shut-Off**

There are several comfort station pump stations for public bathrooms located in Mission Bay Park that utilize a solenoid valve to shut off the water supply to the comfort station whenever a power failure or sewer pump failure occurs.

### **Predictive Maintenance Program for WWTD Pump Stations**

The City has a mature predictive maintenance program to perform reliability centered maintenance and optimization for pump station equipment including odor control. The City surveys equipment using non-destructive testing technologies and analyzes data to assist with prioritizing projects based on historical records and testing. Non-destructive testing performed by City staff includes oil analysis, vibration testing, infrared thermography, carbon testing, and laser alignment. The AMS Machine Health Manager software is used for oil and vibration data analysis and additional software is used for infrared analysis. The City is currently performing predictive maintenance on the 8 large pump stations operated and maintained by WWTD. Vibration and other analyses are performed on smaller pump stations on an ad-hoc basis when issues are identified. Contractors and consultants utilized for training have Category 4 certifications by the Vibration Institute and contractors and consultants utilized for analysis have Category 4 or 2 certifications by the Vibration Institute. Reports are developed and provided to facility chief operators, facility senior operators, safety consultants and the WWTD Deputy Director. Reports include condition scoring to identify level of risk. Facility chief operators and senior operators are responsible for deciding which work is needed and creating work orders. The program has resulted in improved pump station performance with these stations experiencing fewer identified issues over time. In addition to predictive maintenance, the City routinely replaces and rotates equipment to increase pump station reliability and for predictive maintenance testing purposes.

### **Force Main Air Relief Valve Preventive Maintenance**

The City has an effective program for performing force main air relief valve inspection and maintenance. See Section 4 (c) for additional information.



## **Construction-Related Spill Prevention**

The City of San Diego has issued construction contract provisions that require construction contractors to prepare and utilize sanitary sewer spill plans and procedures when they perform City contract work. These provisions further require that flow control requirements be explained to potential bidders at the pre-bid meeting. The contractor is required to provide an Emergency Response Plan for controlling sewage flow during the construction. The City of San Diego's Engineering Branch of the Public Works Department reviews and approves the contractor's Emergency Response Plan prior to start of construction.

A map of all sewer construction projects is periodically updated by the Engineering Branch staff. Contact information for each ongoing construction project, including the names and telephone or pager numbers of the inspector, the inspector's supervisor and contractor's contact person, is available to all City Department's staff.

Engineering Branch staff communicates the City's "no-spills" policy and project plans and specifications to the contractor, enforcing plans and specifications and ensuring the contractor responds appropriately in case of emergencies, notifying the contractor of its responsibility to prevent spills and respond with quick mitigating action if a spill does occur. A City inspector is required to be present on-site to inspect construction project-related sewage bypass equipment prior to the start of construction activities.

## **Fecal Contamination Investigation**

The PUD actively partners with the City's Storm Water Division as part of the Tiger Team to investigate sources of human fecal contamination in the Municipal Separate Storm Sewer System (MS4). The City's Storm Water Division Policy and Enforcement Unit has the responsibility of leading the source investigation. PUD attends Tiger Team meetings, providing information or services, supports identifying potential sources in the area of investigation, and supports clean-up activities and abatement. There are four prioritized areas for investigation. These prioritized areas include the San Diego River Morena Outfall, San Diego River Murphy Canyon Creek, Tourmaline, and Tecolote Creek. The Tiger Team has developed an SOP for the Tiger Team. The SOP includes objectives, Tiger Team organization and responsibilities, and guidelines for investigation.

## **Reference**

Tiger Team SOP, Enforcement Standard Operating Procedures Manual, Policy and Enforcement Unit (2016)

- (c) Develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of**

**sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short- and long-term plans plus a schedule for developing the funds needed for the capital improvement plan;**

The City has developed effective risk based approaches and methodologies to perform condition assessment of wastewater collection system infrastructure and prioritized remediation measures to address risk through monitoring, repairs, and capital improvement planning. These programs meet the requirements of the WDR. The following includes a description of these approaches for each type of infrastructure in the collection system.

### **Large Diameter Trunk Sewers, Interceptors, Force Mains and Outfalls**

The City developed a comprehensive condition assessment plan for large-diameter trunk sewers, interceptors, force mains and outfalls located within the City's service area. The plan serves as a tool for the initial assessment and long-range planning of the City's wastewater system infrastructure.

The main objectives of the condition assessment plan are to:

1. Identify large-diameter pipelines (including trunk sewers, interceptors, and outfalls) and force mains that are due for first time assessment or reassessment and those with special concerns (old age and past spills).
2. Develop an implementation schedule for pipelines which have been identified for condition assessment.
3. Develop a budget for the assessment program and for future sewer rehabilitation Capital Improvement Projects.

Facilities identified for assessment are as follows:

- Trunk sewers
  - Large-diameter (42 inch and larger) sewer pipelines
  - History of no inspection or inspected more than 5 years ago
  - Proximity to waterways and right-of-way
  - History of spills.
- Force Mains:
  - Metro and WWTD Pump Station Force Mains

- Point Loma Digested Sludge Pipeline – Note: this is not a collection system force main.
- Ocean Outfalls
  - Point Loma Ocean Outfall – Note: this is not a collection system sewer.
  - South Bay Ocean Outfall – Note: this is not a collection system sewer.

Gravity pipelines identified for condition assessment are predominantly assessed by Closed-Circuit Television (CCTV), manned inspections, or other suitable inspection technologies and methods. In contrast, the condition assessment of force mains is more complex. Although these inspections tend to be more complicated, several different inspection methods are available. Among them are: laser, sonar, ultrasonic profiling, ground penetrating radar, leak detection, CCTV and others. The specific method of inspection selected for each pipeline depends on several factors such as pipeline material, diameter, accessibility to the pipeline, and flow conditions.

The City prioritized the pipelines with the highest risk for assessment sooner than lower risk pipelines. The large-diameter trunk sewers identified for condition assessment were prioritized according to diverse types of risk criteria for likelihood and consequence of failure such as: installation year (pipe age), pipe location (sewers in proximity to waterways or other environmentally sensitive areas), inspection history, and trunk sewer capacity. The condition assessment for the force mains is conducted in conjunction with the next scheduled pump station condition assessment.

The City is nearing completion of these assessments. The results of these inspections are evaluated and infrastructure identified for remediation is included in the business case evaluation (BCE) and CIP planning process. See Section 8 (c) for additional information on the BCE and CIP planning process.

### **Reference**

Condition Assessment Plan for Large-Diameter Trunk Sewers, Interceptors, Force Mains, and Outfalls (February 2010).

### **Gravity Sewer and Maintenance Hole Condition Assessment**

The gravity sewer main and maintenance hole condition assessment program includes condition assessment for pipelines ranging in size from 6 to 39 inches in diameter and condition assessment of maintenance holes. The City is systematically inspecting and assessing this infrastructure.

Maintenance holes are typically assessed as part of pipeline CCTV inspection and routine maintenance. The City established a CCTV inspection program for inspecting pipelines which employs contractors to perform CCTV inspections of different areas of the collection system. The CCTV inspection program has been beneficial and instrumental in assessing condition of

sewer pipelines, updating City GIS databases, creating CIP and rehabilitation contracts, and reducing sewer spills. The reports submitted by the CCTV contractor include digital videos, an access database with inspection records, and an electronic report detailing the sewer pipe and manhole observations. The City utilizes a semi-automated decision process based on CCTV inspection and other data to make an initial recommendation for remediation including maintenance, repair and rehabilitation needs of the sewer pipelines. Maintenance holes are evaluated using another decision logic to identify maintenance holes for maintenance or remediation. Condition Assessment Reports are developed after analysis by City staff and include an updated remediation decision. The Condition Assessment Reports are developed on a regular basis and the final remediation decisions are identified for planning and execution.

The estimated remaining life (ERL) of pipelines is calculated based on the pipe material, age of the pipe, and factors including spill history, cleaning history, and based on the defect scoring and remediation recommendations following a video inspection. As a result of the ERL analysis, approximately 60 miles per year of CCTV inspection was selected in order to include televising each segment at least once within 25% of its estimated remaining life.

In addition to the above gravity sewer inspection program, PUD WWC CCTV crews perform CCTV inspection of the system as part of post-failure sewer spill inspections, post-repair inspections, cleaning quality control CCTV, pre-scheduled cleaning CCTV for cleaning optimization, FEWD program referrals, ad-hoc requests from Engineering Branch or other departments. All CCTV is uploaded to SHARQ and is available for EPM to evaluate as part of their condition assessment process. WWC keeps hardcopies on DVD of all CCTV videos completed by WWC crews. All databases are uploaded to the U: drive. Post-failure inspections are sent to Maintenance Planners for review. Maintenance Planners determine whether repairs will be performed by WWC crews or replacement or rehabilitation will be planned and executed by the Engineering Branch.

## **Reference**

Condition Assessment Program: Wastewater Condition Assessment – Pipelines & Maintenance holes (January 2017).

## **Sewer Pump Station and WWC Force Main Inspection**

City sewer pump stations are categorized as “WWTD” or “WWC” operated and maintained pump stations as described in Section 4 (b).

The City performs pump station condition assessment and performance testing periodically based on pump station equipment age and feedback from pump station maintenance staff. The City utilizes a mix of internal staff and consultant support to perform condition assessment and performance testing.

Condition assessments have been performed on all WWTD and WWC pump stations. In addition to the predictive maintenance analysis described in Section 4 (b), condition assessments on

WWTD pump stations are typically performed through individual condition assessment analysis of entire pump stations or components of pump stations. These condition assessments are initiated based on operator input, failure analysis, pump station performance, and other factors and are typically executed by the Engineering and Program Management division.

Inspection and assessment of WWC pump stations is planned to be accomplished on a three to five year cycle. A report is prepared for each year, which includes recommendations for needed equipment upgrade and facility replacement projects. The City has completed one inspection cycle and the second cycle is currently in progress.

The following considerations and methodology was used to select the WWC pump stations included in the first cycle of assessment:

- Previous assessments: Pump stations with assessments completed in the past several years.
- Capital Improvement Program (CIP): Pump stations currently being or scheduled to be upgraded under a current CIP were deleted from the list.
- Pump stations scheduled for abandonment in the next year were deleted from the schedule.
- Location of the Pump Station: Pump stations located adjacent to environmentally sensitive areas, such as beaches, wetlands, or canyons were given higher priority for inclusion.

Each pump station is evaluated for the following items:

1. Pump performance: parameters of design operating point, measured operating point, and motor power usage.
2. Station capacity: measured and design station capacity are compared to existing and projected future peak wet weather flow.
3. Station compliance with key requirements of the Sewer Design Guide is assessed. Requirements such as emergency storage capacity, dual force main, standby power requirement, ventilation requirements are assessed.
4. General station structural and equipment conditions and operational problems.

Based on the findings of the evaluation, improvements and corrective actions are recommended for each pump station evaluated and incorporated into a BCE and the CIP or repaired by City staff. See Section 8 (c) for additional information on the BCE and CIP planning process.

Most WWC force mains are dual force mains or will be updated to dual force mains in the near future which provides redundancy. These WWC force mains are also predominantly PVC which is a higher performing material. The City inspects WWC force main air release valves quarterly and replaces force main air release valves during inspection with clean and properly operating air

release valves. The replaced air release valves are cleaned and rebuilt if needed. Pump station operation and efficiency are also reviewed to assess force main performance. Pigging was recently performed as part of a condition assessment study in 2016 of the force main for Pump Station No. 77.

Additional force main inspection is performed on an as needed basis. The City is currently evaluating new technologies for air relief valves on WWTD operated and maintained pump stations to improve performance including reduced potential for failure and reduced maintenance needs.

## **Reference**

FY 2010 Conditional Assessment of Municipal Sewer Pump Stations (June 2010).

## **Replacement and Rehabilitation**

The City has an effective process for planning rehabilitation and replacement. As a part of this planning process, structural deficiencies are identified and needed improvements are developed in coordination with hydraulic requirements and implemented systematically. The rehabilitation and replacement planning implementation entails a variety of short- and long-term activities that ensure the sustainability of the sanitary sewer system infrastructure. Repairs are identified and prioritized for City construction crews to perform in the short term. As identified above, other condition deficiencies are identified and prioritized based on risk for planning and remediation as part of the Capital Improvement Program.

Condition assessment results are coordinated with the capacity assurance master plans and a priority list of improvements is identified annually. Condition assessment results and remediation recommendations typically distinguish between repairs, rehabilitation and rebuilds vs. replacement capital improvement projects. Repairs that can be handled by City staff are incorporated into work orders and executed by City staff. Small diameter gravity sewer main (less than 40 inches in diameter) and associated maintenance hole rehabilitation is identified and executed by Public Utilities Department Engineering and Program Management staff. Replacement of small diameter gravity sewer mains and other significant capital improvement work for interceptor and trunk sewers, force mains and pump stations is executed through the Public Works Department. The typical process for execution of these projects is to develop a Business Case Evaluation (BCE) for each project and execute project planning, design and construction. A more detailed description of this process is in the System Evaluation and Capacity Assurance Section 8.

## **Funding**

The City has a schedule to develop the funding including cost of service studies to develop the funds for the capital improvements required to address sewer collection system condition and maintenance. The cost of service studies are performed at least every 5 years. In the intervening time periods between cost of service studies the Department and City reviews financial

sufficiency for the wastewater funds and determines if any proposition 218 rate updates are required. Additional information on the individual Rehabilitation and Replacement Projects are identified and described in the Capital Improvement Program. Additional information on the CIP development process is available here: <https://www.sandiego.gov/cip/about/budget>. See Section 8 (c) for additional information on Capital Improvement Program (CIP) development and funding.

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

### **Core Training Program**

Training comes under various City programs and is one of the City's SSMP implementation goals. Training includes formal classroom training, informal on-the-job and hands-on training. Training is facilitated by both City staff and by outside training consultants. Most of the internal functional and safety training is currently provided through the Public Utilities Department's Employee Services and Quality Assurance staff and Success Factors online training. Most required training is conducted through the Fall Classic sessions which are 2-day mandatory training events. Training courses are added and existing courses are modified to stay current with the rapidly changing technology and requirements, including computer-aided and online training. The training program includes the development of Standard Operating Manuals for sewer cleaning, CCTV, and repair. On-the-job cross training is actively pursued to ensure staff has a proficient working knowledge of each and every specific part of a task. City staff is cross-trained on an as-needed basis so that critical tasks can be done without interruption even when the crew members change. WWTD has set up significant training for electricians and instrumentation staff including training from manufactures, training for CA state electrical licensure, and training on motor controls and schematics.

Crews are initially trained in the proper operation and maintenance of all new major mobile equipment and facilities by the contractor/manufacturer. Written operation and maintenance manuals are used as resource material for initial start-up training as well as new staff training. Safety training is provided such as railroad safety and safety tailgates. Wastewater Collection Division supervisory staff are responsible for providing operational training on sewer cleaning equipment. Consultant trainers are periodically brought in to provide additional technical training for sewer crew members on sewer cleaning equipment. In addition, the City hires a consultant on an annual basis to conduct field and classroom training of crews, to refresh them on proper cleaning and repair methodologies and to identify areas needing improvement through field observations. CCTV contractors and CCTV inspection staff are trained and certified in a nationally recognized NASSCO PACP defect coding system.

## Confined-Space Entry Training

Staff that require Confined Space Entry training and certification are provided this training on an on- going basis. Employees are trained in hazardous materials management, as required by regulations on an on-going basis.

## Training for Large-Scale Emergencies

The City of San Diego prepares employees to respond to major emergencies and disasters and has established an Emergency Operation Center (EOC) and emergency response teams.

Emergency training exercises are conducted and documented on a regular basis. The EOC is assisted in these efforts by PUD's Department Operations Center (DOC).

## Training from Professional Associations

The City identifies training needs for staff development in its annual budget and provides adequate funding for tuition reimbursement such as for certifications. Training is also provided through various professional associations. Examples of technical training and training materials the City's collection staff might take advantage of are listed in Table 4.

**Table 4. Training Resources (Conferences, Seminars, and Courses)**

Sponsor	Event	Timeframe	References
Water Environment Federation	Collection System Specialty Conference	Periodically	<a href="http://www.wef.org">www.wef.org</a>
	WEFTEC	Periodically	<a href="http://www.weftec.com">www.weftec.com</a>
California Water Environment Association	San Diego Section	Annually	<a href="http://www.cwea.org">www.cwea.org</a>
	State Conference	April	
	Southern Regional Safety Conference	May	
	Southern Sections Collection Systems Committee	Quarterly	
Southern California Alliance of Publicly Owned Treatment Works	Collection System Committee	Quarterly	<a href="http://www.scap1.org">www.scap1.org</a>
Tri-State Conference	Annual Conference	September	<a href="http://www.tristateseminar.com">www.tristateseminar.com</a>
Southern California Collection System Committee Training and Vendor Fair	Annual Training and Vendor Fair	Fall	N/A

## References

City of San Diego and Public Utilities Department Training Materials for Fall Classic

Success Factors Online Training

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



The City maintains equipment and replacement part inventories for critical equipment and parts. Inventory and stocking levels consider frequency of use, lead time for restocking, and criticality such that stocking quantities are greater when failure rates are higher, lead times are longer and equipment is more critical. As noted previously, City crews maintain pump stations and perform repair or replacement of underground pipelines. Routine repair and replacement of underground pipelines associated with Capital Improvement Program projects are contracted out to licensed contractors who have the equipment, materials and staff to complete the work. The City maintains an electronic inventory of equipment, replacement parts, and supplies and follows a structured process to ensure an up-to-date accounting and complete inventory of equipment and replacement parts for their specific duties. PUD maintains a tool room for specialized hand and power tools. PUD personnel also have full access to City wide storerooms to procure a wide variety of consumable tools, equipment and supplies that are associated with their daily tasks.

WWTD has set up a bill of materials for pump station and force main appurtenances inventory. These bills of materials are also developed when equipment is broken down and repaired in the City's repair shop. Reviews of existing inventory through reviews of bill of materials are completed weekly through a regularly scheduled meeting. Stocking levels consider frequency of use, lead time for restocking, and criticality in that stocking quantities are greater when failure rates are higher, lead times are longer and equipment is more critical. WWC has a similar process and has complete spare parts for all pumps. The process for ensuring adequate spare parts for infrastructure is to replace a spare part each time one is used. All pump station and force main spare parts are tracked in SAP which is inclusive of critical spares.

The PUD utilizes Planning and Scheduling staff to schedule routine maintenance activities for sewer maintenance, pump station, and construction section personnel.

Parts that are needed for preventive maintenance are identified ahead of time for each specific maintenance task. Parts are secured prior to the start of preventive maintenance. Redundancy is provided for key pump station equipment. There has been little need to purchase parts through City emergency procurement measures, which attests to the City's readiness.

The City maintains equipment such as portable pumps, portable generators, traffic control devices and night lighting systems in a ready state for immediate deployment in an emergency. The City has a procedure for pre-qualifying manufacturers and equipment vendors and, in some cases, purchasing sole-source equipment to standardize equipment and parts. This additional procurement option reduces inventories, simplifies procurement procedures, and reduces training and operation & maintenance costs.

## 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;**

New sewers and pump stations are planned, designed and constructed per the City of San Diego (City) Sewer Design Guide, [www.sandiego.gov/mwwd/pdf/sewerdesign.pdf](http://www.sandiego.gov/mwwd/pdf/sewerdesign.pdf). This guide summarizes and outlines relevant City policies, applicable codes, and engineering standards for planning and design of wastewater infrastructures, which consist of new sewer mains, pump stations, force mains, and other appurtenances.

Sections include:

- Sewer System Planning
- Gravity Sewer System Design
- Easements and Encroachments
- Sewer Main Bridge Crossing Design
- Abandonment of Existing Sewer Mains, Maintenance Holes, and Easements
- Corrosion Control
- Sewer Pump Station Design Criteria and Equipment Design Guidelines

Public Utilities Department (PUD) is responsible for updating and maintaining the City’s “Sewer Design Guide” and “Approved Materials List”. The Sewer Design Guide is updated on an as needed basis to incorporate improved materials, methods, and processes. The City’s Wastewater Collection Division provides input for improved performance of system components based on experience gained in operations and maintenance. Proposed changes to design criteria are evaluated by the Sewer Design Guide Committee before implementation.

As new products are introduced, they go through a review and evaluation process by City staff or by the Standard Specifications for Public Works Construction (Green Book). Prior to adding new products to the City Approved Materials List, the City Approved Materials Committee makes a recommendation to the Public Utilities Director for approval. Once approved, the new products are then added to the City Approved Materials List. The City participates on the Green Book Committee and references applicable “Green Book” specifications as appropriate for the construction of new sewer projects.

The Engineering Branch of the Public Works Department is responsible for updating the San Diego Regional Standard Drawings and the City’s master specifications for construction projects. All City Engineering Documents and References are available online at the City’s website: <https://www.sandiego.gov/publicworks/edocref>.

The Engineering Branch is responsible for enforcing compliance with the plans and specifications for installing new sewers, pumps and other appurtenances.

All system components are designed to meet permit requirements of the various federal, state and local agencies. In addition, environmental documents are prepared to comply with the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), or both as appropriate. This process ensures that projects meet regulatory requirements and benefit from the input of all affected and interested parties including the communities.

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

The Field Engineering Division of the Engineering Branch provides inspection on all new and rehabilitated sewer and pump station construction contracts. Inspection procedures are followed to ensure that sewer system facilities are built per the plans and specifications. Inspections are conducted both at the jobsite and as required at material fabricators during manufacturing and testing. The Field Engineering Division coordinates its work with the project engineer to ensure the design criterion is met. The City issues final acceptance for projects when they have met all required performance tests as well as a field acceptance from the operational staff. City Engineering Documents and References also include standards for inspection and testing of new or remediated infrastructure.

**References**

City Approved Materials List

Standard Specifications for Public Works Construction, referred to as the “Green Book”

## VI. SPILL EMERGENCY RESPONSE PLAN

Each Enrollee shall develop and implement a spill 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 sewer spills in a timely manner;**
- (b) A program to ensure appropriate response to all spills;**
- (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 sewer spills that potentially affect public health or reach the waters of the State in accordance with the Monitoring and Reporting Program. All sewer spills shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board Waste Discharge Requirements or National Pollutant Discharge Elimination System (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 untreated wastewater and prevent discharge of untreated wastewater to waters of the United States and minimize or correct any adverse impact on the environment resulting from the spills, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.**

The City has developed an SERP documenting response protocols from receipts of calls through clean-up and reporting. The City's SERP meets the requirements of the WDR and MRP. The SERP is updated with the current information on a regular, ongoing basis. The latest version is included as Attachment of this SSMP.

## VII. SEWER PIPE BLOCKAGE CONTROL PROGRAM

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

### Background

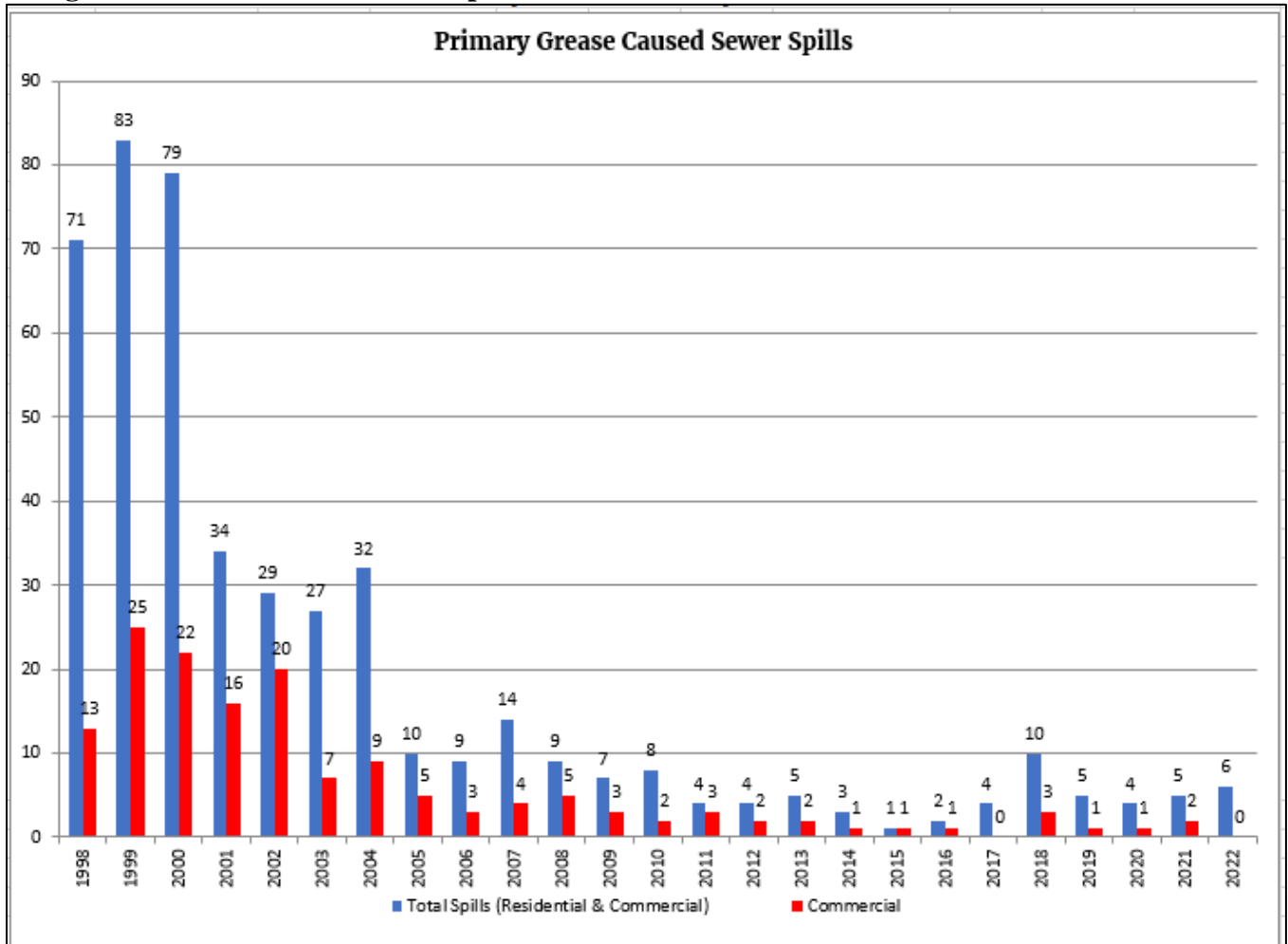
In July 1988, the Food Establishment Wastewater Discharge (FEWD) Permit Program was created following the adoption of Municipal Code, Chapter VI, Article 4, Section 64, “Food Establishment Wastewater”.

The FEWD program initially had the following goals:

1. Permits for all food establishments were to be issued no later than June 30, 1991.
2. All required grease removal equipment was to be installed no later than September 30, 1991.

The FEWD Program has continually worked to reduce fats, oils, grease, rags and debris-related sewage spills. The City has approximately 6,000 restaurants and historically had a significant number of fats, oils, grease, rags and debris-related sewer spills. Using a baseline year 1997, fats, oils, grease, rags and debris-related sewer spills had a reduction from a total of 94 FOG-related spills to 6 in the last full year of data available, 2022; or a 94% reduction as shown in Figure 2. In addition, of the 6 fats, oils, grease, rags and debris-related spills in 2020, all 6 had residential areas involved. Zero were attributable to commercial food service establishments (FSEs). This significant reduction and low count of grease caused sewer spills with commercial distributors demonstrates the effectiveness of the FEWD program.

Figure 2. Grease Caused Sewer Spills



### Sewer Pipe Blockage Control Program

The following is a description of the City's Sewer Pipe Blockage Control Program including Sub-parts (a) through (g) as provided in the State's General Waste Discharge Requirements for developing SSMP Part vii, Sewer Pipe Blockage Control Program.

**(a) An implementation plan and schedule for a public education outreach program that promotes proper disposal of fats, oils, grease, rags and debris;**

Public education outreach has been an ongoing effort, including educational videos, brochures and a postcard describing the best practices for residents to follow to help keep fats, oils, grease, rags and debris out of the sewer system. In addition, the City's Public Utilities Department maintains an up-to-date website which serves as an additional source of information to the food service industry and the community at large. General information about eliminating fats, oils, grease, rags and debris discharges into the sewer system is among the information provided on the website (<https://www.sandiego.gov/mwwd/sewerspill/grease>). The City's Communications Department also produces and broadcasts fats, oils, grease, rags and debris

Public Service Announcements daily on City TV and inserts fats, oils, grease, rags and debris brochures with water/sewer billings twice yearly. Other public outreach and education efforts include public events described below and the residential grease waste recycling collection center at the Miramar Landfill.

FEWD distributes fats, oils, grease, rags and debris postcards to all addresses within 1000 foot radius of a FOG related sewer spill within 10 working days of the event and participates in the San Diego County Apartment Association annual convention to communicate its FOG Control Program and to pass out FOG brochures. FEWD also takes names, address and the number of brochures each member needs for their condominium or apartment complex to be mailed later. In Fiscal Year 2015, in an effort to expand the Residential FOG Outreach efforts, FEWD began partnering with WWT Division and EMTS Division to form the Water Stewardship Community Outreach Team. This joint Outreach Program aims to educate the public not just about FOG issues but also about being good stewards of the wastewater collection system and of the environment as a whole. These efforts are to try to reduce the costs and strain on the collection system and treatment plant processes. In calendar year 2018, the Team participated in major public events such as Earth Fair, PETCO Park Science Fair, and the San Diego County Apartment Association Annual Conference.

**(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;**

The City does not own or operate any FOG disposal facilities. The Food Service Establishments (FSEs) must collect the waste FOG and prevent the waste FOG discharge into the sewer system by installing grease removal equipment. FSEs are responsible for the proper disposal of the collected FOG (see section (d) below for approved maintenance methods).

Local grease haulers such as Affordable Grease Pumping, Atlas Pumping Service, and Dar Pro Solutions service FSEs and remove and properly dispose of the grease. The Miramar Landfill Recycling Center is equipped to receive residential grease waste in quantities up to 30 gallons per resident disposal.

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

The City's FOG Control Municipal Code, Chapter VI, Article 4, Section 64, "Food Establishment Wastewater" effective July 1988, mentioned in Sub-part vii (a) above, provides the legal authority to prohibit FOG discharges by FSEs. To mitigate sewer spills resulting from blockages caused by FOG accumulation, the City's Wastewater Collection Division implements its Spill Response and Tracking Plan (SRTP). FEWD provides investigation of all

FOG related sewer spills and takes enforcement and corrective actions with FSEs as needed to prevent future FOG related sewer spills.

**(d) Requirements to install grease removal devices, design standards for the removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements;**

The City of San Diego’s Municipal Code Chapter VI, Article 4, Section 64, “Food Establishment Wastewater” states: “Facilities engaged in preparing food for consumption by the public...shall obtain a permit to discharge...known as a Food Establishment Wastewater Discharge [Permit]”.

“...all permittees shall be required to install an approved type grease pretreatment device in the waste lines leading from the food preparation area, or from sinks, drains, appliances and other fixtures or equipment used in food preparation or cleanup where grease may be introduced into the sewerage system. Such grease pretreatment devices shall be installed to remove grease from wastewater and shall be maintained in efficient operating conditions by periodic removal of the accumulated grease”.

Major provisions of the FOG Control Ordinance and its Rules and Regulations regarding the requirements for installing and maintaining grease removal devices are summarized below:

### **Grease Interceptor Requirements**

Gravity Grease Interceptor (GGI) and Hydromechanical Grease Interceptor (HGI) are plumbing devices that are installed in a wastewater drainage system to intercept and prohibit FOG from entering the sewer system. An HGI is a smaller grease removal device from minimum size 7gpm/14lbs to 500gpm/1000 lbs. FSEs must also gain approval for placement of HGIs from the County of San Diego Department of Environmental Health (DEH). Typically the DEH may allow the HGI to be installed inside an FSE as long as it is not in the food prep or scullery areas.

Grease Removal Equipment (GRE) installed in the City of San Diego must be an IAPMO (International Association of Plumbing and Mechanical Officials) or PDI (Plumbing and Drain Institute) approved device or must meet ASME A112.14.6 specifications. Installation of grease removal equipment must conform to the California Plumbing Code (CPC) which is enforced by the City of San Diego Development Services Department Mechanical Inspectors.

### **Variance to Allow Alternative Grease Removal Devices**

FEWD does follow the requirements of the California Plumbing Code which allows Alternative Grease Removal Devices. All FSEs plan checking to open new Food Service Establishments (FSE) or remodeling existing FSEs receive requirements to install grease removal equipment with the exception of some juice bars or other FSEs which have indicated there is no other food preparation using any amount of FOG. When an FSE plan checks with FEWD, the proposed installation of a GGI or HGI is approved or corrected depending on the grease waste line loading per the California Plumbing Code’s sizing criteria.



## Operation and Maintenance of Grease Interceptors

The City of San Diego Food Establishment Wastewater Ordinance requires that GRE (Grease Interceptors) "be maintained in efficient operating conditions by periodic removal of the accumulated grease and solid food waste". The cleaning interval varies with the amount of food preparation/clean-up activities and with the facility's housekeeping procedures. This interval must be determined by each facility but will be mandated by the City when maintenance is found to be unsatisfactory. On the back of this page are acceptable grease and oil levels for different size grease interceptors.

Two maintenance methods are approved by the City of San Diego:

1. **MANUAL REMOVAL OF GREASE.** This consists of removing the accumulated grease and oil and removing solids that have settled at the bottom. None of the removed material can be disposed of in the sewer or storm drain system. Collected material can be put in a barrel specifically designated to hold grease interceptor waste (not in the same barrel for used frying oil). Grease Interceptor waste can be disposed of in the trash (not recommended). If applicable, you must ensure that your grease recycler or waste hauler accepts grease interceptor waste. Moreover, per California Code of Regulations [CCR 27, 20200(d)(3)]: (3) liquids or semi solid waste (i.e., waste containing less than 50 percent solids, by weight) shall not be discharged to Class III landfills.
2. **PUMPING.** You may hire a pumping service to empty your GRE. If you have a grease interceptor, pump all grease, oil and food matter from each chamber and sample box, including solids or sludge at the bottom of each chamber, specifically at the bottom of all standpipes. FEWD requires a complete pumping out at each cleaning.

**BACTERIAL PRODUCTS** may help to reduce cleaning frequency. However, high temperature, high or low pH level, sanitizers and other cleaning products render them ineffective. Bacterial products may also cause the accumulated grease to 'fluff-up', or take more space in your GRE than if left alone.

**This is not a substitute for methods 1 or 2.**

**ENZYME PRODUCTS ARE NEVER ALLOWED** as they keep grease and oil suspended in water, which causes them to pass through your grease trap or interceptor. They may also contribute to the corrosion of your GRE.

**In all cases, facility operators are solely responsible for proper GRE maintenance.**

### Summary

GRE collects grease that would otherwise enter the sewer lines and cause blockages and sewer spills. Methods 1 & 2 are the best ways of disposing of this grease. **Bacteria may reduce the frequency of, but will not eliminate the need for, manual cleaning or pumping.**

A record of the dates, methods and identity of persons/company cleaning GRE must be kept at the facility and be available for review at any time. During facility inspections, all GRE will be required to be opened and will be examined for proper maintenance.

FEWD maximum grease and oil levels for grease interceptors:

Hydromechanical Grease Interceptors (HGI) (Ashland, Jonspec, Josam, Mifab, Rockford, Smith Wade, Watts, Zurn)	Maximum Depth of Grease Allowed
7gpm/14lbs	½"
10gpm/20lbs	1"
15gpm/30lbs	1 ½"
20gpm/40lbs	2"
25gpm/50lbs	2 ½"
35gpm/70lbs (includes Retroceptor)	3"
50gpm/100lbs (includes Retroceptor)	3 ½"
75gpm/150lbs	4"
100gpm/200lbs	5"
150gpm/300lbs	6"
<b>Low Profile (any size except below)</b>	2"
<b>Ashland APCI-150</b>	5.5"
<b>Canplas 20gpm &amp; 25gpm</b>	2"
<b>Canplas 35gpm &amp; 50gpm</b>	3"
<b>Canplas XL75</b>	17"
<b>Canplas XL100</b>	25"
<b>Schier PATG2025 or GB-2</b>	7"
<b>Schier PATG2635 (35gpm)</b>	10"
<b>Schier PATG 20-LO</b>	5"
<b>Schier PATG-35-LO</b>	4 ½"
<b>Schier PATG-50-LO</b>	4"
<b>Schier PATG3050 or GB-3</b>	13"
<b>Schier PATG3224 (60gpm)</b>	14"
<b>Schier PATG3475 (75gpm)</b>	17"
<b>Schier GB-15</b>	4"
<b>Schier GB-20</b>	6"
<b>Schier GB-25</b>	4"
<b>Schier GB-35 or GB-1</b>	5"
<b>Schier GB-50</b>	8"
<b>Trapzilla TZ-160 (35gpm)</b>	10"
<b>Trapzilla TZ-400 (75gpm)</b>	7"
<b>Trapzilla TZ-600 (75gpm)</b>	13"

HGI - MIFAB Lil Max Models	
MI-G-1-PL (7gpm)	6"
MI-G-2-PL (10gpm)	5"
MI-G-3-PL (15gpm)	5"
MI-G-4-PL (20gpm)	5"
MI-G-5-PL (25gpm)	6"
MI-G-6-PL (35gpm)	4"
MI-G-7-PL (50gpm)	5"
MI-G-L 25-PL (25gpm)	4"
HGI – MIFAB Big Max Models	
XL-MI-G-PL 750 (75gpm)	16"
XL-MI-G-PL 1150 (100gpm)	15"

Gravity Grease Interceptors (GGI)	Outlet Maximum
Highland 1000 gal	12"
Highland 1500-4000 gal	16"
Proceptor 750	13"
Proceptor 1000	20"
Proceptor 1300	26"
Proceptor 1500	13"
Proceptor 2000	20"
Schier GB75 (750gal substitute)	15"
Schier GB250 (1000gal substitute)	17"
Green Turtle GMC750 UPC	29"
All Concrete (Jensen, Procast)	6"

### Concrete Grease Interceptors (Jensen, Pro-Cast)

Concrete grease interceptors, regardless of their size, are required to be pumped when the second chamber has a grease and/or oil layer of **6"**. At no time should there be visible grease or oil in the sample box.

The City is exploring a ban on liquefiers to prevent impacts to wastewater treatment and Pure Water program treatment facilities.

### Best Management Practices (BMPs)

When FEWD started its FOG Control Program in late 1989 all existing FSEs were required to install grease removal equipment with exceptions for FSEs with minimal or no food prep. They were required to follow what FEWD called "Specific Permit Conditions". These Specific Permit Conditions were BMPs in that most of them were instructions to wipe everything prior to washing. With FSEs that were required to install grease removal equipment, FEWD used Specific Permit Conditions to help limit the number of retrofit grease traps that would be needed, for example... "Ensure wastewater from kitchen area wash down is discharged to a fixture connected to grease removal equipment" - the mop sink did not need to be connected. "Ensure the first rinse from tilt skillet and/or soup kettle is discharged to a fixture connected to grease removal equipment" - the tilt skillet or soup kettle drains did not need to be connected. When FEWD found the prep sink(s) being used to defrost chicken the facility received a Specific Permit Condition to -"Confine use of the prep sink(s) to vegetable and fruit preparation only". Specific Permit Conditions are printed on the front of each FSEs Wastewater Discharge Permit and they are specific to each facility.

During all site visits, FEWD Inspectors look for violations to the FSEs Specific Permit Conditions. For example: if a cold deli has added cooking equipment, added any item on their menu that would require or generate fat oil or grease to prepare or grease is found in a prep sink or cook line sink a requirement is issued to install grease removal equipment. Often FSEs request a second chance which is provided to them by signing a ‘Change in Procedure Form’ that states they will remove the cooking equipment, confine use of the prep sinks or cook line sinks and the requirement is canceled. Upon second violation, the requirement is re-issued and is irrevocable.

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

The City of San Diego’s Municipal Code Chapter VI, Article 4, Section 64, Division 7, “Food Establishment Wastewater” was enacted in July 1988 in order to control waste FOG discharges from food service establishments. A stipulation under this amendment requires those FSEs that generate waste FOG during food preparation processes to obtain a Food Establishment Wastewater Discharge Permit.

The City of San Diego’s Municipal Code gives the FEWD Permit Program the legal authority to visit and inspect FSEs and monitor compliance with discharge permits. As part of routine inspection activities, inspectors from FEWD determine permit requirements and verify compliance.

Additionally, information and training materials such as multi-language sizing of grease interceptor handout, maintenance handout and maintenance logs are provided to help FSEs stay in compliance.

Staffing for the FEWD Section is as follows:

- 1- Wastewater Pretreatment Inspector III – FEWD Program Manager
- 1- Principal Engineering Aide – FEWD Program Coordinator
- 3- Principal Engineering Aides – FEWD Supervisors
- 8- Senior Engineering Aides – FEWD Inspectors
- 1- Word Processing Operator – FEWD Clerical Support

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

There is close coordination between source control and the collection system operations and maintenance staff to investigate FOG issues and determine appropriate source control and maintenance corrective actions to address issues. The City is also proactive in cleaning sewer areas with a history of FOG issues. Procedures related to the cleaning maintenance are described in the Operation and Maintenance Program (Section 4 of this SSMP) and its related Reference documentation.

**(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.**

FEWD investigates potential source(s) of FOG waste to verify compliance with applicable sections of the Municipal Code. FSEs are required to have a Wastewater Discharge Permit, comply with source control measures for all sources of grease, implement BMPs and/or Specific Permit Conditions, install grease removal equipment as applicable, and are subject to site inspection at a minimal interval of every two (2) years to verify continuous compliance. The City uses an escalating inspection frequency of facilities based on findings including a first inspection scheduled within three months of installation or violations, followed by a second inspection scheduled within three months and if no issues are identified then inspection frequency is two years. Implementation of FEWD software is used to support FOG investigations and other FOG program activities including reporting and production tracking. The City has dedicated staff to quality control the data entered into the FEWD software. Residential outreach is also performed after grease caused sewer spills.

In the event an FSE fails to comply with the requirements of the Municipal Code, FEWD takes immediate enforcement action by applying one or more appropriate enforcement action(s). The enforcement actions available to the City of San Diego FEWD Permit Program are outlined as follows:

- **Level 1 Notice of Violation (NOV)** – A notice by certified mail which identifies the permit condition(s) violated, the circumstances surrounding the violation(s), and provides the FSE with an opportunity to correct the non-compliance within 30 days. The City collects an administrative fee of \$150.00 for Level 1 NOVs.
- **Level 2 NOV** - A notice by certified mail which identifies the permit condition(s) violated, usually failure to reach compliance from a Level 1 NOV due date. Level 2 NOVs require FSEs attend a Preliminary Hearing with the FEWD Program Manager or designee, usually within 30 days to discuss their barriers to compliance and to establish a new due date for compliance, no more than 90 days. Level 2 NOVs are also issued for the same violation if the violation reoccurs within a year. The City collects an administrative fee of \$400.00 for Level 2 NOVs.
- **Level 3 NOV** - A notice by certified mail which identifies the permit condition(s) violated, usually failure to reach compliance from a Level 2 NOV due date. Level 3 NOVs require FSEs attend a Show Cause Hearing with FEWD Program Manager or designee, usually within 30 days to discuss their barriers to compliance and to establish a new due date for compliance, no more than 90 days. The City collects an administrative fee of \$400.00 for Level 3 NOVs.
- **Permit Revocation** – FEWD Program Manager revokes the FSEs Wastewater Discharge Permit for protracted non-compliance with their Wastewater Discharge Permit.

- The City may pursue civil penalties, as well as injunctive relief.

**References**

2016 California Plumbing Code

## 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 a Sanitary Sewer Spill discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from sewer spills that escape from the system) associated with conditions similar to those causing spill 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 spill events.**

The City effectively manages the collection system capacity which collects flow from a 450-square-mile service area and services more than 2.2 million residents through system evaluation and capital improvement program development. The City's capacity assurance programs meet the requirements of the WDR and result in very few sewer spills caused by system capacity deficiencies. The effectiveness of these programs is due to the well-defined process the City uses to:

- Identify potential hydraulic deficiencies;
- Prioritize the potential hydraulic deficiencies for additional analysis; and
- Develop and track capital improvements if needed.

PUD is responsible for capital improvement planning and implementation of the City's sewer facilities. PUD's Engineering and Program Management Division is responsible for the flow monitoring program, the municipal sewer capacity assessment program and ensuring sufficient capacity in the sewer system.

### **Flow Monitoring Program**

As of this date, Public Utilities maintains 156 permanent flow monitors in its sewer system to quantify the flows within the City limits and from 12 Participating Agencies (PAs). These monitors are installed and utilized for multiple purposes including strength-based billing, facility planning, sewer modeling, criticality evaluation, infiltration/inflow (I/I) analysis, and spill detection. The multipurpose utilization of the flow monitors makes the flow monitoring program cost-effective. The monitoring system was initiated in the late 1980s and has been considerably enhanced by adding additional monitors periodically in the last decade.

Seventy (70) permanent monitors are located on 60 of the City's 123 trunk sewers (15-inch diameter or larger) and are utilized in the capacity assessment program. Some trunk sewers are monitored by more than one flow monitor. The 63 remaining unmonitored trunk sewers, mostly smaller size with less flow, have been periodically monitored with 10 temporary monitors on a rotational basis.

The City's sewer capacity assessment and assurance program and sewer design process depends heavily on quality monitoring data, and the City regularly updates a list of critical trunk sewers through the ongoing flow monitoring program.

### **Trunk Sewer Capacity Assessment Program**

Beginning in late 1996, PUD's Engineering and Program Management Division developed a trunk sewer modeling program to efficiently analyze the hydraulic capacity of the City's municipal trunk sewer system. The hydraulic model is used to analyze the capacity of existing trunk sewers under current and future conditions, and to pro-actively develop solutions to any potential future problems before they manifest themselves as wastewater spills.

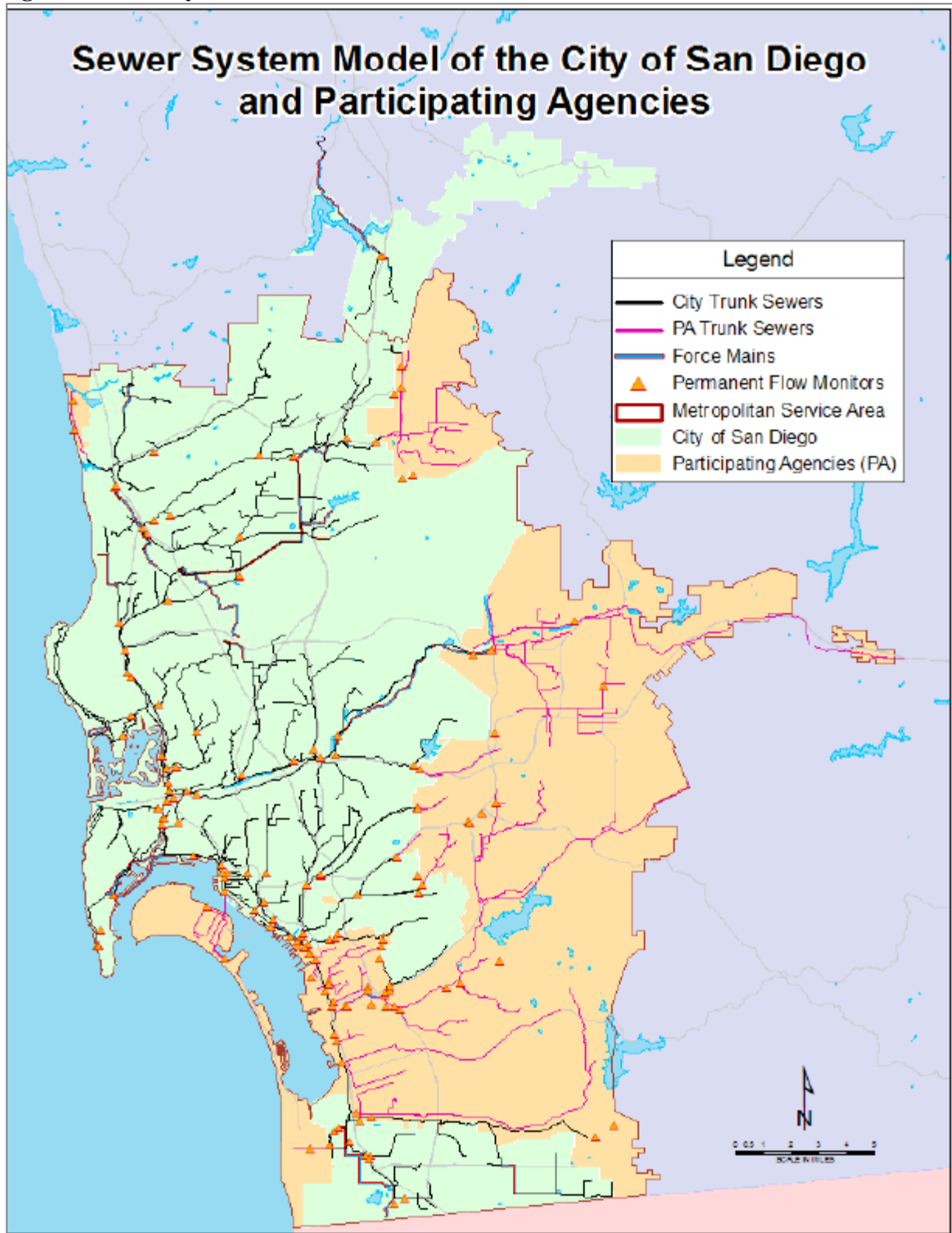
The City's trunk sewer model includes over 6,800 maintenance holes and a like number of pipe segments on 123 trunk sewers. The model includes all pipes 15 inches in diameter or larger, plus many key smaller pipes. The City's wastewater service area consists of approximately 2,400 separate tributary areas, with an average size of less than 70 acres each. Existing and projected population and employment within each of the tributary areas are based on demographic data provided by the regional planning agency, the San Diego Association of Governments (SANDAG).

As shown in Figure 3, the City's Public Utilities System also services areas outside the City. PUD's sewer model includes the PAs' trunk sewers and their tributary areas to allow flow projections from the PAs to be made on the same consistent basis as flow projections from areas within the City, and to route flows accurately. In addition, the flows from the PA's trunks that connect to San Diego's municipal trunk sewers are fully accounted for in the capacity analysis of the City trunk sewers.

The hydraulic model includes a database of the characteristics of the trunk sewers and their tributary areas, calibrated unit flow parameters, software to maintain these data, hydraulic algorithms to compute flows and water depths, and output routines to tabulate and graphically present the results.



Figure 3. Sewer System Model



Modeling results, which include the flows, depths, and velocities throughout the entire trunk, are used in the capacity assessment program. Modeling results are also used to identify hydraulic problems (e.g., general lack of capacity, short bottleneck reach that backs flow upstream, etc.). The model also indicates if there is a significant risk of surcharging and spills, and if that risk will increase due to future growth. For trunks where modeling in the capacity assessment process has identified current or potential future capacity deficiencies, detailed modeling studies have been initiated in which the model of that specific trunk sewer is refined, the nature and extent of infiltration/inflow is assessed, and alternatives for providing the needed capacity are formulated. Generally, the modeling study is followed by a planning study and/or pre-design study in which alternatives are refined and evaluated considering such factors as the condition of the existing trunk sewer, right-of-way availability, capital costs, construction and long-term environmental impacts.

The City includes both dry weather and wet weather flow simulations for present and future (10 years) scenarios in its capacity assessment program. The City prioritizes the trunk sewers as critical, semi-critical, or non-critical, according to the assessment combining both flow monitoring and modeling.

The monitoring criticality of a trunk sewer is based on the maximum depth of flow observed during the period in which the flow data is utilized for the assessment. In general, a 15-minute monitoring interval is used. The observed maximum depth (d) is expressed as a percentage of the pipe diameter (D), and each trunk is classified using the following rules:

For pipes less than 18 inches in diameter:	$50\% \leq d/D$	Critical
	$40\% \leq d/D < 50\%$	Semi-Critical
	$d/D < 40\%$	Non-Critical
For pipes greater than or equal to 18 inches:	$75\% \leq d/D$	Critical
	$50\% \leq d/D < 75\%$	Semi- Critical
	Critical $d/D < 50\%$	Non-Critical

The rules for dry weather d/D are set at less than full pipe to allow for the possibility of higher flows during unmonitored peak wet weather periods, to allow for possible lower capacity due to localized hydraulic inefficiencies, and to provide lead time to better assess the problem and develop solutions. The semi-critical rating category was designated to provide the early warning of possible future capacity problems. The more conservative rules applied to pipes less than 18 inches in diameter reflect the greater potential for factors such as deposits, roots, grease, sags, and poor joints to reduce pipe capacity in smaller pipes.

The strength of the flow monitoring and criticality rating system is that it flags potential problems based on actual field conditions rather than theoretical flow and capacity calculations. The limitation of the system is that it provides only a snapshot in time at one or two locations on each trunk sewer. This limitation is addressed when trunk sewers are further analyzed with a hydraulic model. Hydraulic modeling provides additional spatial definition (e.g., flow versus capacity in all pipe segments rather than just at monitored locations), estimates future flows as well as existing flows, and allows solutions such as diversions and relief sewers to be tested.

For wet weather model simulations, criticality is based on both the d/D and the hydraulic grade line (HGL) depth below rim of the maintenance hole. HGL depth below rim is defined as the distance between the maximum depth of flow and the ground surface. In general, a low HGL value indicates a high risk of sewage spill. Each trunk is classified using the following rules:

For all sizes of pipes:	$100\% < d/D$ and HGL depth below rim $< 2'$	Critical
	$100\% < d/D$ and HGL depth below rim $> 2'$	Semi-Critical
	$100\% \geq d/D$	Non-Critical

The rules for wet weather d/D are set at full pipe since wet weather flows have been accounted for. The wet weather model is simulated based on the standard of a 10-year return wet weather flow.

The City has performed these practices consistently since the beginning of its capacity assessment & assurance program. The City prepares a Municipal Trunk Sewer Capacity Assessment Report which updates the capacity assessment information by considering new flow trends, changes in the sewer system, and other modifications.

### **Small Mains Capacity Assessment Program**

The City's small mains, which are pipes 12-inch in diameter or smaller, generally service smaller and fully developed areas; these small mains generally contain excess capacity. The City requires sewers to be a minimum of 8 inches in diameter mainly for maintenance purposes. Nevertheless, the City has long had procedures in place to assess the capacity of small mains on a selective basis. Two situations which typically trigger assessments are: (1) new development proposals (e.g. sewer planning studies, which are generally performed by consulting engineers for developers) and (2) replacement of concrete mains or other mains determined to be in poor condition or requiring excessive maintenance (e.g. group jobs).

Since 2001, initial capacity assessments of small mains have also been performed in conjunction with the City's sewer inspection and condition assessment program. Capacity assessments are required in order to determine the most effective recommendation for each inspected sewer; primarily to determine if rehabilitation by lining the pipes is a feasible alternative for

replacement of pipes in poor condition. Lining is considered feasible if the existing pipe has adequate capacity and velocity. If the capacity or velocity of the existing pipe is not adequate, replacement with a larger or steeper pipe is required. In this case, the pipes will most likely be grouped with other pipes and sometimes water CIP projects in the same area into a “group job.” During the design of group jobs, City staff further assesses capacity and determines appropriate sizes and slopes for the new replacement pipes. In summary, the initial capacity assessments are part of a screening process to identify pipes suitable for rehabilitation by lining the pipes. This screening process is an important step because rehabilitation projects can be implemented much more quickly and inexpensively than replacement projects, contributing sooner to the City’s goal of reducing sanitary sewer spills.

The small main model uses the same dynamic modeling software and similar approach as the trunk sewer model. Hydraulic computations are performed using the InfoWorks software, as documented in the section of Trunk Sewer Capacity Assessment mentioned above. The key outputs consist of the peak flow, depth, and velocity in each pipe. This data is exported into a spreadsheet for final post-processing, and considered during the condition assessment process to determine the feasibility of rehabilitation by lining.

Approximately 2,600 miles of small mains have been modeled to-date. Additional mains are being modeled on an ongoing basis, corresponding to mains included in various phases of the City’s inspection and condition assessment program. Because all mains in a tributary area must be modeled in one simulation, the number of modeled pipes greatly exceeds that of assessed pipes.

The great majority of small mains have adequate capacity. Only about four percent of the modeled mains have peak flows that exceed 50 percent of the pipe capacity. The pipes considered to have inadequate capacity (i.e., over 50 percent full for a projected flow under the build-out condition) are designated for replacement during the small main assessment process.

The PUD sewer modeling team will continue using the dynamic model to analyze the hydraulic capacity of the sewer system. PUD will ensure that system capacity is sufficient by continuing the current trunk sewer and small main assessment programs, including collecting flow monitoring data in both dry and wet weather and performing hydraulic modeling analysis for the City’s sewer system.

## **Rainfall Dependent Infiltration & Inflow Studies**

To prevent wet weather related sanitary sewer spills, PUD conducts Rainfall Dependent Infiltration & Inflow (RDI/I) studies to identify areas with the tendency of high RDI/I. PUD performs two types of RDI/I studies: One is to perform a system-wide RDI/I study by analyzing data collected from the permanent flow monitors, when RDI/I is deemed evident in a rainy season. The other one is to concentrate on locating RDI/I sources for previously identified high RDI/I sewer basins by installing ISCO flow monitors on a temporary basis. In addition, other RDI/I studies such as smoke testing is applied to further narrow down the source of RDI/I when

needed. The results of these RDI/I studies are used to assist in the wet weather capacity assessment of the sewerage system and for the RDI/I remedial actions.

### **Wet Weather Flow Characterization Report**

The objective of this study is to identify potential sources of RDI/I for the entire Metropolitan Service Area from a macro perspective. This study utilizes data from the City's existing permanent monitors and a computer program, called Sewer Hydrograph Analysis & Peak Evaluation (SHAPE), to determine the RDI/I component of wet weather flow in the wastewater collection system. An advantage of the SHAPE program is being able to separate the groundwater infiltration component from the RDI/I component automatically.

There are two parts in this report. Part I analyzes the RDI/I from the Participating Agencies and compared it to each other and to the City. This part also included the comparison of RDI/I from the three major geographic sewer basins: North Metro, Mission Valley, and South Metro. Part II analyzed the RDI/I from various sewer basins within the City limits.

The latest characterization report analyzed a storm in December of 2014. This report was completed in December 2015. When RDI/I is deemed evident in any given rainy season, PUD may perform these system-wide studies to monitor the status of RDI/I by analyzing the data collected from the permanent flow monitors. Any City sewer basins with exceptionally high RDI/I identified in this program will be subject to further studies such as the **Temporary Flow Monitoring Program** or **Other I/I Study** as mentioned below.

### **Temporary Flow Monitoring Program – Rainfall Dependent Infiltration and Inflow Report**

The objective of this study is to identify the potential sources of infiltration and inflow in sewer basins, where high RDI/I were evidenced. The PUD Temporary Flow Monitoring Program was initiated in the summer of 2005 and has continued since. The uniqueness of this program is that it employs in-house staff and utilizes City-owned monitors and equipment to achieve the flexibility of tracking down the RDI/I.

Upon identifying the high RDI/I basins, action items are initiated in an attempt to determine the causes of high RDI/I and to minimize potential RDI/I and thus to reduce wet weather related sewer spills. The action items may include the installation of temporary flow monitors in the high RDI/I basins before the next rainy season, flow separation analysis, smoke tests, investigation of potential sewer-storm cross-connections, inspection of maintenance holes, televising certain sewer and storm drain segments, negotiation with upstream discharge agencies, and replacing maintenance hole covers in the remote and low-lying areas.

This Temporary Flow Monitoring Program is implemented during the rainy season. The lower-than-average rainfall in the past has not yielded adequate RDI/I data for identifying the sources in most of the study areas. A Temporary Flow Monitoring Program – Rainfall Dependent Infiltration and Inflow Report is published when substantial findings are deduced based on monitoring data collected in a targeted rainy season.

### 3. Other I/I Study – Smoke Testing Study

The objective of conducting this kind of study is to pinpoint the exact causes of the RDI/I, particularly for the component of inflows, when the high RDI/I basin is narrowed down through the flow separation techniques to a manageable size. Smoke testing is intended to detect potential points of inflow due to direct connections to the sewer such as storm sewer cross-connections and point source leaks in drainage paths or ponding areas, roof leaders, cellars, yard or area drains, fountain drains, abandoned building sewers, and faulty service connections. The City will continue performing smoke testing or other effective investigations on an as-needed basis when significant RDI/I is identified in a relatively small basin.

**(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**

The City has developed a Sewer Design Guide, as stated in Section 5 of this SSMP, for both in-house engineers and consultant engineers to comply with. This guide summarizes and outlines relevant City policies and applicable codes, and engineering and operational practices and procedures that have been developed in an attempt to establish a cost-effective, reliable, and safe wastewater collection system. The Sewer Design Guide is available online at [www.sandiego.gov/PUD/pdf/sewerdesign.pdf](http://www.sandiego.gov/PUD/pdf/sewerdesign.pdf). The latest guideline updates in 2015 took into consideration of designing sewer facilities based on a 10-year return wet weather flow and redirecting sewer flow from the canyons and environmentally sensitive areas.

The focus of the Sewer Design Guide is on the design of sewer systems including small pump stations. For major facilities included large pump stations, the design criteria are provided in the Clean Water Program (CWP) Guidelines (Volume I through Volume X). The CWP Guidelines are written primarily for facilities related to wastewater treatment and reclamation plants, including large influent pump stations. The CWP Guidelines is available online at: [www.sandiego.gov/PUD/business/cwpspecs/index.shtml](http://www.sandiego.gov/PUD/business/cwpspecs/index.shtml).

The Sewer Design Guide and the Clean Water Program Guidelines are updated on an as-needed basis when new design/construction techniques, new regulatory requirements, and/or new materials dictate such an update. A Guideline Committee, consisting of seasoned engineers appointed from the PUD, and Development Services Department, is formed to undertake the necessary updates.

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

The first step needed to establish a short-and-long-term CIP to address identified hydraulic deficiencies is to perform capacity assessment for the sewer system as detailed in **(a) Evaluation** above. Critical, semi-critical and non-critical trunks are reviewed during capacity analysis. As a conclusion of this review, critical and semi-critical trunk sewers that may experience capacity constraint under a ten-year return peak wet weather flow in the next 10 years are identified and recommended for the detailed modeling study.

The second step is to prepare a detailed modeling study for those hydraulically deficient trunk sewers including field verification. In general, only one trunk sewer is being assessed in the detailed modeling study, which includes further validated and refined model for that particular trunk sewer. The study consists of modeling peak wet weather flows, developing preliminary alternatives to solve the capacity problem (e.g., replacement or relief sewers, flow diversions to other trunk sewers, etc.), and determining the sizes of required new sewers. These findings are incorporated into a subsequent planning report, which further evaluates the alternatives based on costs and other factors, and recommends a project for subsequent design and construction.

The recommended alternative will then be further assessed in the third step, development of a Business Case Evaluation (BCE). The BCE is a thorough examination of a facility requirement at its infancy to determine which alternative, if any, is the most cost-effective solution to address the requirement. It validates the need for a solution in terms of customer value and seeks the lowest life-cycle cost solution with due consideration for risk. A “Do Nothing” alternative is often added to the BCE to evaluate the risk of doing nothing. If the risk is considered too high compared to the costs (in terms of present value) and benefits of a project over its life-cycle, then the project is validated and presented to the PUD’s Management Team for approval.

Once the BCE is approved by the Management Team, a CIP project is established. A new stand-alone CIP project may be added to the CIP budget during the CIP mid-year and year-end budget monitoring reports, or separately by processing a Request for Council Action (1472). The CIP is available for review on the City of San Diego website: [www.sandiego.gov](http://www.sandiego.gov). Project schedules are established and prioritized based on current and future capacity needs, condition assessment, and potential risks of spill. Project budgets and schedules are routinely reviewed by the responsible Program Management staff, Project Manager and Project Management Team.

Cost of service studies are performed to determine financial sufficiency, which includes forward looking operations and maintenance and CIP cash flows, among other items. Operations and maintenance is funded through cash and CIP is funded through various mechanisms, though has recently been through mostly cash funding. However, with the cost of service study currently underway, this process will aid in determining financing levels for the CIP with cash and debt in the form of various loans and bonds for upcoming years.

**(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.**

The City's 10-Year Wastewater Capital Improvement Program (CIP) is reviewed and updated annually and lists capital improvement projects scheduled for implementation during the following 10 years. The project controls group supports development and tracking of the project schedule in Primavera software and all schedules are located on a SharePoint site for viewing. Monthly meetings are conducted to review projects that are not on schedule and determine steps for schedule recovery. Changes to project schedule and scope are tracked through project charter amendments. The prioritization of these capital improvement projects is reevaluated every year and determined based on the following factors: condition assessment of the infrastructure, future capacity requirements associated with growth, and regulatory requirements. A list of the capital improvement projects for the City is available online at [www.sandiego.gov/fm/annual/fy09vol3.shtml](http://www.sandiego.gov/fm/annual/fy09vol3.shtml). The website includes a GIS-based interactive map. This map can be used by the public to identify project locations and construction timeframes. The City uses this mapping software to automatically generate potential project conflict notices for issues such as a project being identified during a repaving moratorium.

#### **References**

Municipal Trunk Sewer Capacity Assessment – 2015

Municipal Wastewater Collection System Master Plan – 2015

Wet Weather Flow Characterization Report (2015)

Clean Water Program Guidelines



## **IX. MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS**

**The Enrollee shall:**

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

The City uses the following databases to capture and maintain the relevant information used to establish and prioritize appropriate SSMP activities:

- Geographical information system (GIS) and the System Planning & Locator Application for Sewer (SPLASH)
- Computerized maintenance management systems including SAP, FEWD software Salesforce, and Sewer History and Research Query (SHARQ)
- Sewer Spill database
- Reports and Studies

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

The City monitors sewer spill performance to accomplish the following:

- Establish and prioritize appropriate SSMP activities
- Monitor the implementation and effectiveness of the SSMP
- Assess the success of the preventative maintenance program
- Identify and illustrate sewer spill trends including frequency, volume, and location

The City's CMMS and sewer spill database contains information used to determine the effectiveness and success of the preventative maintenance activities and allows for historical review of work order history to adjust maintenance and repair priorities. The City performs a failure cause analysis of individual sewer spill events and, based on this review, identifies corrective actions to prevent future sewer spill events.

### **Performance Monitoring and Program Changes**

The City evaluates the performance of its wastewater collection system using the performance measures identified in Table 5 and updates SSMP programs, process, and systems as needed. Sewer spill metrics are used to evaluate performance. The City is transitioning to SAP software for tracking many performance metrics and the City is evaluating additional performance metrics currently maintained by the City.

**Table 5. Monitoring Summary Table**

Type	Performance Measure	Source
System Statistics	Total miles of gravity sewer	GIS
	Total miles of pressure sewer	GIS
	Total number of sewage pumping stations	GIS
	Total number of maintenance holes	GIS
Measures Based on Sewer Spill Number	Number of Sewer Spills by cause	CIWQS and SAP
	Number of Sewer Spills per 100 miles of sewer per year	CIWQS and SAP
	Map of Sewer Spills locations per year	CIWQS and SAP
Measures Based on Sewer Spill Volume	Total volume of Sewer Spills per Year	CIWQS and SAP
	Total Sewer Spill volume recovered and percentage of overall total Sewer Spill volume	CIWQS and SAP
	Total volume of Sewer Spills released (total minus recovered)	CIWQS and SAP

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

The main indicator of success of the preventative maintenance program is sewer spill performance. Other indicators include production and productivity indicators measuring whether the City is accomplishing the planned maintenance programs. The City's sewer spill database is used with the metrics identified in Table 5 to determine the effectiveness and success of the preventative maintenance activities and allows for historical review of work order history to adjust maintenance and repair priorities. The City's preventative maintenance program has successfully resulted in a significant decline in preventative maintenance related sewer spills since 1997 and an sewer spill rate in the sewer system of less than 1.4 sewer spills per 100 miles of sewer pipelines per year over the last 2 years.

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

Program elements are updated as appropriate based on monitoring or performance evaluations. The main drivers of updates to SSMP program elements are program issues or opportunities identified through the following performance evaluation processes:

- Program issues identified as a result of sewer spill root cause analysis
- Program issues or opportunities identified through the course of the year and planned into the annual budgeting process
- Program issues or opportunities identified during the SSMP program audit

One example of program updates based on monitoring system performance is the development of an accelerated inspection and maintenance program for maintenance holes to proactively prevent sewer spills based on a review of sewer spill causes and maintenance hole data. Another example is the piloting and use of new force main air release valve technology that is less likely to fail and cause sewer spills based on review of sewer spill causes and maintenance data.

**(e) Identify and illustrate sewer spill trends, including: frequency, location, and volume.**

The City is continually tracking and communicating the performance of various sewer spill metrics identified in Table 5 such as sewer spill count, sewer spill cause, sewer spill Volume, sewer spill Location, and sewer spills reaching surface waters. The SERP described in Section 6, and included as Attachment , includes example sewer spill reports and maps the City tracks. Sewer spill performance is posted on the walls in both operations yards in highly visible areas. Sewer spill performance is also reported out to the City’s Independent Rates Oversight Committee (IROC) on a quarterly basis.

## **X. SSMP PROGRAM AUDITS**

**As part of the SSMP, the Enrollee shall conduct periodic audits, appropriate to the size of the system and the number of sewer spills. 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.**

### **SSMP Program Audits**

The City updated the approach to performing SSMP Program Audits in November 2017. Prior to 2017, the City performed SSMP Program Audits in conjunction with the annual reporting required for EPA Consent Decree compliance. The last Consent Decree annual report was submitted in February 2014. Between 2014 and early 2017, the City did not conduct an SSMP Program Audit. Moving forward, the City will perform SSMP Program Audits using a cross-functional internal audit team. Future SSMP Program Audits will be performed every two years instead of annually.

The SSMP Program Audit will evaluate the effectiveness of the SSMP Program implementation and will determine whether the SSMP meets the current requirements of the WDR, whether the SSMP reflects the City's current practices, and whether the City is following the SSMP. The audit report will be used to identify program deficiencies and the associated corrective actions recommended to increase the effectiveness of the SSMP program implementation. The audit will be conducted by a team consisting of trained City staff. At the City's discretion, a consultant may be retained to perform all or part of the audit process in cooperation with City staff. The results of the audit will be included in the SSMP Audit Report. The most recent audit was conducted in November 2017 and finalized in March 2018.

The Legally Responsible Official will designate a WDR Subject Matter Expert (SME) responsible for managing the SSMP Program Audit. The WDR SME is currently an Associate Civil Engineer in WWC. The WDR SME will be responsible for identifying and notifying all staff that will form the Audit Team. The WDR SME will either lead the Audit Team, will designate an Audit Lead, or will be responsible for acquiring third party support to lead or support the audit. The Audit Team will review the findings of previous audits, will conduct interviews and review data to audit the current program, and will develop an audit report to document the effectiveness of the current SSMP program implementation, any identified deficiencies and associated corrective actions, and other findings and opportunities for improvement.

Once the SSMP Program Audit is complete, the City will review the audit findings and will assign a City staff member (Task Owner) responsible for reviewing each of the deficiencies or findings from the audit, perform additional inquiry if necessary, and determining an updated

course of action if there is any disagreement with the recommended corrective action. The Task Owner will also provide the WDR SME with a timetable for implementing the corrective action and any updates to the SSMP.

## 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 with the Public

The City is continually communicating with the public on the development, implementation, and performance of its SSMP through the means of communication included in Table 6.

**Table 6. Means of Communication with the Public on the Development, Implementation, and Performance of the SSMP**

Means for Public Communication	Description
Sewer Spill Reduction Program webpage	The PUD maintains current information on the City’s website ( <a href="https://www.sandiego.gov/mwwd/sewerspill">https://www.sandiego.gov/mwwd/sewerspill</a> ) and regularly submits billing insert information with the City’s water/sewer billing processes. The PUD also provides contact information to the public for reporting any issues regarding sewer system management ( <a href="https://www.sandiego.gov/mwwd/general#phone">https://www.sandiego.gov/mwwd/general#phone</a> ).
Independent Rate Oversight Committee	The PUD communicates ongoing development and implementation of SSMP processes through the City’s Independent Rate Oversight Committee (IROC). The PUD provides regular quarterly updates on the performance of its SSMP through informational presentations to the City’s Independent Rate Oversight Committee and/ or its sub committees.
Communications Department	The City’s Communications Department works in PUD’s behalf to routinely communicate Department information both to its external stakeholders and to internal audiences within the City organization.
City Council and Council Committee Meetings	The City of San Diego PUD regularly communicates with the public on the development, implementation and performance of the SSMP through its participation in regular City Council and Council Committee meetings, regular and ad hoc City of San Diego citizens committees, and regular individual citizen communications. The PUD presents the SSMP for City Council approval in a public meeting and provides the document for public review and comment prior to the meeting.

In addition to the means of communication presented in Table 6, the City also participates in numerous public outreach activities to communicate the importance of fats, oils, and grease source control as described in Section 7 – Sewer Pipe Blockage Control Program.

## **Communication with Satellite Public Sewer Systems**

The City of San Diego PUD communicates on a monthly basis with its satellite collection system agencies through the Metro Wastewater Joint Powers Authority Technical Advisory Committee (Metro TAC) meetings. Metro TAC meetings are open to the public and cover issues impacting the Metropolitan Wastewater System, which conveys sewage flow discharged by municipalities and special districts into the City of San Diego's regional wastewater facilities. The City has a standing item on the Metro TAC agenda to provide a Metro Wastewater Update to communicate and discuss any regional issues impacting SSMP Program effectiveness and performance.

## **Attachment 1. SWRCB Order 2006-0003**



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

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

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

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

## **SEWER SYSTEM MANAGEMENT PLANS**

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

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

## REGULATORY CONSIDERATIONS

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

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

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

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

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

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

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

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

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

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

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

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

**A. DEFINITIONS**

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

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

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

## **B. APPLICATION REQUIREMENTS**

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

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

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

### **C. PROHIBITIONS**

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

### **D. PROVISIONS**

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

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

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



(vii) The Enrollee took all reasonable steps to stop and mitigate the impact of the discharge as soon as possible.

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

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

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

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

### **Sewer System Management Plan (SSMP)**

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

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

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

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

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

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

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

- (vii) **FOG Control Program:** Each Enrollee shall evaluate its service area to determine whether a FOG control program is needed. If an Enrollee determines that a FOG program is not needed, the Enrollee must provide justification for why it is not needed. If FOG is found to be a problem, the Enrollee must prepare and implement a FOG source control program to reduce the amount of these substances discharged to the sanitary sewer system. This plan shall include the following as appropriate:
- (a) An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;
  - (b) A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area;
  - (c) The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;
  - (d) Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements;
  - (e) Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the FOG ordinance;
  - (f) An identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section; and
  - (g) Development and implementation of source control measures for all sources of FOG discharged to the sanitary sewer system for each section identified in (f) above.
- (viii) **System Evaluation and Capacity Assurance Plan:** The Enrollee shall prepare and implement a capital improvement plan (CIP) that will provide hydraulic capacity of key sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design storm or wet weather event. At a minimum, the plan must include:
- (a) **Evaluation:** Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs

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

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

Enrollee's compliance with the SSMP requirements identified in this subsection (D.13), including identification of any deficiencies in the SSMP and steps to correct them.

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

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

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

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

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

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

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

**Sewer System Management Plan Time Schedule**

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



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

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

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

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

#### **E. WDRs and SSMP AVAILABILITY**

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

#### **F. ENTRY AND INSPECTION**

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

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

## **G. GENERAL MONITORING AND REPORTING REQUIREMENTS**

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

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

#### **H. CHANGE IN OWNERSHIP**

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

#### **I. INCOMPLETE REPORTS**

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

#### **J. REPORT DECLARATION**

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

#### **K. CIVIL MONETARY REMEDIES FOR DISCHARGE VIOLATIONS**

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

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

**L. SEVERABILITY**

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

**CERTIFICATION**

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

AYE: Tam M. Doduc  
Gerald D. Secundy

NO: Arthur G. Baggett

ABSENT: None

ABSTAIN: None



---

Song Her  
Clerk to the Board

## STATE WATER RESOURCES CONTROL BOARD

### MONITORING AND REPORTING PROGRAM NO. 2006-0003-DWQ STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR SANITARY SEWER SYSTEMS

This Monitoring and Reporting Program (MRP) establishes monitoring, record keeping, reporting and public notification requirements for Order No. 2006-2003-DWQ, "Statewide General Waste Discharge Requirements for Sanitary Sewer Systems." Revisions to this MRP may be made at any time by the Executive Director, and may include a reduction or increase in the monitoring and reporting.

#### A. SANITARY SEWER OVERFLOW REPORTING

##### SSO Categories

1. Category 1 - All discharges of sewage resulting from a failure in the Enrollee's sanitary sewer system that:
  - A. Equal or exceed 1000 gallons, or
  - B. Result in a discharge to a drainage channel and/or surface water; or
  - C. Discharge to a storm drainpipe that was not fully captured and returned to the sanitary sewer system.
2. Category 2 – All other discharges of sewage resulting from a failure in the Enrollee's sanitary sewer system.
3. Private Lateral Sewage Discharges – Sewage discharges that are caused by blockages or other problems within a privately owned lateral.

##### SSO Reporting Timeframes

4. Category 1 SSOs – All SSOs that meet the above criteria for Category 1 SSOs must be reported as soon as: (1) the Enrollee has knowledge of the discharge, (2) reporting is possible, and (3) reporting can be provided without substantially impeding cleanup or other emergency measures. Initial reporting of Category 1 SSOs must be reported to the Online SSO System as soon as possible but no later than 3 business days after the Enrollee is made aware of the SSO. Minimum information that must be contained in the 3-day report must include all information identified in section 9 below, except for item 9.K. A final certified report must be completed through the Online SSO System, within 15 calendar days of the conclusion of SSO response and remediation. Additional information may be added to the certified report, in the form of an attachment, at any time.

The above reporting requirements do not preclude other emergency notification requirements and timeframes mandated by other regulatory agencies (local

County Health Officers, local Director of Environmental Health, Regional Water Boards, or Office of Emergency Services (OES)) or State law.

5. Category 2 SSOs – All SSOs that meet the above criteria for Category 2 SSOs must be reported to the Online SSO Database within 30 days after the end of the calendar month in which the SSO occurs (e.g. all SSOs occurring in the month of January must be entered into the database by March 1st).
6. Private Lateral Sewage Discharges – All sewage discharges that meet the above criteria for Private Lateral sewage discharges may be reported to the Online SSO Database based upon the Enrollee's discretion. If a Private Lateral sewage discharge is recorded in the SSO Database, the Enrollee must identify the sewage discharge as occurring and caused by a private lateral, and a responsible party (other than the Enrollee) should be identified, if known.
7. If there are no SSOs during the calendar month, the Enrollee will provide, within 30 days after the end of each calendar month, a statement through the Online SSO Database certifying that there were no SSOs for the designated month.
8. In the event that the SSO Online Database is not available, the enrollee must fax all required information to the appropriate Regional Water Board office in accordance with the time schedules identified above. In such event, the Enrollee must also enter all required information into the Online SSO Database as soon as practical.

### **Mandatory Information to be Included in SSO Online Reporting**

All Enrollees must obtain SSO Database accounts and receive a "Username" and "Password" by registering through the California Integrated Water Quality System (CIWQS). These accounts will allow controlled and secure entry into the SSO Database. Additionally, within thirty (30) days of receiving an account and prior to recording SSOs into the SSO Database, all Enrollees must complete the "Collection System Questionnaire", which collects pertinent information regarding an Enrollee's collection system. The "Collection System Questionnaire" must be updated at least every 12 months.

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

9. Category 2 SSOs:
  - A. Location of SSO by entering GPS coordinates;
  - B. Applicable Regional Water Board, i.e. identify the region in which the SSO occurred;
  - C. County where SSO occurred;
  - D. Whether or not the SSO entered a drainage channel and/or surface water;
  - E. Whether or not the SSO was discharged to a storm drain pipe that was not fully captured and returned to the sanitary sewer system;

- F. Estimated SSO volume in gallons;
- G. SSO source (manhole, cleanout, etc.);
- H. SSO cause (mainline blockage, roots, etc.);
- I. Time of SSO notification or discovery;
- J. Estimated operator arrival time;
- K. SSO destination;
- L. Estimated SSO end time; and
- M. SSO Certification. Upon SSO Certification, the SSO Database will issue a Final SSO Identification (ID) Number.

10. Private Lateral Sewage Discharges:

- A. All information listed above (if applicable and known), as well as;
- B. Identification of sewage discharge as a private lateral sewage discharge; and
- C. Responsible party contact information (if known).

11. Category 1 SSOs:

- A. All information listed for Category 2 SSOs, as well as;
- B. Estimated SSO volume that reached surface water, drainage channel, or not recovered from a storm drain;
- C. Estimated SSO amount recovered;
- D. Response and corrective action taken;
- E. If samples were taken, identify which regulatory agencies received sample results (if applicable). If no samples were taken, NA must be selected.
- F. Parameters that samples were analyzed for (if applicable);
- G. Identification of whether or not health warnings were posted;
- H. Beaches impacted (if applicable). If no beach was impacted, NA must be selected;
- I. Whether or not there is an ongoing investigation;
- J. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the overflow and a schedule of major milestones for those steps;
- K. OES control number (if applicable);
- L. Date OES was called (if applicable);
- M. Time OES was called (if applicable);
- N. Identification of whether or not County Health Officers were called;
- O. Date County Health Officer was called (if applicable); and
- P. Time County Health Officer was called (if applicable).

**Reporting to Other Regulatory Agencies**

These reporting requirements do not preclude an Enrollee from reporting SSOs to other regulatory agencies pursuant to California state law. These reporting requirements do not replace other Regional Water Board telephone reporting requirements for SSOs.

1. The Enrollee shall report SSOs to OES, in accordance with California Water Code Section 13271.

Office of Emergency Services  
Phone (800) 852-7550

2. The Enrollee shall report SSOs to County Health officials in accordance with California Health and Safety Code Section 5410 et seq.
3. The SSO database will automatically generate an e-mail notification with customized information about the SSO upon initial reporting of the SSO and final certification for all Category 1 SSOs. E-mails will be sent to the appropriate County Health Officer and/or Environmental Health Department if the county desires this information, and the appropriate Regional Water Board.

#### **B. Record Keeping**

1. Individual SSO records shall be maintained by the Enrollee for a minimum of five years from the date of the SSO. This period may be extended when requested by a Regional Water Board Executive Officer.
3. All records shall be made available for review upon State or Regional Water Board staff's request.
4. All monitoring instruments and devices that are used by the Enrollee to fulfill the prescribed monitoring and reporting program shall be properly maintained and calibrated as necessary to ensure their continued accuracy;
5. The Enrollee shall retain records of all SSOs, such as, but not limited to and when applicable:
  - a. Record of Certified report, as submitted to the online SSO database;
  - b. All original recordings for continuous monitoring instrumentation;
  - c. Service call records and complaint logs of calls received by the Enrollee;
  - d. SSO calls;
  - e. SSO records;
  - f. Steps that have been and will be taken to prevent the SSO from recurring and a schedule to implement those steps.
  - g. Work orders, work completed, and any other maintenance records from the previous 5 years which are associated with responses and investigations of system problems related to SSOs;
  - h. A list and description of complaints from customers or others from the previous 5 years; and
  - i. Documentation of performance and implementation measures for the previous 5 years.
6. If water quality samples are required by an environmental or health regulatory agency or State law, or if voluntary monitoring is conducted by the Enrollee or its agent(s), as a result of any SSO, records of monitoring information shall include:



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

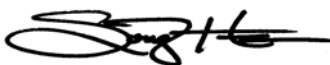
**C. Certification**

1. All final reports must be certified by an authorized person as required by Provision J of the Order.
2. Registration of authorized individuals, who may certify reports, will be in accordance with the CIWQS' protocols for reporting.

Monitoring and Reporting Program No. 2006-0003 will become effective on the date of adoption by the State Water Board.

**CERTIFICATION**

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



---

Song Her  
Clerk to the Board

**Attachment 2. SWRCB Order 2007-0005**

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
REGION 9, SAN DIEGO REGION

ORDER R9-2007-0005

WASTE DISCHARGE REQUIREMENTS  
FOR SEWAGE COLLECTION AGENCIES  
IN THE SAN DIEGO REGION

The California Regional Water Quality Control Board, San Diego Region (hereinafter Regional Board), finds that:

1. **STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS:** State Water Resource Control Board (State Board) Order No. 2006-0003-DWQ, *Statewide General Waste Discharge Requirements for Sanitary Sewer Systems*, adopted by the State Board on May 2 2006, establishes minimum requirements to prevent sanitary sewer overflows (SSOs) from publicly owned/ operated sanitary sewer system. Order No. 2006-0003-DWQ is the primary regulatory mechanism for sanitary sewer systems statewide, but allows each regional board to issue more stringent or more prescriptive Waste Discharge Requirements (WDRs) for sanitary sewer systems within their respective jurisdiction.
2. **ENROLLMENT UNDER ORDER NO. 2006-0003-DWQ:** In accordance with Order No. 2006-0003-DWQ, all federal and state agencies, municipalities, counties, districts, and other public entities that own, operate, acquire, or assume responsibility for sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California are required to apply for coverage under the general WDRs.
3. **ORDER No. 96-04:** On May 9, 1996, this Regional Board adopted Order No. 96-04, *General Waste Discharge Requirements Prohibiting Sanitary Sewer Overflows by Sewage Collection Agencies*, prohibiting the discharge of sewage from a sanitary sewer system at any point upstream of a sewage treatment plant. Each Sewage Collection Agency currently regulated under Order No. 96-04 is required to obtain enrollment under the State Board Order No. 2006-0003-DWQ.
4. **SAN DIEGO REGION SANITARY SEWER OVERFLOW REGULATIONS:** Order No. 96-04 has been an effective regulatory mechanism in reducing the number and magnitude of sewage spills in the Region. The Order is more stringent and prescriptive than Order No. 2006-0003-DWQ in that Order No. 2006-0003-DWQ may allow some SSOs that are currently prohibited under Order No. 96-04. In order to maintain regulation of Sanitary Sewer Systems in the San Diego Region consistent with the provisions of Order No. 96-04, this Order reaffirms the prohibition on all SSOs upstream of a sewage treatment plant. This strict prohibition implements the requirements contained in the Basin Plan, California Water Code, and Federal Clean Water Act.

5. **CONSISTENT REGIONAL REQUIREMENTS:** The regulation of all Sewage Collection Agencies will be consistent within the San Diego Region by requiring agencies such as California Department of Corrections; California State University, San Marcos; San Diego State University; and University of California, San Diego, which have not been regulated under Order No. 96-04, to comply with Regional Board requirements that augment State Board Order No. 2006-0003-DWQ.
6. **BASIN PLAN:** The Regional Board adopted a Water Quality Control Plan for the San Diego Basin (hereinafter Basin Plan) on September 8, 1994. The Basin Plan was subsequently approved by the State Board on December 13, 1994. Subsequent revisions to the Basin Plan have also been adopted by the Regional Board and approved by the State Board. The Basin Plan designates beneficial uses, narrative, and numerical water quality objectives, and prohibitions which are applicable to the discharges prohibited under this Order.
7. **PROHIBITIONS CONTAINED IN BASIN PLAN:** The Basin Plan contains the following prohibitions which are applicable to the discharges prohibited under this Order:
  - a. "The discharge of waste to waters of the state in a manner causing, or threatening to cause a condition of pollution, contamination, or nuisance as defined in California Water Code Section 13050, is prohibited."
  - b. "The discharge of treated or untreated waste to lakes or reservoirs used for municipal water supply, or to inland surface water tributaries thereto, is prohibited."
  - c. "The discharge of waste to inland surface waters, except in cases where the quality of the discharge complies with applicable receiving water quality objectives, is prohibited. ..."
  - d. "The dumping, deposition, or discharge of waste directly into waters of the state, or adjacent to such waters in any manner which may permit its being transported into the waters, is prohibited unless authorized by the Regional Board."
  - e. "The unauthorized discharge of treated or untreated sewage to waters of the state or to a storm water conveyance system is prohibited."
  - f. "The discharge of waste to land, except as authorized by waste discharge requirements or the terms described in California Water Code Section 13264 is prohibited."
  - g. "The discharge of waste in a manner causing flow, ponding, or surfacing on lands not owned or under the control of the discharger is prohibited, unless the discharge is authorized by the Regional Board."

8. **PORTER-COLOGNE WATER QUALITY CONTROL ACT (CALIFORNIA WATER CODE, DIVISION 7):** California Water Code Section 13243 provides that a Regional Board, in establishing waste discharge requirements, may specify certain conditions or areas where the discharge of waste, or certain types of waste, is prohibited. California Water Code 13260 prohibits the discharge of waste to land prior to the filing of a required report of waste discharge and the subsequent issuance of either WDRs or a waiver of WDRs. California Water Code 13264 prohibits discharge of waste absent a report of waste discharge and waste discharge requirements.
9. **FEDERAL CLEAN WATER ACT:** The Federal Clean Water Act largely prohibits any discharge of pollutants from a point source to waters of the United States except as authorized under an NPDES permit. In general, any point source discharge of sewage effluent to waters of the United States must comply with technology-based, secondary treatment standards, at a minimum, and any more stringent requirements necessary to meet applicable water quality standards and other requirements. Hence, the unpermitted discharge of wastewater from a sanitary sewer system to waters of the United States is illegal under the Clean Water Act. Furthermore, the Code of Federal Regulation requires proper operation and maintenance of all POTW facilities including collection systems, which results in prevention of SSOs.
10. **RESCISSION OF ORDER No. 96-04:** Order No. 96-04 can be rescinded after all of the Sewage Collection Agencies regulated under Order No. 96-04 have obtained coverage under Order No. 2006-0003-DWQ.
11. **PRIVATE LATERAL SEWAGE DISCHARGES REPORTING:** Order No. 96-04 does not require Sewage Collection Agencies to report Private Lateral Sewage Discharges. Over the past several years, however, this Regional Board has been tracking the number of Private Lateral Sewage Discharges based on courtesy reports from the Sewage Collection Agencies. During the period from July 2004 through June 2006, a total of 268 Private Lateral Sewage Discharges were reported by the Agencies. During some of those months, more Private Lateral Sewage Discharges were reported than public SSOs. Because the Agencies are not required to report Private Lateral Sewage Discharges, it is not known if the numbers reported fully represent the number and locations of Private Lateral Sewage Spills in the Region.

Finding Nos. 2, 3, and 4 of State Board Order No. 2006-0003-DWQ pertaining to causes of SSOs and the potential threat to water quality resulting from SSOs are also applicable to Private Lateral Sewage Discharges. Because Private Lateral Sewage Discharges are numerous and are a potential threat to public health and the environment, there is a need to have a reliable reporting system for Private Lateral Sewage Discharges for similar reasons as the public SSOs. Although sewage collection agencies are not responsible for the cause, cleanup, or repair of Private Lateral Sewage Discharges, sewage collection agencies are typically notified and/or are the first responders to Private Lateral Sewage Discharges. Consequently, requiring the sewage collection agencies to report all known Private Lateral Sewage Discharges is reasonable and a first step toward development of a regulatory approach for reducing Private Lateral Sewage Discharges in the San Diego Region.

12. **PERMITTING FEES:** This Order will serve as additional requirements to the State Board Order No. 2006-0003-DWQ. Sewage Collection Agencies that are covered and pay the fees under State Board Order No. 2006-0003-DWQ (or orders that supersede 2006-0003-DWQ) will not be required to pay for fees under this Order No. R9-2007-0005.
13. **CALIFORNIA ENVIRONMENTAL QUALITY ACT:** The action to adopt this Order is exempt from the California Environmental Quality Act (Public Resources Code §21000 et seq.) because it is an action taken by a regulatory agency to assure the protection of the environment and the regulatory process involves procedures for protection of the environment. (Cal. Code Regs., tit. 14, §15308). In addition, the action to adopt this Order is exempt from CEQA pursuant to Cal.Code Regs., title 14, §15301 to the extent that it applies to existing sanitary sewer collection systems that constitute "existing facilities" as that term is used in Section 15301, and §15302, to the extent that it results in the repair or replacement of existing systems involving negligible or no expansion of capacity.
14. **PUBLIC NOTICE:** The Regional Board has notified all known interested persons and the public of its intent to consider adoption of this Order. Interested persons and the public have had reasonable opportunity to participate in review of the proposed Order.
15. **PUBLIC HEARING:** The Regional Board has considered all comments pertaining to this Order submitted to the Regional Board in writing, or by oral presentations at the public hearing held on February 14, 2007.

**IT IS HEREBY ORDERED,** that all Sewage Collection Agencies within the San Diego Region, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following, in addition to the State Water Resource Control Board Order No. 2006-0003-DWQ (or orders that supersede 2006-0003-DWQ) and its addenda (hereinafter referred to as State Board Order):

#### A. Definitions

1. For purposes of this Order, a Sewage Collection Agency shall mean an "enrollee", as defined in the State Board Order, within the boundaries of the San Diego Region.

#### B. Prohibition

1. The discharge of sewage from a sanitary sewer system at any point upstream of a sewage treatment plant is prohibited.

#### C. Monitoring and Reporting Program Requirements

1. Each Sewage Collection Agency shall report all SSOs in accordance with the Monitoring and Reporting Program No. 96-04 until the Sewage Collection Agency notifies the Regional Board that they can successfully report the SSOs to the State Board Online SSO System. The notification shall be a letter signed and certified by a person designated, for a municipality, state, federal or other public agency, as either a principal executive officer or ranking elected official.
2. For Category 1 (as defined in State Board Monitoring and Reporting Program No. 2006-0003-DWQ) SSOs, the Sewage Collection Agency shall provide notification of the SSO to the Regional Board by phone, email, or fax within 24 hours after the Sewage Collection Agency becomes aware of the SSO, notification is possible, and notification can be provided without substantially impeding cleanup or other emergency measures. The information reported to the Regional Board shall include the name and phone number of the person reporting the SSO, the responsible sewage collection agency, the estimated total sewer overflow volume, the location of the SSO, the receiving water (if any), the start date/time of the SSO (if known), the end date/time of the SSO (or whether or not the sewer overflow is still occurring at the time of the report), and confirmation that the local health services agency was or will be notified as required under the reporting requirements of the local health services agency.
3. The Sewage Collection Agency shall provide notification of all Private Lateral Sewage Discharges (as defined in the State Board Order), for which they become aware of, that equal or exceed 1,000 gallons; result in a discharge to a drainage channel and/or surface water; and/or discharge to a storm drainpipe that was not fully captured and returned to the sanitary sewer system, to the Regional Board by phone or fax within 24 hours after the Sewage Collection Agency becomes aware of the Private Lateral Sewage Discharge, notification is possible, and notification can be provided without substantially impeding cleanup or other emergency measures. The information reported to the Regional Board shall include the following information, if known: the name and phone number of the person reporting the Private Lateral Sewage Discharge, the service area where the Private Lateral Sewage Discharge occurred, the responsible party (other than the Sewage Collection Agency, if known), the estimated Private

Lateral Sewage Discharge volume, the location of the Private Lateral Sewage Discharge, the receiving water (if any), the start date/time of the Private Lateral Sewage Discharge, the end date/time of the Private Lateral Sewage Discharge (or whether or not the sewer overflow is still occurring at the time of the report), and confirmation that the local health services agency was or will be notified as required under the reporting requirements of the local health services agency.

4. The following requirement supersedes the Private Lateral Sewage Discharge Reporting Timeframe for Private Lateral Sewage Discharges in the State Board Monitoring and Reporting Program No. 2006-0003-DWQ: For Private Lateral Sewage Discharges that occur within a Sewage Collection Agency's service area and that a Sewage Collection Agency becomes aware of, the Sewage Collection Agency shall report the Private Lateral Sewage Discharge to the State Board Online SSO Database within 30 days after the end of the calendar month in which the Private Lateral Sewage Discharge occurs. The Sewage Collection Agency must identify the sewage discharge as occurring and caused by a private lateral, and a responsible party (other than the Sewage Collection Agency) should be identified, if known. The Sewage Collection Agency will not be responsible for the cause, cleanup, or repair of Private Lateral Sewage Discharges, but only the reporting of those within their jurisdiction and for which they become aware of.

#### D. Notification

1. Upon completion with Monitoring and Reporting Program Requirement C.1, the Regional Board will give written notice to the Sewage Collection Agency stating that regulation of the Sewage Collection Agency under Order No. 96-04 is terminated.
2. Order No. 96-04 is rescinded once regulation of all Sewage Collection Agencies under Order No. 96-04 is terminated. The Regional Board will give written notice to all of the Sewage Collection Agencies stating that all Sewage Collection Agencies under Order No. 96-04 was terminated and, thus, Order 96-04 is rescinded.

*I, John Robertus, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of Order No. 2007-0005 adopted by the California Regional Water Quality Control Board, San Diego Region on February 14, 2007.*

  
\_\_\_\_\_  
JOHN H. ROBERTUS  
Executive Officer



## **Attachment 3. SWRCB Order 2013-0058-EXEC**

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

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

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

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

---

<sup>1</sup> Available for download at:

[http://www.waterboards.ca.gov/board\\_decisions/adopted\\_orders/water\\_quality/2006/wqo/wqo2006\\_0003.pdf](http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2006/wqo/wqo2006_0003.pdf)

<sup>2</sup> Cal OES Hazardous Materials Spill Reports available Online at:

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

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

8. In the February 28, 2008 Memorandum of Agreement between the State Water Board and the California Water and Environment Association (CWEA), the State Water Board committed to re-designing the CIWQS<sup>3</sup> Online SSO Database to allow "event" based SSO reporting versus the original "location" based reporting. Revisions to this MRP and accompanying changes to the CIWQS Online SSO Database will implement this change by allowing for multiple SSO appearance points to be associated with each SSO event caused by a single asset failure.
9. Based on stakeholder input and Water Board staff experience implementing the SSO Reduction Program, SSO categories have been revised in this MRP. In the prior version of the MRP, SSOs have been categorized as Category 1 or Category 2. This MRP implements changes to SSO categories by adding a Category 3 SSO type. This change will improve data management to further assist Water Board staff with evaluation of high threat and low threat SSOs by placing them in unique categories (i.e., Category 1 and Category 3, respectively). This change will also assist enrollees in identifying SSOs that require Cal OES notification.
10. Based on over six years of implementation of the SSS WDRs, the State Water Board concludes that the February 20, 2008 MRP must be updated to better advance the SSO Reduction Program<sup>4</sup> objectives, assess compliance, and enforce the requirements of the SSS WDRs.

**IT IS HEREBY ORDERED THAT:**

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

8/6/13  
\_\_\_\_\_  
Date

  
\_\_\_\_\_  
Thomas Howard  
Executive Director

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

<sup>4</sup> Statewide Sanitary Sewer Overflow Reduction Program information is available at: [http://www.waterboards.ca.gov/water\\_issues/programs/ssor/](http://www.waterboards.ca.gov/water_issues/programs/ssor/)

## ATTACHMENT A

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

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

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

#### A. SUMMARY OF MRP REQUIREMENTS

Table 1 – Spill Categories and Definitions

CATEGORIES	DEFINITIONS [see Section A on page 5 of Order 2006-0003-DWQ, for Sanitary Sewer Overflow (SSO) definition]
CATEGORY 1	Discharges of untreated or partially treated wastewater of <b>any volume</b> resulting from an enrollee's sanitary sewer system failure or flow condition that: <ul style="list-style-type: none"><li>• Reach surface water and/or reach a drainage channel tributary to a surface water; or</li><li>• Reach a Municipal Separate Storm Sewer System (MS4) and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).</li></ul>
CATEGORY 2	Discharges of untreated or partially treated wastewater of <b>1,000 gallons or greater</b> resulting from an enrollee's sanitary sewer system failure or flow condition that <b>do not</b> 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 <b>within a privately owned sewer lateral</b> connected to the enrollee's sanitary sewer system or from other private sewer assets. PLSDs that the enrollee becomes aware of may be <b>voluntarily</b> reported to the California Integrated Water Quality System (CIWQS) Online SSO Database.

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

ELEMENT	REQUIREMENT	METHOD
<b>NOTIFICATION</b> (see section B of MRP)	<ul style="list-style-type: none"> <li>• Within two hours of becoming aware of any Category 1 SSO <b>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</b>, notify the California Office of Emergency Services (Cal OES) and obtain a notification control number.</li> </ul>	Call Cal OES at: <b>(800) 852-7550</b>
<b>REPORTING</b> (see section C of MRP)	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• Category 3 SSO: Submit certified report within 30 calendar days of the end of month in which SSO the occurred.</li> <li>• 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.</li> <li>• “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.</li> <li>• Collection System Questionnaire: Update and certify every 12 months.</li> </ul>	Enter data into the CIWQS Online SSO Database ( <a href="http://ciwqs.waterboards.ca.gov/">http://ciwqs.waterboards.ca.gov/</a> ), certified by enrollee’s Legally Responsible Official(s).
<b>WATER QUALITY MONITORING</b> (see section D of MRP)	<ul style="list-style-type: none"> <li>• Conduct water quality sampling <b>within 48 hours</b> after initial SSO notification for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters.</li> </ul>	Water quality results are required to be uploaded into CIWQS for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters.
<b>RECORD KEEPING</b> (see section E of MRP)	<ul style="list-style-type: none"> <li>• SSO event records.</li> <li>• Records documenting Sanitary Sewer Management Plan (SSMP) implementation and changes/updates to the SSMP.</li> <li>• Records to document Water Quality Monitoring for SSOs of 50,000 gallons or greater spilled to surface waters.</li> <li>• Collection system telemetry records if relied upon to document and/or estimate SSO Volume.</li> </ul>	Self-maintained records shall be available during inspections or upon request.

## **B. NOTIFICATION REQUIREMENTS**

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

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

### **C. REPORTING REQUIREMENTS**

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

- ii. **Category 3 SSOs** – All SSOs that meet the above criteria for Category 3 SSOs shall be reported to the CIWQS Online SSO Database and certified within 30 calendar days after the end of the calendar month in which the SSO occurs (e.g., all Category 3 SSOs occurring in the month of February shall be entered into the database and certified by March 30). Minimum information that shall be certified in a final Category 3 SSO report shall include all information identified in section 8.i.e below.
- iii. **“No Spill” Certification** – If there are no SSOs during the calendar month, the enrollee shall either 1) certify, within 30 calendar days after the end of each calendar month, a “No Spill” certification statement in the CIWQS Online SSO Database certifying that there were no SSOs for the designated month, or 2) certify, quarterly within 30 calendar days after the end of each quarter, “No Spill” certification statements in the CIWQS Online SSO Database certifying that there were no SSOs for each month in the quarter being reported on. For quarterly reporting, the quarters are Q1 - January/ February/ March, Q2 - April/May/June, Q3 - July/August/September, and Q4 - October/November/December.  
  
If there are no SSOs during a calendar month but the enrollee reported a PLSD, the enrollee shall still certify a “No Spill” certification statement for that month.
- iv. **Amended SSO Reports** – The enrollee may update or add additional information to a certified SSO report within 120 calendar days after the SSO end date by amending the report or by adding an attachment to the SSO report in the CIWQS Online SSO Database. SSO reports certified in the CIWQS Online SSO Database prior to the adoption date of this MRP may only be amended up to 120 days after the effective date of this MRP. After 120 days, the enrollee may contact the SSO Program Manager to request to amend an SSO report if the enrollee also submits justification for why the additional information was not available prior to the end of the 120 days.

## 5. **SSO Technical Report**

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

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



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

iii. **Water Quality Monitoring:**

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

6. **PLSDs**

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

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

7. **CIWQS Online SSO Database Unavailability**

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

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

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

i. **SSO Reports**

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

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

10. Whether or not a beach closure occurred or may have occurred as a result of the SSO.
  11. Whether or not health warnings were posted as a result of the SSO.
  12. Name of beach(es) closed and/or impacted. If no beach was impacted, NA shall be selected.
  13. Name of surface water(s) impacted.
  14. If water quality samples were collected, identify parameters the water quality samples were analyzed for. If no samples were taken, NA shall be selected.
  15. If water quality samples were taken, identify which regulatory agencies received sample results (if applicable). If no samples were taken, NA shall be selected.
  16. Description of methodology(ies) and type of data relied upon for estimations of the SSO volume discharged and recovered.
  17. SSO Certification: Upon SSO Certification, the CIWQS Online SSO Database will issue a final SSO identification (ID) number.
- c. **Draft Category 2 SSOs**: At a minimum, the following mandatory information shall be reported for a draft Category 2 SSO report:
1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO.
- d. **Certified Category 2 SSOs**: At a minimum, the following mandatory information shall be reported for a certified Category 2 SSO report:
1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO and Items 1-9, and 17 in section 8.i.b above for Certified Category 1 SSO.
- e. **Certified Category 3 SSOs**: At a minimum, the following mandatory information shall be reported for a certified Category 3 SSO report:
1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO and Items 1-5, and 17 in section 8.i.b above for Certified Category 1 SSO.

ii. **Reporting SSOs to Other Regulatory Agencies**

These reporting requirements do not preclude an enrollee from reporting SSOs to other regulatory agencies pursuant to state law. In addition, these reporting requirements do not replace other Regional Water Board notification and reporting requirements for SSOs.

iii. **Collection System Questionnaire**

The required Questionnaire (see subsection G of the SSS WDRs) provides the Water Boards with site-specific information related to the enrollee's sanitary sewer system. The enrollee shall complete and certify the Questionnaire at least every 12 months to facilitate program implementation, compliance assessment, and enforcement response.

iv. **SSMP Availability**

The enrollee shall provide the publicly available internet web site address to the CIWQS Online SSO Database where a downloadable copy of the enrollee's approved SSMP, critical supporting documents referenced in the SSMP, and proof of local governing board approval of the SSMP is posted. If all of the SSMP documentation listed in this subsection is not publicly available on the Internet, the enrollee shall comply with the following procedure:

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

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

**D. WATER QUALITY MONITORING REQUIREMENTS:**

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

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

**E. RECORD KEEPING REQUIREMENTS:**

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

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

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

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

## **F. CERTIFICATION**

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

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

### CERTIFICATION

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

7/30/13

Date



Jeanine Townsend  
Clerk to the Board

**Attachment 4. SWRCB Order WQ 2022-0103-DWQ**

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

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

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

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

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

**CERTIFICATION**

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

AYE:           Chair E. Joaquin Esquivel  
                  Vice Chair Dorene D'Adamo  
                  Board Member Sean Maguire  
                  Board Member Laurel Firestone  
                  Board Member Nichole Morgan

NAY:           None

ABSENT:       None

ABSTAIN:      None

 for  
\_\_\_\_\_  
Jeanine Townsend  
Clerk to the Board



# STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

## Table of Contents

1.	Introduction .....	4
2.	Regulatory Coverage and Application Requirements .....	5
2.1.	Requirements for Continuation of Existing Regulatory Coverage .....	5
2.2.	Requirements for New Regulatory Coverage.....	5
2.3.	Regulatory Coverage Transfer .....	7
3.	Findings .....	7
3.1.	Legal Authorities .....	7
3.2.	General .....	11
3.3.	Water Quality Control Plans, Policies and Resolutions .....	14
3.4.	California Environmental Quality Act.....	16
3.5.	State Water Board Funding Assistance for Compliance with Water Board Water Quality Orders .....	16
3.6.	Notification to Interested Parties .....	17
4.	Prohibitions .....	17
4.1	Discharge of Sewage from a Sanitary Sewer System.....	17
4.2.	Discharge of Sewage to Waters of the State.....	17
4.3.	Discharge of Sewage Creating a Nuisance.....	18
5.	Specifications.....	18
5.1.	Designation of a Legally Responsible Official .....	18
5.2.	Sewer System Management Plan Development and Implementation.....	18
5.3.	Certification of Sewer System Management Plan and Plan Updates.....	19
5.4.	Sewer System Management Plan Audits .....	19
5.5.	Six-Year Sewer System Management Plan Update.....	21
5.6.	System Resilience.....	22
5.7.	Allocation of Resources .....	22
5.8.	Designation of Data Submitters.....	22
5.9.	Reporting Certification.....	22
5.10.	System Capacity .....	23
5.11.	System Performance Analysis .....	23
5.12.	Spill Emergency Response Plan and Remedial Actions .....	23
5.13.	Notification, Monitoring, Reporting and Recordkeeping Requirements .....	24
5.14.	Electronic Sanitary Sewer System Service Area Boundary Map.....	26
5.15.	Voluntary Reporting of Spills from Privately-Owned Sewer Laterals and/or Private Sanitary Sewer Systems .....	26
5.16.	Voluntary Notification of Spills from Privately-Owned Laterals and/or Systems to the California Office of Emergency Services.....	27
5.17.	Unintended Failure to Report .....	27

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

5.18. Duty to Report to Water Boards ..... 27  
5.19. Operation and Maintenance ..... 27  
6. Provisions ..... 27  
6.1. Enforcement Provisions ..... 27  
6.2. Other Regional Water Board Orders ..... 30  
6.3. Sewer System Management Plan Availability ..... 31  
6.4. Entry and Inspection ..... 31

**Table of Attachments**

Attachment A – Definitions .....A-1  
Attachment B – Application for Enrollment .....B-1  
Attachment C - Notice of Termination.....C-1  
Attachment D – Sewer System Management Plan – Required Elements .....D-1  
Attachment E1 – Notification, Monitoring, Reporting and Recordkeeping Requirements .....E1-1  
Attachment E2 – Summary of Notification, Monitoring and Reporting Requirements.....E2-1  
Attachment F – Regional Water Quality Control Board Contact Information ..... F-1

# STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

## 1. INTRODUCTION

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

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

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

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

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

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

## STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

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

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

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

## 2. REGULATORY COVERAGE AND APPLICATION REQUIREMENTS

### 2.1. Requirements for Continuation of Existing Regulatory Coverage

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

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

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

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

### 2.2. Requirements for New Regulatory Coverage

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

## STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

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

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

### 2.2.1. Application Package Requirements

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

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

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

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

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

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

### 2.2.3. Electronic Reporting Account for New Enrollee

**Within 30 days after the date of the Approval of Complete Application Package for System Enrollment**, a duly authorized representative for the Enrollee shall obtain a CIWQS Sanitary Sewer System Database user account by clicking the “User Registration” button and following the directions on the [CIWQS Login Page](#)

## STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

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

### 2.3. Regulatory Coverage Transfer

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

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

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

## 3. FINDINGS

### 3.1. Legal Authorities

#### 3.1.1. Federal and State Regulatory Authority

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

#### 3.1.2. Discharge of Sewage

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

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

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

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

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

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

## STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

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

### **3.1.4. Water Board Authority to Prescribe General Waste Discharge Requirements**

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

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

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

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

### **3.1.5. Previous Statewide General Waste Discharge Requirements**

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



## STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

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

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

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

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

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

### **3.1.6. Existing Memorandum of Agreement with California Water Environment Association**

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

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

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

# STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

## 3.2. General

### 3.2.1. Waters of the State

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

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

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

More specifically, sanitary sewer spills may:

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

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

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

## STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

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

### 3.2.3. Proactive Sanitary Sewer System Management to Eliminate Spill Causes

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

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

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

## STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

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

### 3.2.4. Underground Sanitary Sewer System Leakage

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

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

### **3.2.5. Proactive Sanitary Sewer System Management to Reduce Inflow and Infiltration**

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

### **3.3. Water Quality Control Plans, Policies and Resolutions**

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

#### **3.3.1. State Water Board Antidegradation Policy**

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

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

#### **3.3.2. State Water Board Sources of Drinking Water Policy**

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

#### **3.3.3. State Water Board Cost of Compliance Resolution**

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

## STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

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

### **3.3.4. State Water Board Human Right to Water Resolution**

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

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

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

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

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

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

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

## STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

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

### **3.3.5. State Water Board Open Data Resolution**

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

### **3.3.6. State Water Board Response to Climate Change**

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

### **3.4. California Environmental Quality Act**

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

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

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

Funding applicants may obtain further information regarding current funding opportunities, and Division of Financial Assistance staff contact information at the following website: [Financial Assistance Funding - Grants and Loans | California State Water Resources Control Board](https://www.waterboards.ca.gov/water_issues/programs/grants_loans/).

([https://www.waterboards.ca.gov/water\\_issues/programs/grants\\_loans/](https://www.waterboards.ca.gov/water_issues/programs/grants_loans/))

## STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

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

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

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

### 3.6. Notification to Interested Parties

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

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

## 4. PROHIBITIONS

### 4.1 Discharge of Sewage from a Sanitary Sewer System

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

### 4.2 Discharge of Sewage to Waters of the State

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



## STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

### 4.3. Discharge of Sewage Creating a Nuisance

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

## 5. SPECIFICATIONS

### 5.1. Designation of a Legally Responsible Official

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

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

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

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

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

### 5.2. Sewer System Management Plan Development and Implementation

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

## STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

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

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

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

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

For a new Enrollee:

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

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

### **5.3. Certification of Sewer System Management Plan and Plan Updates**

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

### **5.4. Sewer System Management Plan Audits**

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

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

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

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

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

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

The Enrollee shall submit a complete audit report that includes:

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

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

See the following tables for clarification:

**Initial Audit Period and Audit Due Date for New Enrollees**

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

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

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

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

**Three-Year Ongoing Audit Period**

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

**5.5. Six-Year Sewer System Management Plan Update**

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

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

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

## 5.6. System Resilience

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

## 5.7. Allocation of Resources

The Enrollee shall:

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

## 5.8. Designation of Data Submitters

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

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

## 5.9. Reporting Certification

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

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

## STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

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

### 5.10. System Capacity

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

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

### 5.11. System Performance Analysis

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

#### **Graph 1 – Total Spill Volume per Year:**

X axis: A 10-year period which includes the current calendar year and the nine previous calendar years;

Y axis: The total spill volume, per Spill Category, for each calendar year.

#### **Graph 2 – Total Number of Spills per Year:**

X axis: A 10-year period which includes the current calendar year and the nine previous calendar years;

Y axis: The total number of spills, per Spill Category, for each calendar year.

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

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

### 5.12. Spill Emergency Response Plan and Remedial Actions

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

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

## STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

### For New Enrollees:

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

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

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

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

### **5.13. Notification, Monitoring, Reporting and Recordkeeping Requirements**

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

#### **5.13.1. Spill Categories**

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

- **Category 1 Spill**

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

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

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

## STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

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

- **Category 2 Spill**

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

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

- **Category 3 Spill**

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

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

- **Category 4 Spill**

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

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

### 5.13.2. Annual Report

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

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



**5.14. Electronic Sanitary Sewer System Service Area Boundary Map**

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

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

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

An Enrollee of a disadvantaged community that may need assistance developing an electronic map to comply with this requirement, may contact State Water Board staff for assistance at [SanitarySewer@waterboards.ca.gov](mailto:SanitarySewer@waterboards.ca.gov).

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

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

<https://ciwqs.waterboards.ca.gov>:

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

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

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

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

## STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

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

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

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

### **5.17. Unintended Failure to Report**

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

### **5.18. Duty to Report to Water Boards**

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

### **5.19. Operation and Maintenance**

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

## **6. PROVISIONS**

### **6.1. Enforcement Provisions**

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

#### **6.1.1. Enforceability of Clean Water Act and Water Code Violations**

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

## STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

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

### **6.1.2. Monetary Penalties**

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

### **6.1.3. Falsifying or Failure to Report**

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

### **6.1.4. Severability of General Order**

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

### **6.1.5. Indirect Discharges**

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

### **6.1.6. Water Boards' Considerations for Discretionary Enforcement**

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

## STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

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

## STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

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

### 6.1.7. Enforcement Discretion Based on Reporting Compliance

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

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

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

### 6.2. Other Regional Water Board Orders

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

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

## STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

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

### **6.3. Sewer System Management Plan Availability**

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

### **6.4. Entry and Inspection**

#### **6.4.1. Entry and Availability of Information**

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

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

#### **6.4.2. Pre-Inspection Questionnaire**

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

## **ATTACHMENT A - DEFINITIONS**

### **Annual Report**

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

### **Basin Plan**

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

### **Beneficial Uses**

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

### **California Integrated Water Quality System (CIWQS)**

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

### **Data Submitter**

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

### **Disadvantaged Community**

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

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

### **Drainage Conveyance System**

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

## Enrollee

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

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

## Environmentally Sensitive Area

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

## Exfiltration

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

## Flood Control Channel

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

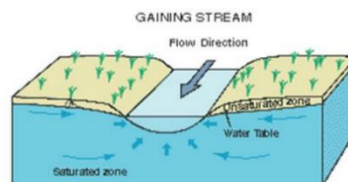
## Governing Entity

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

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

## Hydrologically Connected

Two waterbodies are hydrologically connected when one waterbody flows, or has the potential to flow, into the other waterbody. For the purpose of this General Order, groundwater is hydrologically connected to a surface water when the groundwater feeds into the surface water. (The surface waterbody in this example is termed a gaining stream as it gains flow from surrounding groundwater.)





### **Lateral (including Lower and Upper Lateral)**

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

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

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

### **Legally Responsible Official**

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

### **Nuisance**

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

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

### **Private Sewer Lateral**

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

### **Private Sanitary Sewer System**

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

### **Potential to Discharge, Potential Discharge**

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

## **Receiving Water**

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

## **Resilience**

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

## **Sanitary Sewer System**

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

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

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

## **Satellite Sewer System**

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

## **Sewer System Management Plan**

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

## **Sewage**

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

## **Spill**

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

## **Training**

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

**Wash Down Water**

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

**Waste**

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

**Waste Discharge Identification Number (WDID)**

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

**Waters of the State**

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

**Waters of the United States**

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

**Water Quality Objective**

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

**ATTACHMENT B – APPLICATION FOR ENROLLMENT**

**1. Enrollment Status:** (Mark only one item)

New Enrollee

New Enrollee with previous regulatory coverage under Order 2006-0003-DWQ  
(that failed to certify continuation of coverage in CIWQS per Order 2022-XXXX-DWQ)

Existing WDID Number: \_\_\_\_\_

**2. Applicant Information:**

Legally Responsible Official Submitting Application

First and Last Name: \_\_\_\_\_

Title: \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

System Owner/Operator Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

County: \_\_\_\_\_

Sanitary Sewer System Name: \_\_\_\_\_

Regional Water Quality Control Board(s): \_\_\_\_\_

Signature and Date: \_\_\_\_\_

**3. Applicant Type (Check one):**

City    County    State    Federal    Special District

Government Combination    Private    Other Non-governmental Entity

**4. Wastewater Treatment Plant Receiving Sanitary Sewer System Waste:**

Wastewater Treatment Plant Permittee: \_\_\_\_\_

WDID No.: \_\_\_\_\_

**5. Billing Information**

Billing Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Billing Contact Person and Title: \_\_\_\_\_

Phone and Email Address: \_\_\_\_\_

**6. Application Fee:**

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

Check one of the following and enter fee amount:

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

Population Served ≥ 50,000 – Total Fee submitted: \$ \_\_\_\_\_

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

State Water Resources Control Board, Accounting Office

P. O. Box 1888

Sacramento, CA 95812-1888

Attention: Statewide Sanitary Sewer System Program

**7. Application Submittal Certification**

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

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



**3. Regulatory Coverage Termination Certification**

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

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**For State Water Board Use Only**

Approved for Termination

Denied and Returned to Enrollee

Deputy Director of Water Quality Signature: \_\_\_\_\_

Date: \_\_\_\_\_ Notice of Termination Effective Date: \_\_\_\_\_

**ATTACHMENT D – SEWER SYSTEM MANAGEMENT PLAN – REQUIRED ELEMENTS**

**Table of Contents**

1. Sewer System Management Plan Goal And Introduction .....D-2

    1.1. Regulatory Context .....D-2

    1.2. Sewer System Management Plan Update Schedule.....D-3

    1.3. Sewer System Asset Overview .....D-3

2. Organization .....D-3

3. Legal Authority .....D-4

4. Operation And Maintenance Program.....D-4

    4.1. Updated Map of Sanitary Sewer System .....D-4

    4.2. Preventive Operation and Maintenance Activities .....D-4

    4.3. Training .....D-5

    4.4. Equipment Inventory .....D-5

5. Design And Performance Provisions .....D-5

    5.1. Updated Design Criteria and Construction Standards and Specifications.....D-5

    5.2. Procedures and Standards.....D-5

6. Spill Emergency Response Plan.....D-6

7. Sewer Pipe Blockage Control Program.....D-7

8. System Evaluation, Capacity Assurance and Capital Improvements.....D-7

    8.1 System Evaluation and Condition Assessment.....D-7

    8.2. Capacity Assessment and Design Criteria .....D-8

    8.3. Prioritization of Corrective Action .....D-9

    8.4. Capital Improvement Plan .....D-9

9. Monitoring, Measurement and Program Modifications.....D-9

10. Internal Audits.....D-10

11. Communication Program .....D-10



**ATTACHMENT D – SEWER SYSTEM MANAGEMENT PLAN – REQUIRED ELEMENTS**

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

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

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

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

**1. SEWER SYSTEM MANAGEMENT PLAN GOAL AND INTRODUCTION**

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

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

**1.1. Regulatory Context**

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

**1.2. Sewer System Management Plan Update Schedule**

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

**1.3. Sewer System Asset Overview**

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

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

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

**2. ORGANIZATION**

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

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

health officer, county environmental health agency, and State Office of Emergency Services.)

### **3. LEGAL AUTHORITY**

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

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

### **4. OPERATION AND MAINTENANCE PROGRAM**

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

#### **4.1. Updated Map of Sanitary Sewer System**

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

#### **4.2. Preventive Operation and Maintenance Activities**

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

The scheduling system must include:

- Inspection and maintenance activities;

## STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER 2022-0103-DWQ

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

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

### **4.3. Training**

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

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

### **4.4. Equipment Inventory**

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

## **5. DESIGN AND PERFORMANCE PROVISIONS**

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

### **5.1. Updated Design Criteria and Construction Standards and Specifications**

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

### **5.2. Procedures and Standards**

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

**6. SPILL EMERGENCY RESPONSE PLAN**

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

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

## **7. SEWER PIPE BLOCKAGE CONTROL PROGRAM**

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

The procedures must include, at minimum:

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

## **8. SYSTEM EVALUATION, CAPACITY ASSURANCE AND CAPITAL IMPROVEMENTS**

The Plan must include procedures and activities for:

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

### **8.1 System Evaluation and Condition Assessment**

The Plan must include procedures to:

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

## STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER 2022-0103-DWQ

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

### **8.2. Capacity Assessment and Design Criteria**

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

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

The capacity assessment must consider:

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

## STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER 2022-0103-DWQ

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

### **8.3. Prioritization of Corrective Action**

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

### **8.4. Capital Improvement Plan**

The capital improvement plan must include the following items:

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

## **9. MONITORING, MEASUREMENT AND PROGRAM MODIFICATIONS**

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

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



**10. INTERNAL AUDITS**

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

**11. COMMUNICATION PROGRAM**

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

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

**ATTACHMENT E1 – NOTIFICATION, MONITORING, REPORTING AND RECORDKEEPING REQUIREMENTS**

**Table of Contents**

1. Notification Requirements ..... E1-3

    1.1. Notification of Spills of 1,000 Gallons or Greater to the California Office of  
        Emergency Services ..... E1-3

    1.2. Spill Notification Information..... E1-4

    1.3. Notification of Spill Report Updates..... E1-4

2. Spill-Specific Monitoring Requirements ..... E1-5

    2.1 Spill Location and Spread ..... E1-5

    2.2 Spill Volume Estimation..... E1-5

    2.3. Receiving Water Monitoring ..... E1-5

    2.4. Safety and Access Exceptions ..... E1-8

3. Reporting Requirements ..... E1-8

    3.1. Reporting Requirements for Individual Category 1 Spill Reporting ..... E1-8

    3.2. Reporting Requirements for Individual Category 2 Spill Reporting ..... E1-12

    3.3. Monthly Certified Spill Reporting for Category 3 Spills ..... E1-14

    3.4. Monthly Certified Spill Reporting for Category 4 Spills ..... E1-16

    3.5. Amended Certified Spill Reports for Category 3 Spills ..... E1-16

    3.6. Annual Certified Spill Reporting of Category 4 and/or Lateral Spills ..... E1-16

    3.7. Monthly Certification of “No-Spills” or “Category 4 Spills” and/or “Non-Category 1  
        Lateral Spills” ..... E1-16

    3.8. Electronic Sanitary Sewer System Service Area Boundary Map..... E1-17

    3.9. Annual Report (Previously termed as Collection System Questionnaire in  
        General Order 2006-0003-DWQ) ..... E1-17

    3.10. Sewer System Management Plan Audit Reporting Requirements ..... E1-19

    3.11. Sewer System Management Plan Reporting Requirements ..... E1-19

4. Recordkeeping Requirements ..... E1-20

    4.1. Recordkeeping Time Period..... E1-20

    4.2. Availability of Documents ..... E1-20

    4.3. Spill Reports..... E1-20

    4.4. Recordkeeping of Category 4 Spills and Non-Category 1 Lateral Spills ..... E1-21

    4.5. Sewer System Telemetry Records..... E1-22

    4.6. Sewer System Management Plan Implementation Records ..... E1-22

    4.7. Audit Records..... E1-23

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER 2022-0103-DWQ

4.8. Equipment Records..... E1-23  
4.9. Work Orders..... E1-23

## **ATTACHMENT E1– NOTIFICATION, MONITORING, REPORTING AND RECORDKEEPING REQUIREMENTS**

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

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

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

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

### **1. NOTIFICATION REQUIREMENTS**

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

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

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

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

## 1.2. Spill Notification Information

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

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

## 1.3. Notification of Spill Report Updates

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

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

## **2. SPILL-SPECIFIC MONITORING REQUIREMENTS**

### **2.1 Spill Location and Spread**

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

- Photography and GPS coordinates for:
  - The system location where spill originated.  
For multiple appearance points of a single spill event, the points closest to the spill origin.
- Photography for:
  - Drainage conveyance system entry locations,
  - The location(s) of discharge into surface waters, as applicable,
  - Extent of spill spread, and
  - The location(s) of clean up.

### **2.2 Spill Volume Estimation**

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

### **2.3. Receiving Water Monitoring**

#### **2.3.1. Receiving Water Visual Observations**

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

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

## STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER 2022-0103-DWQ

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

### 2.3.2. Receiving Water – Water Quality Sampling and Analysis

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

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

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

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

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

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

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

**2.3.3. Water Quality Analysis Specifications**

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

Sufficiently Sensitive Methods

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

Environmental Laboratory Accreditation Program-Accredited Laboratories

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

**2.3.4. Receiving Water Sampling Locations**

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

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

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

**Receiving Surface Water Sampling (RSW)<sup>1</sup>**

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



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

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

**2.4. Safety and Access Exceptions**

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

**3. REPORTING REQUIREMENTS**

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

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

**3.1. Reporting Requirements for Individual Category 1 Spill Reporting**

**3.1.1. Draft Spill Report for Category 1 Spills**

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

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

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

## STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER 2022-0103-DWQ

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

### 3.1.2. Certified Spill Report for Category 1 Spills

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

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

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

## STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER 2022-0103-DWQ

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

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

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

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

## STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER 2022-0103-DWQ

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

### 3.1.4. Amended Certified Spill Reports for Individual Category 1 Spills

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

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

## 3.2. Reporting Requirements for Individual Category 2 Spill Reporting

### 3.2.1. Draft Spill Report for Category 2 Spills

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

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

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

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

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

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

11. Estimated total spill volume recovered.

### 3.2.2. Certified Spill Report for Category 2 Spills

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

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

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

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

### 3.2.3. Amended Certified Spill Reports for Individual Category 2 Spills

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

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

### 3.3. Monthly Certified Spill Reporting for Category 3 Spills

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

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

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

## STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER 2022-0103-DWQ

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



- Spill response completion date, and
- Ongoing investigation efforts, and expected completion date of investigation to determine the full cause of spill;

21. Detailed narrative of investigation and investigation findings of cause of spill.

### **3.4. Monthly Certified Spill Reporting for Category 4 Spills**

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

### **3.5. Amended Certified Spill Reports for Category 3 Spills**

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

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

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

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

- Maintain records per section 4.4. of this Attachment;  
The Enrollee shall provide records upon request by State Water Board or Regional Water Board staff.
- Annually upload and certify a report, in an appropriate digital format, of all recordkeeping of spills to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occurred.

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

### **3.7. Monthly Certification of “No-Spills” or “Category 4 Spills” and/or “Non-Category 1 Lateral Spills”**

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

## STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER 2022-0103-DWQ

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

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

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

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

### **3.8. Electronic Sanitary Sewer System Service Area Boundary Map**

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

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

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

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

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

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

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

- Population served;

## STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER 2022-0103-DWQ

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

## STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER 2022-0103-DWQ

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

### 3.10. Sewer System Management Plan Audit Reporting Requirements

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

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

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

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

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

### 3.11. Sewer System Management Plan Reporting Requirements

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

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

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

Between 100,000 and 10,000: August 2, 2009

Between 10,000 and 2,500: May 2, 2010

Less than 2,500: August 2, 2010

## STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER 2022-0103-DWQ

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

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

Between 100,000 and 10,000: August 2, 2025

Between 10,000 and 2,500: May 2, 2026

Less than 2,500: August 2, 2026

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

### 4. RECORDKEEPING REQUIREMENTS

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

#### 4.1. Recordkeeping Time Period

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

#### 4.2. Availability of Documents

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

#### 4.3. Spill Reports

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

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

## STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER 2022-0103-DWQ

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

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

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

#### **Recordkeeping of Individual Category 4 Spill Information:**

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

## STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER 2022-0103-DWQ

- The methodology and type of data relied upon, including supervisory control and data acquisition (SCADA) records, flow monitoring or other telemetry information used to estimate the volume of the spill discharged, and the volume of the spill recovered (if any volume of the spill was recovered), and
- The methodology and type of data relied upon to estimate the spill start time, on-going spill rate at time of arrival (if applicable), and the spill end time;

11. Description of implemented system modifications and operating/maintenance modifications.

### **Recordkeeping of Individual Lateral Spill Information:**

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

### **Total Annual Spill Information:**

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

## **4.5. Sewer System Telemetry Records**

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

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

## **4.6. Sewer System Management Plan Implementation Records**

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

**4.7. Audit Records**

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

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

**4.8. Equipment Records**

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

**4.9. Work Orders**

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



**ATTACHMENT E2 – SUMMARY OF NOTIFICATION, MONITORING AND REPORTING REQUIREMENTS**

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

**Table E2-1**

**Spill Category 1: Spills to Surface Waters**

<b>Spill Requirement</b>	<b>Due</b>	<b>Method</b>
Notification	<p><b>Within two (2) hours</b> of the Enrollee’s knowledge of a Category 1 spill of 1,000 gallons or greater, discharging or threatening to discharge to surface waters:</p> <p>Notify the California Office of Emergency Services and obtain a notification control number.</p>	<p>California Office of Emergency Services at: (800) 852-7550  (Section 1 of Attachment E1)</p>
Monitoring	<ul style="list-style-type: none"> <li>• Conduct spill-specific monitoring;</li> <li>• Conduct water quality sampling of the receiving water within <b>18 hours</b> of initial knowledge of spill of 50,000 gallons or greater to surface waters.</li> </ul>	<p>(Section 2 of Attachment E1)</p>
Reporting	<ul style="list-style-type: none"> <li>• Submit Draft Spill Report <b>within three (3) business days</b> of the Enrollee’s knowledge of the spill;</li> <li>• Submit Certified Spill Report <b>within 15 calendar days</b> of the spill end date;</li> <li>• Submit Technical Report <b>within 45 calendar days</b> after the spill end date for a Category 1 spill in which <b>50,000 gallons or greater</b> discharged to surface waters; and</li> <li>• Submit Amended Spill Report <b>within 90 calendar days</b> after the spill end date.</li> </ul>	<p>(Section 3.1 of Attachment E1)</p>

**Table E2-2**

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

<b>Spill Requirements</b>	<b>Due</b>	<b>Method</b>
Notification	<p><b>Within two (2) hours</b> of the Enrollee’s knowledge of a Category 2 spill of 1,000 gallons or greater, discharging or threatening to discharge to waters of the State:</p> <p>Notify California Office of Emergency Services and obtain a notification control number.</p>	<p>California Office of Emergency Services at: (800) 852-7550</p> <p>(Section 1 of Attachment E1)</p>
Monitoring	Conduct spill-specific monitoring.	(Section 2 of Attachment E1)
Reporting	<ul style="list-style-type: none"> <li>• Submit Draft Spill Report <b>within three (3) business days</b> of the Enrollee’s knowledge of the spill;</li> <li>• Submit Certified Spill Report <b>within 15 calendar days</b> of the spill end date; and</li> <li>• Submit Amended Spill Report <b>within 90 calendar days</b> after the spill end date.</li> </ul>	(Section 3.2 of Attachment E1)

**Table E2-3**

**Spill Category 3: Spills of Equal or Greater than 50 Gallons and Less than 1,000 Gallons That Does Not Discharge to Surface Waters**

<b>Spill Requirements</b>	<b>Due</b>	<b>Method</b>
Notification	Not Applicable	Not Applicable
Monitoring	Conduct spill-specific monitoring.	(Section 2 of Attachment E1)
Reporting	<ul style="list-style-type: none"> <li>Submit monthly Certified Spill Report to the online CIWQS Sanitary Sewer System Database within <b>30 calendars days</b> after the end of the month in which the spills occur; and</li> <li>Submit Amended Spill Reports <b>within 90 calendar days</b> after the Certified Spill Report due date.</li> </ul>	(Section 3.3 and 3.5 of Attachment E1)

**Table E2-4**

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

<b>Spill Requirements</b>	<b>Due</b>	<b>Method</b>
Notification	Not Applicable	Not Applicable
Monitoring	Conduct spill-specific monitoring.	(Section 2 of Attachment E1)
Reporting	<ul style="list-style-type: none"> <li>If, during any calendar month, Category 4 spills occur, certify monthly, the estimated total spill volume exiting the sanitary sewer system, and the total number of all Category 4 spills into the online CIWQS Sanitary Sewer System Database, within 30 days after the end of the calendar month in which the spills occurred.</li> <li>Upload and certify a report, in an acceptable digital format, of all Category 4 spills to the online CIWQS Sanitary Sewer System Database, by February 1<sup>st</sup> after the end of the calendar year in which the spills occur.</li> </ul>	(Section 3.4, 3.6, 3.7 and 4.4 of Attachment E1)

**Table E2-5**

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

<b>Spill Requirements</b>	<b>Due</b>	<b>Method</b>
Notification	<p><b>Within two (2) hours</b> of the Enrollee’s knowledge of a spill of 1,000 gallons or greater, from an enrollee-owned and/or operated lateral, discharging or threatening to discharge to waters of the State:</p> <p>Notify California Office of Emergency Services and obtain a notification control number.</p> <p>Not applicable to a spill of less than 1,000 gallons.</p>	<p>California Office of Emergency Services at: (800) 852-7550</p> <p>(Section 1 of Attachment E1)</p>
Monitoring	Conduct visual monitoring.	(Section 2 of Attachment E1)
Reporting	<ul style="list-style-type: none"> <li>• Upload and certify a report, in an acceptable digital format, of all lateral spills (that do not discharge to a surface water) to the online CIWQS Sanitary Sewer System Database, by February 1<sup>st</sup> after the end of the calendar year in which the spills occur.</li> <li>• Report a lateral spill of any volume that discharges to a surface water as a Category 1 spill.</li> </ul>	(Sections 3.6, 3.7 and 4.4 of Attachment E1)

**ATTACHMENT F – REGIONAL WATER QUALITY CONTROL BOARD CONTACT INFORMATION**

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



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

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

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

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

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

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

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

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

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

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

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

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

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER 2022-0103-DWQ

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

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

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

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

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

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

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

**Region 6 -- Lahontan Regional Water Quality Control Board:**

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

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

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

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

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

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

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

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

Orange, Riverside, San Bernardino counties.

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

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

San Diego county and portions of Orange and Riverside counties.

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

**End of Order 2022-0103-DWQ**

## **Attachment 5. Change Log**

City of San Diego  
Sewer System Management Plan Change Log

No.	Date of Change	SSMP Section	SSMP SubSection	Change	Approved By (Name of Element Owner)
1	April 2018	All		Removed outdated references to consent decree.	Agnes Generoso
2	April 2018	Goal	Goal	Introduction added to provide background on regulations.	Agnes Generoso
3	April 2018	Goal	Goal	Updated goals to replace outdated general goals and to include specific SSMP implementation goals.	Agnes Generoso
4	April 2018	Goal	Certification	Added statement of certification.	Agnes Generoso
5	April 2018	Organization	Organization	Section updated with latest organization chart and WDR responsible party.	Agnes Generoso
6	April 2018	Organization	Organization	Contact information moved to Attachment 6.	Agnes Generoso
7	April 2018	Legal Authority	Legal Authority	Summary of City Legal Authorities added.	Jeff Van Every
8	April 2018	Operation and Maintenance Program	Operation and Maintenance Program	Section updated with latest operation and maintenance practices and training resources.	Terrell Powell
9	April 2018	Operation and Maintenance Program	Gravity Sewer System Preventative and Proactive Maintenance	Semi-automatic support logic updated to current practices.	Terrell Powell
10	April 2018	Operation and Maintenance Program	Non-Right-of_Way Maintenance	Section updated to include typical preventative maintenance practices.	Terrell Powell
11	April 2018	Operation and Maintenance Program	Pump Station and Force Mains Maintenance	Pump stations updated to clarify WWTD vs WWC pump stations and treatment plant pump stations and force mains that are not included in the SSMP.	Mike Bedard (WWC) Rim Stanley (WWTD)
12	April 2018	Operation and Maintenance Program	Pump Station Back up Power	Description of back up power to pump stations added.	Mike Bedard (WWC) Rim Stanley (WWTD)
13	April 2018	Operation and Maintenance Program	Predictive Maintenance Program fro WWTD Pump Stations	Section added for WWTD pump stations including odor control.	Rim Stanley
14	April 2018	Operation and Maintenance Program	Force Main Air Relief Valve Preventative Maintenance	Section added to address air relief valves.	Mike Bedard (WWC) Rim Stanley (WWTD)
15	April 2018	Operation and Maintenance Program	Condition Assessment	Updated information for condition assessment programs for collection system infrastructure including gravity sewers, maintenance holes, pump stations, and force mains.	Vien Hong
16	April 2018	Operation and Maintenance Program	Sewer Pump Station and WWC Force Main Inspection	Section updated and revised to reflect current practices.	Vien Hong Mike Bedard
17	April 2018	Operation and Maintenance Program	Replacement and Rehabilitation	Updated to include the use of condition assessment results and process for improvement decisions.	Vien Hong
18	April 2018	Operation and Maintenance Program	Training from Professional Associations	Section added to include professional training resources.	Terrell Powell Rim Stanley
19	April 2018	Operation and Maintenance Program	Equipment and Replacement Parts Inventory	Updated to include replacement part process.	Mike Bedard (WWC) Rim Stanley (WWTD) Jean Fernandes and Sean Willis
20	April 2018	Design and Performance Provisions	Design and Performance Provisions	Updated to the latest Sewer Design Guide.	Jeff Van Every



City of San Diego  
Sewer System Management Plan Change Log

No.	Date of Change	SSMP Section	SSMP SubSection	Change	Approved By (Name of Element Owner)
21	April 2018	Overflow Emergency Response Plan	Overflow Emergency Response Plan	Section revised to introduce the section in the body of the SSMP, but the Plan has been moved to an attachment and has been updated with the latest practices. Contact information and minor updates made to OERP.	Isaac Jenkins
22	April 2018	Fog Control Program	Fog Control Program	Added performance chart for FOG SSOs illustration high performance of FOG program.	Brian Ikeda
23	April 2018	Fog Control Program	Background	Background updated to include grease caused SSOs.	Brian Ikeda
24	April 2018	Fog Control Program	Implementation Plan for Public Outreach	Public outreach updated to include select public events and waste recycling.	Brian Ikeda
25	April 2018	Fog Control Program	Disposal of FOG	Section updated to include local haulers and the Miramar Recycling Facility.	Brian Ikeda
26	April 2018	Fog Control Program	Operation and Maintenance of Grease Interceptors	Section updated with latest acceptable methods, GRE requirements, and inspection frequency.	Brian Ikeda
27	April 2018	System Evaluation and Capacity Assurance Plan	System Evaluation and Capacity Assurance Plan	Section has been updated to the latest practices and map has been updated. Updated to include BCE and capital improvement planning process.	Matthew Wedeking
28	April 2018	System Evaluation and Capacity Assurance Plan	Condition Assessment	Section has been moved to the operation and maintenance section.	Matthew Wedeking
29	April 2018	System Evaluation and Capacity Assurance Plan	Funding	Discussion on funding for CIP updated.	Seth Gates
30	April 2018	Monitoring, Measurement, and Program Modifications	Monitoring, Measurement, and Program Modifications	Section updated to replace detailed database information with information on performance and monitoring. Added a list of performance monitoring metrics.	Agnes Generoso
31	April 2018	SSMP Program Audits	SSMP Program Audits	Section updated with the latest information and to provide additional detail on the audit process.	Agnes Generoso
32	April 2018	Communication Program	Communication Program	Section updated to include latest practices and a descriptive table of the individual responsibilities.	Agnes Generoso
33	February 2019	All		Updated the revision month and year (February 2019).	Michael Rosenberg
34	February 2019	Organization	Organization	Updated Deputy Director information.	Michael Rosenberg
35	February 2019	Operation and Maintenance Program	Operation and Maintenance Program	Section updated with latest software products for mapping (replaced PSTools with SAP).	Michael Rosenberg
36	February 2019	Operation and Maintenance Program	Information Systems Supporting Maintenance Program	Section updated with latest computerized maintenance management systems (replaced EMPAC, PSTools, CSTools, FSTools, SWIM with SAP, Salesforce).	Michael Rosenberg
37	February 2019	Operation and Maintenance Program	Information Management Supporting Pump Station Operation and Maintenance	Section updated with latest software used (replaced EMPAC with SAP).	Michael Rosenberg
38	February 2019	Operation and Maintenance Program	Training from Professional Associations - equipment and replacement part inventories	Section updated with latest tracking software used (replaced EMPAC with SAP).	Michael Rosenberg

City of San Diego  
Sewer System Management Plan Change Log

No.	Date of Change	SSMP Section	SSMP SubSection	Change	Approved By (Name of Element Owner)
39	February 2019	Fog Control Program	Background	Background updated to include latest 2018 data.	Brian Ikeda
40	February 2019	Fog Control Program	Figure 2 - Grease Caused SSOs	Figure updated to include 2018 data.	Brian Ikeda
41	February 2019	Fog Control Program	Fog Control Program	Year updated for participation in major public events.	Brian Ikeda
42	February 2019	Monitoring, Measurement, and Program Modifications	Monitoring, Measurement, and Program Modifications	Section updated with latest computerized maintenance management systems (replaced EMPAC, PSTools, CSTools, FSTools, SWIM with SAP, Salesforce).	Michael Rosenberg
43	February 2019	Attachment 6	SSMP Contact Information	Attachment updated to reflect current contacts.	Michael Rosenberg
44	February 2019	Attachment 7 - Overflow Emergency Response Plan	Definitions	Removed SWIM, added SAP	Michael Rosenberg
45	February 2019	Attachment 7 - Overflow Emergency Response Plan	Telephone Calls - Station 38	Updated Station 38 operator entry for sewer overflow information from SWIM to SAP.	Michael Rosenberg
46	February 2019	Attachment 7 - Overflow Emergency Response Plan	Dispatch of Appropriate Crews to Site of Sewer Spill - Table 5-1	Updated Table 5-1 with current contacts / information.	Michael Rosenberg
47	February 2019	Attachment 7 - Overflow Emergency Response Plan	Communication and Responsibilities during Sewer Overflow Response	Updated System Dispatch Screen from SWIM to SAP.	Michael Rosenberg
48	February 2019	Attachment 7 - Overflow Emergency Response Plan	Appendix A. Sewer Overflow Response and Tracking Process Diagram	Updated diagram - Station 38 generates Service Request and first work order using SAP, not SWIM.	Michael Rosenberg
49	February 2019	Attachment 7 - Overflow Emergency Response Plan	Appendix B. WWC Event Notification List	Updated WWC Event Notification List to show current contacts / information.	Michael Rosenberg
50	February 2019	Attachment 7 - Overflow Emergency Response Plan	Appendix E. Sewer Overflow Tracking Reports	Updated Sewer Overflow Tracking Reports E-1 to E-6) to include 2018 data.	Michael Rosenberg
51	February 2019	Attachment 7 - Overflow Emergency Response Plan	Appendix F. Water Quality Monitoring Program Plan	Updated Attachment F-2 - Public Utilities WWC EMTS Lab Certification document.	Michael Rosenberg
52	April 2019	Attachment 7 - Overflow Emergency Response Plan	Appendix B. WWC Event Notification List	Updated WWC Event Notification List to show current contacts / information.	Michael Rosenberg
53	April 2020	Attachment 7 - Overflow Emergency Response Plan	Appendix B. WWC Event Notification List	Updated WWC Event Notification List to show current contacts / information.	Michael Rosenberg
54	July 2021	Attachment 7 - Overflow Emergency Response Plan	C-1. Overflow / Backup Response Flowchart	Updated the Overflow/Backup Response Flowchart.	Michael Rosenberg
55	July 2021	Attachment 7 - Overflow Emergency Response Plan	D-1. Sanitary Sewer Overflow Field Report	Updated the Sanitary Sewer Overflow Field Report.	Michael Rosenberg

City of San Diego  
Sewer System Management Plan Change Log

No.	Date of Change	SSMP Section	SSMP SubSection	Change	Approved By (Name of Element Owner)
56	July 2021	Attachment 7 - Overflow Emergency Response Plan	E-1 to E-4: Volume Estimation	Added Volume Estimation Worksheets to the plan.	Michael Rosenberg
57	July 2021	Attachment 7 - Overflow Emergency Response Plan	F-1: Back Up Forms Checklist	Added the Back Up Forms Checklist to the plan.	Michael Rosenberg
58	July 2021	Attachment 7 - Overflow Emergency Response Plan	F-2: First Responder Form	Added the First Responder Form to the plan.	Michael Rosenberg
59	July 2021	Attachment 7 - Overflow Emergency Response Plan	F-3: Declination of Cleaning Services	Added the Declination of Cleaning Services to the plan.	Michael Rosenberg
60	July 2021	Attachment 7 - Overflow Emergency Response Plan	F-4: Customer Information Letter	Added the Customer Information Letter to the plan.	Michael Rosenberg
61	July 2021	Attachment 7 - Overflow Emergency Response Plan	F-5: Responsibilities as a Private Property Owner	Added information for the Reponsibilities as a Private Property Owner to the plan.	Michael Rosenberg
62	July 2021	Attachment 7 - Overflow Emergency Response Plan	Claim Against the City of San Diego Form	Added the Claim Against the City of San Diego Form to the plan.	Michael Rosenberg
63	July 2021	Attachment 7 - Overflow Emergency Response Plan	G-1: Failure Analysis	Added a Failure Analysis worksheet to the plan.	Michael Rosenberg
64	October 2021	Attachment 5 - Certification	Certification	Updated the placement of the 2019 SSMP Certification document.	Michael Rosenberg
65	October 2021	Attachment 6	SSMP Contact Information	Attachment updated to reflect current contacts.	Michael Rosenberg
66	October 2021	Attachment 7 - Overflow Emergency Response Plan	Appendix B. WWC Event Notification List	Updated WWC Event Notification List to show current contacts / information.	Michael Rosenberg
67	December 2021	Attachment 7 - Overflow Emergency Response Plan	Appendix B. WWC Event Notification List	Updated WWC Event Notification List to show current contacts / information.	Michael Rosenberg
68	May 2022	Attachment 7 - Overflow Emergency Response Plan	Appendix B. WWC Event Notification List	Updated WWC Event Notification List to show current contacts / information.	Michael Rosenberg
69	May 2022	Attachment 6	SSMP Contact Information	Attachment updated to reflect current contacts.	Michael Rosenberg
70	September 2022	Attachment 7 - Overflow Emergency Response Plan	Appendix B. WWC Event Notification List	Updated WWC Event Notification List to show current contacts / information.	Michael Rosenberg
71	September 2022	Attachment 6	SSMP Contact Information	Attachment updated to reflect current contacts.	Michael Rosenberg

City of San Diego  
Sewer System Management Plan Change Log

No.	Date of Change	SSMP Section	SSMP SubSection	Change	Approved By (Name of Element Owner)
72	October 2022	Attachment 7 - Overflow Emergency Response Plan	Appendix B. WWC Event Notification List	Updated WWC Event Notification List to show current contacts / information.	Michael Rosenberg
73	November 2022	Attachment 6	SSMP Contact Information	Attachment updated to reflect current contacts.	Michael Rosenberg
74	November 2022	Attachment 7 - Overflow Emergency Response Plan	Appendix B. WWC Event Notification List	Updated WWC Event Notification List to show current contacts / information.	Michael Rosenberg
75	January 2023	Attachment 7 - Overflow Emergency Response Plan	Appendix B. WWC Event Notification List	Updated WWC Event Notification List to show current contacts / information.	Michael Rosenberg
76	May 2023	Attachment 7 - Spill Emergency Response Plan	Appendix B. WWC Event Notification List	Updated WWC Event Notification List to show current contacts / information.	Michael Rosenberg
77	June 2023	Attachment 7 - Spill Emergency Response Plan	Appendix B. WWC Event Notification List	Updated WWC Event Notification List to show current contacts / information.	Michael Rosenberg
78	June 2023	SERP	Changed name of document	Overflow Emergency Response Plan (OERP) became Spill Emergency Response Plan.	Kent Vian
79	June 2023	SERP Notification List	Created dynamic notification list separate from SSMP document	Separated the Notification List names and contact information into a separate dynamic document.	Kent Vian
80	June 2023	All	SSO to Sewer Spill	Updated language throughout document to update language for SSO's and replace the language with Sewer Spills.	Kent Vian
81	July 2023	2022 Regional Water Board Order	Added Order to document.	SWRCB Order WQ 2022-0103-DWQ added to SSMP document.	Kent Vian
82	July 2023	Sewer Pipe Blockage Control Program	Figure 2 - Grease Caused Spills	Updated the figure to include data through 2022.	Kent Vian
83	July 2023	SERP & SERP Notification List	Notify National Wildlife Refuge for Spills entering San Diego Bay	Added language to SERP and Notification List to notify National Wildlife Refuge if Spill flow enters San Diego Bay.	Kent Vian
84	July 2023	SERP & SERP Notification List	Conduct Biological Assessments for Category 1 or 2 Spills	Added language to SERP and Notification List for the City to conduct biological assessments for Category 1 or 2 Spill.	Kent Vian

## **Attachment 6. Certification**

Stem 117  
3/19/19  
(R-2019-384)

RESOLUTION NUMBER R- 312281

DATE OF FINAL PASSAGE MAR 25 2019

A RESOLUTION OF THE COUNCIL OF THE CITY OF  
SAN DIEGO AUTHORIZING THE MAYOR TO APPROVE  
THE CITY OF SAN DIEGO'S SEWER SYSTEM MANAGEMENT  
PLAN (SSMP), WHICH WILL SERVE AS THE CITY'S  
RECERTIFICATION OF THE SSMP.

WHEREAS, on May 2, 2006, the State Water Resources Control Board adopted Statewide General Waste Discharge Requirements (WDRs) for Sanitary Sewer Systems, Water Quality Order No. 2006-0003. The purpose of this Order is to provide a consistent statewide regulatory approach to address Sanitary Sewer Overflows (SSOs). This Order requires public agencies that own or operate sanitary sewer systems to develop and implement sewer system management plans and report all SSOs to the State Water Board's online SSO database and the Order also includes a timeline for implementation; and

WHEREAS, the Public Utilities Department (PUD) began posting SSO data to the Board's online database on January 1, 2007, and is in compliance with that portion of the Order and PUD has also prepared a Sewer System Management Plan (SSMP) which documents the City's programs to properly operate and maintain the sanitary sewer system. The SSMP addresses the following elements: Goals, Organization, Legal Authority, Operation and Maintenance Program, Design and Performance Provisions, Overflow Emergency Response Plan, Fats, Oils, and Grease (FOG) Control Program, System Evaluation and Capacity Assurance Plan, Monitoring, Measurement, and Program Modifications, SSMP Program Audits, and Communication Program; and

WHEREAS, many of the programs included in the SSMP were developed by PUD in 2001 and 2002 in response to concerns raised by the U.S. Environmental Protection Agency and

the Regional Water Quality Control Board during that time period, and have been in operation since then and which were incorporated into the City's past Consent Decree with these regulatory agencies. The Consent Decree was terminated on July 28, 2015, but the City continues to maintain these programs in the same manner as when the Consent Decree was in place; and

WHEREAS, the SSMP must be updated every five (5) years. Since PUD last received approval from the City Council in 2009, via Resolution No. R-304742, for the SSMP, the SSMP was updated in 2014 with minor changes. In the 2018 update to the SSMP, significant updates have been made to remove references to the terminated Consent Decree and the document itself has many updates to the language which would warrant significant updates. Recertification by the City Council is required in accordance with WDR, section D.14 when significant updates to the SSMP are made; and

WHEREAS, PUD is required to certify that the final SSMP is in compliance with the WDR, section D.14. PUD achieves this self-certification through the City Council's approval of the SSMP. Once the SSMP is certified, PUD will post the document on the PUD website and will conduct internal audits every two years to evaluate the effectiveness of the SSMP and to maintain compliance with SSMP; NOW, THEREFORE,

BE IT RESOLVED, by the Council of the City of San Diego, that the Mayor, or his designee, is authorized to approve, for and on behalf of the City, the City of

San Diego's Sewer System Management Plan (SSMP), which will serve as the City's  
recertification of the SSMP.

APPROVED: MARA W. ELLIOTT, City Attorney

By *CLeone*  
Christine M. Leone  
Deputy City Attorney

CML:cw  
02/21/19  
Or.Dept: Public Utilities  
CC No.: N/A  
Doc. No.: 1936351

I hereby certify that the foregoing Resolution was passed by the Council of the City of San Diego,  
at its meeting of MAR 19 2019.

ELIZABETH S. MALAND  
City Clerk

By *Hy Read*  
Deputy City Clerk  
*Kevin L. Faulconer*  
KEVIN L. FAULCONER, Mayor

Approved: 3/25/19  
(date)

Vetoed: \_\_\_\_\_  
(date)

\_\_\_\_\_  
KEVIN L. FAULCONER, Mayor



Passed by the Council of The City of San Diego on MAR 19 2019, by the following vote:

Councilmembers	Yeas	Nays	Not Present	Recused
Barbara Bry	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jennifer Campbell	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chris Ward	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Monica Montgomery	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mark Kersey	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chris Cate	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Scott Sherman	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vivian Moreno	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Georgette Gómez	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Date of final passage MAR 25 2019.

**(Please note: When a resolution is approved by the Mayor, the date of final passage is the date the approved resolution was returned to the Office of the City Clerk.)**

AUTHENTICATED BY:

KEVIN L. FAULCONER  
Mayor of The City of San Diego, California.

(Seal)

ELIZABETH S. MALAND  
City Clerk of The City of San Diego, California.

By *Uky Brady*, Deputy

Office of the City Clerk, San Diego, California

Resolution Number R- 312281

## **Attachment 7. SSMP Contact Information**

City of San Diego  
 Sewer System Management Plan Contact Information

Positions Responsible for SSMP Program Development and Implementation –

**Please see Notification Contact List attachment for current list with names and contact information.**

WDR Reference	SSMP Element/Measure	Responsible Positions	Contact Name	Contact Phone Number
D.13	Overall SSMP Development and Implementation	WWC Deputy Director		
D. 13(i)	Goal	WWC Deputy Director		
D.13(ii)	Organization	WWC Deputy Director		
D.13(iii)	Legal Authority	Associate Civil Engineer – WWC Operations Engineering		
D.13(v)	Design and Performance Provisions	Associate Civil Engineer – WWC Operations Engineering		
D.13(vi)	Overflow Emergency Response Plan	WWC PWUS, Emergency Response		
D.13(vii)	Fats, Oils, and Grease Control Program	WWC FEWD Program Manager		
D.13(viii)	System Evaluation and Capacity Assurance Plan – CIP and Schedule	Senior Civil Engineer – Engineering & Program Management		
D.13(viii)	System Evaluation and Capacity Assurance Plan – Hydraulic Modeling and Capacity Assurance Planning	Senior Civil Engineer – Sewer Modeling		
D.13(ix)	Monitoring, Measurement, and Program Modifications	WWC Deputy Director		
D.13(x)	SSMP Program Audits	WWC Deputy Director		
D.13(xi)	Communication Program – Public education	WWC Deputy Director		

City of San Diego  
 Sewer System Management Plan Contact Information

**Responsible for SSMP Operations and Maintenance (O&M) Program Development and Implementation**

<b>WDR Reference</b>	<b>SSMP O&amp;M Program Measure</b>	<b>Responsible Positions</b>	<b>Contact Name</b>	<b>Contact Phone Number</b>
D.13(iv)(a)	Mapping	Associate Civil Engineer – WWC Operations Engineering		
D.13(iv)(b)	Preventative Maintenance – Gravity Sewers	WWC PWUS – Cleaning		
D.13(iv)(b)	Preventative Maintenance – Planning and Scheduling for WWC	WWC GWUS – Planning and Scheduling		
D.13(iv)(b)	Preventative Maintenance – WWC Pump Stations and Force Mains	WWC GWUS, Sewer Pump Stations		
D.13(iv)(b)	Preventative Maintenance – WWTD Pump Stations No. 1 and No. 2 and Force Mains	PLWTP Senior Plant Technical Supervisor		
D.13(iv)(b)	Preventative Maintenance – Other WWTD Pump Stations and Force Mains	NCWRP Senior Plant Technical Supervisor		
D.13(iv)(c)	Condition Assessment; Rehabilitation and Replacement Program – Planning and Scheduling for WWC	WWC GWUS – Planning and Scheduling		
D.13(iv)(c)	Condition Assessment; Rehabilitation and Replacement Program – Condition Assessment of Trunk Sewers, Interceptor Sewers, Gravity Sewer Mains, Manholes, WWTD and WWC Pump Stations and Force Mains	Senior Civil Engineer – WW Master Planning and Condition Assessment		
D.13(iv)(c)	Condition Assessment; Rehabilitation and Replacement Program – CIP and Schedule	Senior Civil Engineer – Engineering & Program Management		

City of San Diego  
 Sewer System Management Plan Contact Information

WDR Reference	SSMP O&M Program Measure	Responsible Positions	Contact Name	Contact Phone Number
D.13(iv)(c)	Condition Assessment; Rehabilitation and Replacement Program – City Crew Repairs and Rehabilitation	WWC GWUS, Construction		
D.13(iv)(c)	Condition Assessment; Rehabilitation and Replacement Program – City Crew CCTV Inspection	WWC GWUS – Cleaning and Emergency Response		
D.13(iv)(d)	Training	WWC GWUS, Cleaning and Emergency Response		
D.13(iv)(e)	Critical and Replacement Part inventory – WWC Pump Stations and Force Mains	WWC GWUS – Sewer Pump Stations		
D.13(iv)(e)	Critical and Replacement Part inventory – WWTD Pump Stations No. 1 and No. 2 and Force Mains	PLWTP Senior Plant Technical Supervisor		
D.13(iv)(e)	Critical and Replacement Part inventory – Other WWTD Pump Stations and Force Mains	NCWRP Senior Plant Technical Supervisor		
D.13(iv)(e)	Critical and Replacement Part inventory Gravity Sewers	WWC GWUS, Cleaning and Emergency Response and WWC GWUS, Construction		

## **Attachment 8. SSMP Spill Emergency Response Plan**



# Spill Emergency Response Plan



City of San Diego  
Public Utilities Department  
Wastewater Collection Division

Revised July 21, 2023

## Table of Contents

### Spill Emergency Response Plan (SERP)

1. Purpose
2. Policy
3. Definitions as used in this SERP
4. Regulatory Requirements for SERP Element of SSMP
5. Goals
6. Sanitary Sewer Spill Detection and Notification
7. Spill Response Procedures
8. Recovery and Cleanup
9. Water Quality
10. Sewer Backup Into/Onto Private Property Claims Handling Policy
11. Notification, Reporting, Monitoring and Recordkeeping Requirements
12. Post Spill Event Debriefing
13. Failure Analysis Investigation
14. Spill Response Training
15. Authority
16. Appendices

#### **Appendix A: Event Notification List**

#### **Appendix B: Sewer Spill Reference Guide Pamphlet: Your Responsibilities as a Private Property Owner**

#### **Appendix C: Door Hanger**

#### **Appendix D: Warning Sign**

#### **Appendix E: Sanitary Sewer Spill and Backup Response Workbook**

##### Tab 1: Start Here

- Workbook Instructions.....**A-1**
- Spill Checklist.....-2

##### Tab 2: Regulatory Reporting

- Regulatory Reporting Guide ..... **B-1**
- Regulatory Reporting Contacts and Authorization ..... -2
- Notifications Log ..... -3
- Supervisor Spill Text Notification ..... -4

##### Tab 3: Spill/Backup Response Flowchart..... **C-1**

##### Tab 4: Sanitary Sewer Spill Field Report..... **D-1**

##### Tab 5: Volume Estimation

- Volume Estimation Computations and Examples..... **E-1**
- Eyeball Estimation Method ..... -2
- Duration and Flow Rate Comparison Method ..... -3



- Area/Volume Method .....-4
- Upstream Connections Method .....-5
- Drawing Worksheet .....-6

Tab 6: Backup Forms

- Backup Forms Checklist .....**F-1**
- First Responder Form.....-2
- Declination of Cleaning Services.....-3
- Customer Information Letter.....-4
- Your Responsibilities as a Private Property Owner.....-5
- Claim Form .....-6

Tab 7: Failure Analysis ..... **G-1**

# Spill Emergency Response Plan

## 1. Purpose

The purpose of the City of San Diego's Spill Emergency Response Plan (SERP) is to support an orderly and effective response to Sanitary Sewer Spills. The SERP provides guidelines for City personnel to follow in responding to, cleaning up, and reporting spills that may occur within the City's service area. This SERP satisfies the SWRCB Statewide General Waste Discharge Requirements (GWDR), which require wastewater collection agencies to have a Spill Emergency Response Plan.

## 2. Policy

The City's employees are required to report all wastewater spills found and to take the appropriate action to secure the wastewater spill area, properly report to the appropriate regulatory agencies, relieve the cause of the spill, and ensure that the affected area is cleaned as soon as possible to minimize health hazards to the public and protect the environment. The City's goal is to respond to sewer system spills as soon as possible following notification. The City will follow reporting procedures in regards to sewer spills as set forth by the San Diego Regional Water Quality Control Board (RWQCB) and the California State Water Resources Control Board (SWRCB).

## 3. Definitions as Used in This SERP

**CALIFORNIA INTEGRATED WATER QUALITY SYSTEM (CIWQS):** Refers to the State Water Resources Control Board online electronic reporting system that is used to report spills, certify completion of the SSMP, and provide information on the sanitary sewer system.

**DUTY SUPERVISOR:** The Duty Supervisor is the Emergency Response Section Senior Water Utility Supervisor on the day shift, the Night Shift Supervisor, the Weekend Shift Supervisor, or the Standby Supervisor.

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

**LEGALLY RESPONSIBLE OFFICIAL (LRO):** Refers to an individual who has the authority to certify reports and other actions that are submitted through CIWQS.

**MAINLINE SEWER:** Refers to City wastewater collection system piping that is not a private lateral connection to a user.

**MAINTENANCE HOLE OR MANHOLE:** Refers to an engineered structure that is intended to provide access to a sanitary sewer for maintenance and inspection.

**MAJOR SPILL:** A spill of whatever size that, based on a reasonable assessment of the spill size, location, and potential impacts, is deemed to pose an imminent and substantial endangerment to public health or the environment.

**NOTIFICATION OF A SEWER SPILL:** Refers to the time at which the City becomes aware of a sewer spill event through observation or notification by the public or other source.

**NUISANCE** - California Water Code section 13050, subdivision (m), defines nuisance as anything that meets all of the following requirements:

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

**PREVENTATIVE MAINTENANCE:** Refers to maintenance activities intended to prevent failures of the wastewater collection system facilities (e.g. cleaning, CCTV, inspection).

**PRIVATE LATERAL SEWAGE DISCHARGES** – Sewage discharges that are caused by blockages or other problems within a privately-owned lateral.

**PUD:** This refers to the Public Utilities Department.

**COMC:** This section monitors the Pump Station Alarms and the permanent flow meters.

**SANITARY SEWER SPILL** - Any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system. Sewer spills include:

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

Sewer spills that include multiple appearance points resulting from a single cause will be considered one sewer spill for documentation and reporting purposes in CIWQS.

*NOTE: Wastewater backups into buildings caused by a blockage or other malfunction of a building lateral that is privately owned are not sewer spills.*

**SAP:** This refers to the City of San Diego's proprietary computerized maintenance management system.

## Sewer Spill Categories:

- Category 1: Discharges of untreated or partially treated wastewater of **any volume** resulting from an enrollee's sanitary sewer system failure or flow condition that:
- Reach surface water and/or reach a drainage channel tributary to a surface water; or
  - Reach a Municipal Separate Storm Sewer System (MS4) and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).
- Category 2: Discharge of untreated or partially treated wastewater greater than or equal to 1,000 gallons resulting from a sanitary sewer system failure or flow condition that either:
- Does not reach surface water, a drainage channel, or an MS4, or
  - The entire spill discharged to the storm drain system was fully recovered and disposed of properly.
- Category 3: Discharge of untreated or partially treated wastewater equal to or greater than 50 gallons and less than 1,000 gallons resulting from a sanitary sewer system failure or flow condition that either:
- Does not reach surface water, a drainage channel, or an MS4, or
  - The entire spill discharged to the storm drain system was fully recovered and disposed of properly.
- Category 4: A spill of less than 50 gallons, from or caused by a sanitary sewer system that does not discharge to a surface water.  
A spill of less than 50 gallons that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 4 spill.

**SANITARY SEWER SYSTEM:** Any publicly-owned system of pipes, pump stations, sewer lines, or other conveyances, upstream of a wastewater treatment plant headworks used to collect and convey wastewater to the publicly owned treatment facility. Temporary storage and conveyance facilities (such as vaults, temporary piping, construction trenches, wet wells, impoundments, tanks, etc.) are considered to be part of the sanitary sewer system, and discharges into these temporary storage facilities are not considered to be sewer spills.

**SENSITIVE AREA:** Refers to areas where a spill could result in a fish kill or pose an imminent or substantial danger to human health (e.g. parks, aquatic habitats, etc.)

**SEWER SERVICE LATERAL:** Refers to the piping that conveys sewage from the building to the City's wastewater collection system.

**STATION 38:** The City of San Diego Dispatch Center located at the Chollas Yard, 2871 Caminito Chollas. Telephone number (619) 527-7660. Station 38 shall be staffed full time (24 hours per day, every day of the year).

**UNTREATED OR PARTIALLY TREATED WASTEWATER:** Any volume of waste discharged from the sanitary sewer system upstream of a wastewater treatment plant headworks.

**WATERS OF THE STATE:** Waters of the State (or waters of the United States) means any surface water, 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 wastewater collection system and that portion of the storm drain is cleaned.

**WWC:** Wastewater Collection Division.

## 4. State Regulatory Requirements for Element 6, Spill Emergency Response Plan

### GWDR Requirement

The collection system agency shall develop and implement a spill 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 sewer spills in a timely manner;
- (b) A program to ensure appropriate response to all spills;
- (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 spills that potentially affect public health or reach the waters of the State in accordance with the Monitoring and Reporting Program (MRP). All spills shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board Waste Discharge Requirements or National Pollutant Discharge Elimination System (NPDES) permit requirements. The Sewer System Management Plan 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 untreated wastewater and prevent discharge of untreated wastewater to Waters of the United States and minimize or correct any adverse impact on the environment resulting from the spills, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.

The Sewer System Management Plan and critical supporting documents are available to the public at <https://www.sandiegocounty.gov/content/sdc/dpw/wasteh2o/sewer-system-management-plan--ssmp-.html>.

## 5. Goals

The City's goals with respect to responding to sewer spills are:

- Work safely;
- Respond quickly to minimize the volume of the spill;
- Eliminate the cause of the spill;
- Prevent sewage system spills or leaks from entering the storm drain system or receiving waters to the maximum extent practicable;
- Contain the spilled wastewater to the extent feasible;
- Minimize public contact with the spilled wastewater;
- Mitigate the impact of the spill;
- Meet the regulatory reporting requirements;
- Evaluate the causes of failure related to certain spills; and
- Revise response procedures resulting from the debrief and failure analysis of certain spills.

## **6. Spill Detection and Notification**

*ref. SWRCB Order No. 2006-0003-DWQ D.13vi(a)*

The processes that are employed to notify the City of the occurrence of a sewer spill include: observation by the public, receipt of an alarm, or observation by City staff during the normal course of their work.

### **6.1 SEWER PUMP STATION ALARMS**

In the event of any pump failure, the high-level sensor activates the SCADA alarm system and the City is contacted. Sewer Pump Station Alarms shall be monitored by COMC Staff. The COMC Staff shall immediately notify Pump Station personnel via telephone upon receipt of a pump station alarm event. COMC staff shall notify appropriate field crews of gravity sewer main problems or issues. To prevent spill, wastewater from the wet well can either be pumped into a vacuum truck for disposal to a nearby sanitary sewer manhole or bypassed around the station into the sanitary sewer system.

### **6.2 TRUNK SEWER FLOW METERS**

The City operates and maintains a flow metering alarm system that can detect flow abnormalities over approximately ninety percent (90%) of the flow weighted length of the City's three hundred forty (340) miles of trunk sewers, including all canyon trunk sewers. The system is capable of detecting and notifying City staff within ninety (90) minutes of reductions in flow of twenty-five percent (25%) or more of the average dry weather flow during dry weather conditions. The Trunk Sewer Flow Meters are monitored by a contract vendor.

The vendor is required to immediately notify the duty COMC operator of any potential trunk sewer spill to detect major deviations in sewage flow. COMC operator shall immediately notify the Duty Supervisor by telephone of potential trunk sewer spills. WWC Staff (COMC) reviews daily hydrographs of flow meters to ensure flow meters function properly, are serviced, and are maintained.

### **6.3 PUBLIC OBSERVATION**

Public observation is the most common way that the City is notified of blockages and spills. Contact numbers and information for reporting sewer spills and backups are in the phone book and on the City's website: <http://www.sandiego.gov>. The City's telephone number for reporting sewer problems is (619) 515-3525.

All telephone calls from the general public, City employees and officials, plumbers, contractors, and other public and private agencies regarding suspected sewer spills are routed to Station 38 at (619) 515-3525. The Station 38 operator shall obtain all relevant information regarding the sewer spill including:

- Date and time that the call was received.
- Specific location (address, street name, cross street, city).
- Characteristics and severity of the sewer spill.
- Date and time that the sewer spill was first noticed by the caller.
- Caller's name and phone number.
- Other relevant information.

If a caller is uncertain as to the nature of a reported leakage (e.g. fresh water, storm water, street drainage, sewage, etc.), then the Station 38 operator shall obtain additional information to ensure that the appropriate field crew is dispatched. PUD has developed a guide for Station 38 operators with information and images available to help identify spills and collect spill information. Additional followup questions should include:

- Color, consistency, odor, and other appearance characteristics.
- Precise location relative to streets, alleys, or off-road areas.
- Type of structure (e.g. manhole, gate valve cover, meter box).

The Station 38 operator shall enter sewer spill information into the City's computerized maintenance management system (SAP) to obtain a unique Work Order Number for documentation of the complaint and subsequent response activities.

If the spill/backup is not in the City's service area they provide the customer with the contact information for the responsible agency, and then notify that agency.

If the spill/backup is in the City's service area, the Station 38 Operator will notify the Duty Supervisor. If they are not available they will notify the Principal Water Utility Supervisor or their designee. A Wastewater Crew is dispatched and instructed to complete the Sanitary Sewer Spill/Backup Response Workbook.

For calls that are not sewer spills the Station 38 Operator will enter the crew's findings and actions taken if any on the work order and close it out to be archived in the SAP.

#### **6.4 CITY STAFF OBSERVATION**

City staff conducts periodic inspections of its sewer system facilities as part of their routine activities. Any problems noted with the sewer system facilities are reported to appropriate City staff that, in turn, responds to emergency situations. Work orders are issued to correct non-emergency conditions.

#### **6.5 CONTRACTOR OBSERVATION**

The following procedures are to be followed in the event that a contractor/plumber causes or witnesses a Sanitary Sewer Spill. If the contractor/plumber causes or witnesses a sewer spill they should:

1. Immediately notify the City at (619) 515-3525.
2. Protect storm drains.
3. Protect the public.
4. Provide Information to the City Wastewater Crew such as start time, appearance point, suspected cause, weather conditions, etc.
5. Direct ALL media and public relations requests to the Public Information Officer at (619) 533-4571.



## 6.6 NO OBSERVATION

If there are no witnesses or no call was received for a sewer spill, the City staff will contact nearby residents or business owners in the vicinity of the spill, in an attempt to obtain information that brackets a given start time that the spill began. This information will be collected and placed with records for the specific spill.

## 7. Spill Response Procedures

*ref. SWRCB Order No. 2006-0003-DWQ D.13vi(b)*

### 7.1 DISPATCH OF APPROPRIATE CREWS TO SITE OF SEWER SPILL

1. Station 38 and/or COMC operators shall immediately notify the Duty Supervisor first by City mobile phone text messaging functionality and then by City mobile phone call regarding sewer spills.
2. Shift/Duty Supervisors shall respond to notifications by Station 38 and/or COMC operators with instructions regarding appropriate crews, materials, supplies, and equipment to be dispatched.
3. Station 38 and/or COMC operators shall immediately dispatch field crews by pager, mobile radio, or telephone.
4. Station 38 and/or COMC operators shall ensure that the entire message has been received and acknowledged by the field crews who were dispatched. No message is considered complete unless acknowledged by the field crew.
5. Station 38 and/or COMC operators shall refer all pertinent information to the next shift Duty Supervisor including any details of the problems described by customers including unconfirmed reports of sewage spills.
6. Duty Supervisors shall monitor all dispatches due to sewer spills to assure that an appropriate resolution has been achieved.

### 7.2 Sewer Spill/Backup Response Summary

The City will respond to sewer spills as soon as feasible following notification of an spill/backup or unauthorized discharge.

If it is not possible that the spill/backup is due to a failure in the City-owned/maintained sewer line the Wastewater Crew performs the following:

- Follows the instructions in the Sanitary Sewer Spill/Backup Response Workbook.
- If the customer is not home the Wastewater Crew completes the Door Hanger and leaves it on the customer's door.
- If the customer is home the Wastewater Crew:

- Explains that the blockage is in the customer's lateral and the City does not have legal authority to maintain or perform work on privately owned laterals.
- Recommends to the customer that they hire a contractor/plumber to clear their line.
- Gives the customer the Sewer Spill Reference Guide pamphlet.

If it is possible that the spill/backup is due to a failure in the City-owned/maintained sewer lines the Wastewater Crew:

- Follows the instructions in the Sanitary Sewer Spill/Backup Workbook.
- Duty Supervisor notifies Principal Water Utility Supervisor of the incident.
- Relieves blockage and cleans impacted areas.
- Forwards the completed Sanitary Sewer Spill Workbook to the Principal Water Utility Supervisor.

The Duty Supervisor performs required regulatory reporting in accordance with the Sanitary Sewer Spill/Backup Workbook's Regulatory Reporting section.

If the sewer spill has impacted private property, the Wastewater Crew:

- Follows the instructions in the Sanitary Sewer Spill/Backup Workbook.
- Provides the customer with forms and information as indicated in the Sanitary Sewer Spill/Backup Workbook.
- Forwards the completed Sanitary Sewer Spill/Backup Workbook to the Duty Supervisor. The

Duty Supervisor notifies the Engineering Section designee and Dispatch of incident.

The Senior Claims Adjustor or designee:

- Reviews incident reports, claim form, and other incident information.
- Communicates with claimant as appropriate.
- Adjusts and administers the claim to closure.

### **7.3 First Responder Priorities**

The first responder's priorities are:

- To follow safe work practices.
- To respond promptly with the appropriate and necessary equipment.
- To contain the spill wherever feasible.
- To restore the flow as soon as practicable.
- To minimize public access to and/or contact with the spilled sewage.

- To promptly notify the Principal Water Utility Supervisor in event of major spill.
- To return the spilled sewage to the sewer system.
- To restore the area to its original condition (or as close as possible).

#### **7.4 Safety**

The first responder is responsible for following safety procedures at all times. Special safety precautions must be observed when performing sewer work. There may be times when City personnel responding to a sewer system event are not familiar with potential safety hazards peculiar to sewer work. In such cases it is appropriate to take the time to discuss safety issues, consider the order of work, and check safety equipment before starting the job.

#### **7.5 Initial Response**

The first responder must respond to the reporting party/problem site and visually check for potential sewer stoppages or sewer spills.

The first responder will:

- Note arrival time at the site of the spill/backup.
- Verify the existence of a public sewer system spill or backup.
- Take photos of spilling manhole(s)/cleanout(s).
- Determine if the spill or blockage is from a public or private sewer.
- Identify and assess the affected area and extent of spill.
- Contact caller if time permits.
- Document conditions upon arrival with photographs. Decide whether to proceed with clearing the blockage to restore the flow or to initiate containment measures. The guidance for this decision is:
  - Small spills (i.e., spills that are easily contained) – proceed with clearing the blockage.
  - Moderate or large spill where containment is anticipated to be simple – proceed with the containment measures.
  - Moderate or large spills where containment is anticipated to be difficult – proceed with clearing the blockage; however, whenever deemed necessary, call for additional assistance and implement containment measures.
- Take steps to contain the spill. For procedures refer to the Sanitary Sewer Spill/Backup Response Workbook.

## 7.6 Initiate Spill Containment Measures

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

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

For procedures refer to the Sanitary Sewer Spill/Backup Response Workbook.

## 7.7 Restore Flow

Using the appropriate cleaning equipment, set up downstream of the blockage and hydro-clean upstream from a clear manhole. Attempt to remove the blockage from the system and observe the flows to ensure that the blockage does not reoccur downstream. If the blockage cannot be cleared within a reasonable time from arrival, or sewer requires construction repairs to restore flow, then initiate containment and/or bypass pumping. If other assistance is required, immediately contact the Principal Water Utility Supervisor. For procedures refer to the Sanitary Sewer Spill/Backup Response Workbook.

## 7.8 Equipment

This section provides a list of specialized equipment that is required to support this Spill Emergency Response Plan.

- *Closed Circuit Television (CCTV) Inspection Unit* – A CCTV Inspection Unit is required to determine the root cause for all spills from gravity sewers.
- *Camera* -- A digital or disposable camera is required to record the conditions upon arrival, during clean up, and upon departure.
- *Emergency Response Trucks* -- A utility body pickup truck, or open bed is required to store and transport the equipment needed to effectively respond to sewer emergencies. The equipment and tools will include containment and clean up materials.
- *Portable Generators, Portable Pumps, Piping, and Hoses* – Equipment used to bypass pump, divert, or power equipment to mitigate a spill.
- *Combination Sewer Cleaning Trucks* -- Combination high velocity sewer cleaning trucks with vacuum tanks are required to clear blockages in gravity sewers, vacuum spilled sewage, and wash down the impacted area following the spill event.
- *Air plugs, sandbags and plastic mats*
- *Spill Sampling Kits*

- *Portable Lights*
- *Traffic Control Equipment*

Standard operating procedures for equipment that may be necessary in the event of a sanitary sewer spill or backup can be found in the library in the MOC I Building and electronically.

## **7.9 Continued Response Efforts**

The City shall, following the initial response and reporting required by the State Water Resources Control Board's Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (SSS WDR), continue response efforts based on the risk posed by the spill at issue, taking into account: (1) the volume of the spill; (2) the proximity of the spill to high risk areas, which shall include sensitive populations, specifically public and private schools, parks, recreational areas, and surface waters, especially during the recreation season from May to September; and (3) the timing and/or seasonality of the spill event (e.g., a spill to surface waters during low flow, acid conditions of late summer). The City further agrees to provide training to its response crews regarding implementation of the risk assessment. The City shall augment the SSMP and SERP, as necessary, to document this practice.

## **8. Recovery and Cleanup**

*ref. SWRCB Order No. 2006-0003-DWQ D.13vi(e)*

The recovery and cleanup phase begins immediately after the flow has been restored and the spilled sewage has been contained to the extent possible. The spill recovery and cleanup procedures are:

### **8.1 Estimate the Flow and Volume of Spilled Sewage**

To estimate the flow rate, crew members will use the SSCSC Manhole Spill Gauge if the same style of manhole cover is observed spilling. A variety of approaches exist for estimating the volume of a sanitary sewer spill. Crew members should use the method most appropriate to the sewer spill in question and reference the Sanitary Sewer Spill/Backup Response Workbook which provides four (4) methods:

- Eyeball Estimation Method
- Duration and Flow Rate Calculation Method
- Area/Volume Method
- Lower Lateral Estimation Method

Where safe and possible, the City shall take photographs of a sewer spill event before and during the recovery operation to help aid in establishing and justifying spill volume. Such photographs will preserve data such as the date and time for when City staff took the photograph.

## **8.2 Recovery of Spilled Sewage**

Vacuum up and/or pump the spilled sewage and rinse water and discharge it back into the sanitary sewer system.

## **8.3 Clean-up and Disinfection**

Clean up and disinfection procedures will be implemented to reduce the potential for public health issues and adverse environmental impacts that are associated with a sewer spill event. The procedures described are for dry weather conditions and will be modified as required for wet weather conditions. Where cleanup is beyond the capabilities of City staff, a cleanup contractor will be used.

### *Private Property*

City crews are responsible for the cleanup when the property damage is minor in nature and is outside of private building dwellings, such as in front, side and backyards, easements, etc. In all other cases, affected property owners can call a water damage restoration contractor to complete the cleanup and restoration. If the sewer spill into property is the definite cause of City system failure, the property owner can call out a water damage restoration contractor to complete the cleanup and restoration. In both cases, property owners may submit a claim form to the City Risk Management Office.

### *Hard Surface Areas*

Collect all signs of sewage solids and sewage-related material either by protected hand or with the use of rakes and brooms. Wash down the affected area with clean water and/or deozyme or similar non-toxic biodegradable surface disinfectant until the water runs clear. The flushing volume will be approximately three times the estimated volume of the spill. Take reasonable steps to contain and vacuum up the wastewater. Allow area to dry. Repeat the process if additional cleaning is required.

### *Landscaped and Unimproved Natural Vegetation*

Collect all signs of sewage solids and sewage-related material either by protected hand or with the use of rakes and brooms. Wash down the affected area with clean water until the water runs clear. The flushing volume will be approximately three times the estimated volume of the spill. Either contain or vacuum up the wash water so that none is released. Allow the area to dry. Repeat the process if additional cleaning is required.

### *Natural Waterways*

The Department of Fish and Wildlife will be notified by CalOES for sewer spills greater than or equal to 1,000 gallons.

### *Wet Weather Modifications*

Omit flushing and sampling during heavy storm events (i.e., sheet of rainwater across paved surfaces) with heavy runoff where flushing is not required and sampling would not provide meaningful results.

## 8.4 Public Notification

Warning signs shall be posted in the vicinity of any water body that is suspected of being contaminated by sewage as determined by County Department of Environmental Health and Quality (DEHQ). This will be done as soon as practicable following the initial response to the sewer spill. Signs should be posted on either side of the point of entry where sewage entered the body of water and the nearest public access point to that body of water. A minimum of seven signs, fifty (50) feet apart, will be posted. Contamination signs shall be double-sided so that they are plainly visible.

If City Lifeguards are present, they shall be notified immediately to assist in warning bathers. If there are no on-duty lifeguards, the employee or crew shall attempt to gain the attention of the bathers to make them aware of the spill.

The Duty Supervisor shall direct field crews to place additional warning signs when requested by the Department of Environmental Health. Field crews posting warning signs will notify the Station 38 operator when the warning signs have been posted.

Sewer Pump Station Patrol Units shall inspect posted warning signs twice daily during April through October, and once daily from November through March. Any missing warning signs shall be replaced. Warning Signs shall not be removed except at the direction of Department of Environmental Health.

The following provisions shall apply to posting and removing warning signs around Mission Bay.

- The Department of Environmental Health will notify City Lifeguards of sewage closures or openings of Mission Bay.
- City Lifeguards will notify:
  - Wastewater Collection Division to post, inspect, and remove warning signs due to sewage-related closures of Mission Bay.
  - Mission Bay lessees and other interested parties.

## 9. Water Quality

*ref. SWRCB Order No. 2006-0003-DWQ D.13vi(f)*

### 9.1 Water Quality Sampling and Testing

In the event that a sewer spill of any amount reaches surface waters or flowing drainage channel tributary to a larger body of water, PUD staff should report to Beach & Bay Advisory Hotline Land and Water Quality Division at (619) 338-2073. After hours contact HIRT (Hazardous Incident Response Team) at (858) 505-6657. B&B will investigate the spill, whether the spill has reached or impacted any water body/recreational waters and decide if sampling is required.

Samples will be collected within 18 hours for spills  $\geq 50,000$  gallons in accordance with the Statewide WDR Monitoring and Reporting Program requirements.

When collecting water samples for examination, Duty supervisor should ensure that samples are collected as stipulated in Water Quality Sampling Procedure below. Lab sample procedures and the locations should be recorded on an area map depicting each location of sampling.

In addition, DEHQ may impose additional testing requirements and locations of sampling depending on the test results and the receiving water conditions. After collecting the samples as stated in the SOP, PUD staff should deliver the samples to the Environmental Monitoring and Technical Services Division (EMTS) Marine Microbiology Laboratory for bacterial analyses. The Marine Microbiology Laboratory is ELAP certified (certificate # 2185) in three microbiology Fields of Testing (FoT) including wastewater, recreational water and drinking water. The spill response staff performs qualitative tests to screen for the presence of ammonia using ammonia test strips. The EMTS' Wastewater Chemistry Services laboratories are ELAP certified and have the capabilities to perform ammonia testing for numerical values on an as needed basis. This sampling and testing should continue until the results from the lab indicates that they are back to baseline levels. Collaboration with the County of San Diego Department of Environmental Health should continue until they determine that the sampling is no longer needed.

As a general rule:

**Closure Zone (subject to evaluation)**

Less than 1000 gallons	100 yards to ¼ mile each side of discharge
1,000 to 10,000 gallons	¼ mile to ½ mile each side of the discharge
10,000 to 100,000 gallons	¾ mile to 1 mile each side of the discharge
100,000 to 1 million gallons	2 to 3 miles each side of the discharge
1 to 2 million gallons	4 to 5 miles each side of the discharge
Over 2 million gallons	Over 5 miles each side of the discharge

**Sampling Guidelines**

Less than 1000 gallons	3 or more samples within the closure zone
1,000 to 10,000 gallons	5 or more samples within the closure zone
10,000 to 100,000 gallons	7 or more samples within the closure zone
100,000 to 1 million gallons	9 or more samples within the closure zone
1 to 2 million gallons	11 or more samples within the closure zone
Over 2 million gallons	13 or more samples within the closure zone

**9.2 Water Quality Monitoring Plan**

To comply with subsection D.7 (v) of the SSS WDRs, the enrollee shall develop and implement a Sewer Spill Water Quality Monitoring Program to assess impacts from sewer spills to surface waters in which 50,000 gallons or greater may have been spilled to surface waters. The City may perform water quality monitoring surface waters on smaller spills.

The Sewer Spill Water Quality Monitoring Program required by the SSS WDR, shall include, at minimum:

1. Contain protocols for water quality monitoring.
2. Account for spill travel time in the surface water and scenarios where monitoring may not be possible (e.g. safety, access restrictions, etc.).
3. Require water quality analyses for ammonia and bacterial indicators to be performed by an accredited or certified laboratory.



4. Require monitoring instruments and devices used to implement the Sewer Spill Water Quality Monitoring Program to be properly maintained and calibrated, including any records to document maintenance and calibration, as necessary, to ensure their continued accuracy.
5. Within 18 hours of the enrollee becoming aware of the spill, require water quality sampling for, at a minimum, the following constituents:
  - i. Ammonia. The City spill response staff perform ammonia testing in the field using testing strips.
  - ii. Appropriate Bacterial indicator(s) per the applicable Basin Plan water quality objective or Regional Board direction which may include total and fecal coliform, enterococcus, and e- coli. The City performs total and fecal coliform and enterococcus. Additional monitoring may be performed per request by DEHQ.

Additionally, for Category 1 sewer spills of 50,000 gallons or more, and spill technical report is required and must be submitted within 45 calendar days from the spill end date. The Sewer Spill Technical Report requirements are described in element 5, SERP.

### **9.3 Biological Assessment – Category 1 or 2 Spills (ref: cdo\_r9-2023-0016 Finding 23)**

After a suspected Category 1 or 2 Sewer Spill, the City will conduct a biological assessment in addition to any Water Quality sampling.

### **9.4 Sewer Spill Technical Report**

The City will submit a Sewer Spill Technical Report to the CIWQS Online Sewer Spill Database within 45 calendar days of the spill end date for any major spill spilled to surface waters. The Deputy Director of the Wastewater Collections Division will supervise the preparation of this report and will certify this report. This report, which does not preclude the Water Boards from requiring more detailed analyses if requested, shall include at a minimum, the following:

#### Causes and Circumstances of the Spill:

- Complete and detailed explanation of how and when the spill was discovered.
- Diagram showing the spill failure point, appearance point(s), and final destination(s).
- Detailed description of the methodology employed and available data used to calculate the volume of the spill and, if applicable, the spill volume recovered.
- Detailed description of the cause(s) of the spill.
- Copies of original field crew records used to document the spill.
- Historical maintenance records for the failure location.

#### City's Response to Spill:

- Chronological narrative description of all actions taken by the City to terminate the spill.
- Explanation of how the SSMP Spill Emergency Response Plan was implemented to respond to and mitigate the spill.
- Final corrective action(s) completed and/or planned to be completed, including a schedule for actions not yet completed.

#### Water Quality Monitoring:

- Description of all water quality sampling activities conducted including analytical results and

evaluation of the results.

- Detailed location map illustrating all water quality sampling points.

## 10. Sewer Backup Into/Onto Private Property Claims Handling Policy

It is the policy of the City that a claims form shall be offered to anyone wishing to file a claim. The following procedures will be observed for all sewer spills/backups into/onto private property:

- City staff will offer a City claim form irrespective of fault whenever it is possible that the sanitary sewer backup may have resulted from an apparent blockage in the City-owned sewer lines or whenever a City customer requests a claim form. The claim may later be rejected if subsequent investigations into the cause of the loss indicate the City was not at fault.
- It is the responsibility of the Wastewater Crew to gather information regarding the incident and notify the Duty Supervisor or their designee.
- It is the responsibility of the Senior Claims Adjustor or their designee to review all claims and to oversee the adjustment and administration of the claim to closure.

## 11. Notification, Reporting, Monitoring and Recordkeeping Requirements

*ref. SWRCB Order No. 2006-0003-DWQ D.13vi(c)*

In accordance with the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (SSS GWDRs), the City of San Diego maintains records for each sanitary sewer spill. Records include:

- Documentation of response steps and/or remedial actions
- Photographic evidence to document the extent of the spill, field crew response operations, and site conditions after field crew spill response operations have been completed. The date, time, location, and direction of photographs taken will be documented.
- Documentation of how any estimations of the volume of discharged and/or recovered volumes were calculated including all assumptions made.
- Regulator required notifications are outlined in Section 11.1 on the following page.

The San Diego County Department of Environmental Health will be notified by phone or email if there is a discharge of sewage from the public sanitary sewer collection system of the City of San Diego, which enters a surface water body of water such as the Pacific Ocean, bay, river, lake, stream, creek, or domestic water supply where there is a potential for human contact as defined by the County Department of Environmental Health. Includes Category 1 Sewer Spills as defined in Order No. WQ 2013-0058-EXEC and private spills greater than 1,000 gallons or private spills to surface waters.

The following information will be included:

- Name of the reporting agency/ responsible party and their contact information so we can contact if there are any questions
- Spill information:
- Date:
- Time:
- Address/Coordinates:
- Substance:
- Volume:

- Cause of the spill
- Has the spill been stopped?
- Has the spill been mitigated?
- Surface water affected? if so, which water body?
- Any Recreational water affected? If so, indicate.
- Has there been a Cal OES report filed?
- If the spill was neutralized, what substance was it neutralized with?

### 11.1 Regulator Required Notifications

ELEMENT	REQUIREMENT	METHOD
<b>NOTIFICATION</b>	Within two hours of becoming aware of any Category 1 Sewer Spill 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, the City will notify the California Office of Emergency Services (CalOES) and obtain a notification control number.	Call Cal OES at: <b>(800) 852-7550</b>
<b>NOTIFICATION</b>	If there is a discharge of sewage from the public sanitary sewer collection system of the City of San Diego, which enters a surface water body of water such as the Pacific Ocean, bay, river, lake, stream, creek, or domestic water supply where there is a potential for human contact as defined by the County Department of Environmental Health. Includes Category 1 Sewer Spills as defined in Order No. WQ 2013-0058-EXEC and private spills greater than 1,000 gallons or private spills to surface waters.	Immediately contact San Diego County Department of Environmental Health  During Business Hours 7 a.m. – 4 p.m. M-F  <ul style="list-style-type: none"> <li>• Joseph Palmer: (858) 495-5752</li> <li>• Farnaz Farhang: (619) 366-1590 Available until 5:30 pm M - F</li> </ul> Beach & Bay Water Quality Hotline: (619) 338-2073  Email: Farnaz.Farhang@sdcounty.ca.gov AND Joseph.Palmer@sdcounty.ca.gov; lwq duty.deh@sdcounty.ca.gov; hirt.deh@sdcounty.ca.gov  After hours emergency (HIRT): (858)505-6657

*(table continued)*

(continued)

<b>REPORTING</b>	<ul style="list-style-type: none"><li>• Category 1 Sewer Spill: The City will submit draft report within three business days of becoming aware of the spill and certify within 15 calendar days of spill end date.</li><li>• Category 2 Sewer Spill: The City will submit draft report within 3 business days of becoming aware of the spill and certify within 15 calendar days of the spill end date.</li><li>• Category 3 Sewer Spill: The City will submit certified report within 30 calendar days of the end of month in which spill the occurred.</li><li>• Category 4 Sewer Spill: The City will report and certify the estimated total spill volume and total number of Category 4 spills within 30 calendar days after the end of the month in which the spills occurred.</li><li>• Private Lateral Sewage Discharge: The City will submit certified report within 30 calendar days of the end of month in which spill the occurred.</li><li>• Sewer Spill Technical Report: The City will submit within 45 calendar days after the end date of any Category 1 Sewer Spill in which 50,000 gallons or greater are spilled to surface waters.</li><li>• “No Spill” Certification: The City will certify that no spills occurred within 30 calendar days of the end of the month or, if reporting quarterly, the quarter in which no spills occurred.</li><li>• Annual Report (previously termed Collection System Questionnaire): The City will update for each calendar year by April 1.</li></ul>	Enter data into the CIWQS Online Sewer Spill Database <sup>1</sup> ( <a href="http://ciwqs.waterboards.ca.gov/">http://ciwqs.waterboards.ca.gov/</a> ) certified by the Legally Responsible Official(s) <sup>2</sup> .  All information required by CIWQS will be captured in the Sanitary Sewer Spill Report.  Certified spill reports may be updated by amending the report or adding an attachment to the spill report within 120 calendar days after the spill end date. After 120 days, the State Sewer Spill Program Manager must be contacted to request to amend a spill report along with a justification for why the additional information was not available prior to the end of the 120 days.
<b>BIOLOGICAL ASSESSMENTS</b>	The City will conduct biological assessments following Category 1 Sewer Spills & for Sewer Spills reaching San Diego Bay	Biological assessment results will be uploaded into CIWQS for Category 1 Sewer Spills & for Spills reaching San Diego Bay.
<b>WATER QUALITY MONITORING</b>	The City will conduct water quality sampling within <b>18 hours</b> after initial spill notification for Category 1 Sewer Spills in which 50,000 gallons or greater are spilled to surface waters.	Water quality results will be uploaded into CIWQS for Category 1 Sewer Spills in which 50,000 gallons or greater are spilled to surface waters..

(table continued)

(continued)

---

<sup>1</sup> In the event that the CIWQS online sewer spill database is not available, the Principal Water Utility Supervisor will notify SWRCB by phone and will fax or e-mail all required information to the RWQCB office at (510) 622-2460 in accordance with the time schedules identified above. In such an event, the City will submit the appropriate reports using the CIWQS online sewer spill database when the database becomes available. A copy of all documents that certify the submittal in fulfillment of this section shall be retained in the sewer spill file.

<sup>2</sup> The City always has at least one LRO. Any change in the LRO(s) including deactivation or a change to contact information, will be submitted to the SWRCB within 30 days of the change by calling (866) 792-4977 or emailing [help@ciwqs.waterboards.ca.gov](mailto:help@ciwqs.waterboards.ca.gov).

ELEMENT	REQUIREMENT	METHOD
<b>RECORD KEEPING</b>	The City will maintain the following records: <ul style="list-style-type: none"><li>• Spill event records.</li><li>• Records documenting Sanitary Sewer Management Plan (SSMP) implementation and changes/updates to the SSMP.</li><li>• Records to document Water Quality Monitoring for sewer spills of 50,000 gallons or greater spilled to surface waters.</li><li>• Collection system telemetry records if relied upon to document and/or estimate sewer spill Volume.</li></ul>	Self-maintained records shall be available during inspections or upon request.

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

### 11.2 Sewer Spill Tracking Database and Sewer Spill Tracking

1. Data from the investigation of all sewer spills shall be entered in the Sewer Spill Tracking Database and into CIWQS per regulatory requirements.
2. The Shift/Duty Supervisors and Standby Supervisors shall be responsible for entering the data in the Sewer Spill Tracking Database in a timely manner. Original documents created or compiled during the investigation are archived on the City's G: drive. Also, the Emergency Response Duty Supervisor has hard copies of all spill investigations. All Sewer Spill Tracking information and associated documents shall be retained for five years from the date of the spill.
3. The Emergency Response Section is responsible for administering the Sewer Spill Database and CIWQS. Database maintenance procedures shall be performed weekly to ensure data integrity.
4. The WWC Emergency Response Section Supervisor shall be responsible for creating email notifications to key stakeholders to notify of a sewer spill.
5. The following business reports from SAP shall be made available by WWC staff in ad hoc use:
  - Sewer Spills by month, quarter, and calendar year
  - Sewer Spills by cause
  - Sewer Spills by geographical area
  - Sewer Spills by volume

### **11.3 Complaint Records**

The City maintains records of all complaints received whether or not they result in sanitary sewer spills in SAP. These complaint records include:

- Date, time, and method of notification
- Date and time the complainant or informant first noticed the spill or occurrence related to the call
- Narrative description describing the complaint
- A statement from the complainant or informant, if they know, of whether or not the potential spill may have reached waters of the state
- Name, address, and contact telephone number of the complainant or informant reporting the potential spill (if not reported anonymously)
- Follow-up return contact information for each complaint received (if not reported anonymously)
- Final resolution of the complaint with the original complainant
- Work order information used to document all feasible and remedial actions taken

All complaint records will be maintained for a minimum of five years whether or not they result in a sewer spill. Hardcopy spill incident files are stored with the shift supervisor from the shift that responded.

## **12. Post Sewer Spill Event Debriefing**

*ref. SWRCB Order No. 2006-0003-DWQ D.13vi(d)*

Every sewer spill event is an opportunity to evaluate the City response and reporting procedures. Each sewer spill event is unique, with its own elements and challenges including volume, cause, location, terrain, climate, and other parameters.

As soon as possible after Category 1 and Category 2 Sewer Spill events all of the participants, from the person who received the call to the last person to leave the site, will meet to review the procedures used and to discuss what worked and where improvements could be made in preventing or responding to and mitigating future spill events. The results of the debriefing will be documented and tracked to ensure the action items are completed as scheduled.

## **13. Failure Analysis Investigation**

*ref. SWRCB Order No. 2006-0003-DWQ D.13vi(d)*

The objective of the failure analysis investigation is to determine the “root cause” of the spill and to identify corrective action(s) needed that will reduce or eliminate future potential for the spill to recur or for other spills to occur.



The investigation will include reviewing all relevant data to determine appropriate corrective action(s) for the line segment. The investigation will include:

- Reviewing and completing the Sanitary Sewer Spill Report and any other documents related to the incident
- Reviewing the incident timeline and other documentation regarding the incident
- Reviewing communications with the reporting party and witness
- Reviewing volume estimate, volume recovered estimate, volume estimation assumptions and associated drawings
- Reviewing available photographs
- Interviewing staff that responded to the spill
- Reviewing past maintenance records
- Reviewing past CCTV records,
- Conducting a CCTV inspection to determine the condition of all line segments immediately following the spill and reviewing the video and logs,
- Reviewing any Fats, Oils, Roots and Grease (FROG) related information or results
- Post spill debrief records
- Interviews with the public at the spill location

The product of the failure analysis investigation will be the determination of the root cause and the identification and scheduling of the corrective actions. The Collection System Failure Analysis Form (in Sanitary Sewer Spill/Backup Response Workbook) will be used to document the investigation.

## **14. Sewer Spill Response Training**

*ref. SWRCB Order No. 2006-0003-DWQ D.13vi(d)*

This section provides information on the training that is required to support this Spill Emergency Response Plan.

### **14.1 Initial and Annual Refresher Training**

All City personnel who may have a role in responding to, reporting, and/or mitigating a sewer system spill will receive training on the contents of this SERP. All new employees will receive training before they are placed in a position where they may have to respond. Current employees will receive annual refresher training on this plan and the procedures to be followed. The City will document all training.

Affected employees will receive annual training on the following topics by knowledgeable trainers:

- The City's Spill Emergency Response Plan and Sanitary Sewer Management Plan
- Sanitary Sewer Spill Volume Estimation Techniques
- Researching and documenting Sanitary Sewer Spill Start Times
- Impacted Surface Waters: Response Procedures
- State Water Resources Control Board Employee Knowledge Expectations
- Employee Core Competency Evaluations on Sanitary Sewer Operations
- Water Quality Sampling Plan

The City will verify that annual safety training requirements are current for each employee, and that

employees are competent in the performance of all core competencies. This will be verified through electronic testing, interviews and observations. The City will address, through additional training/instruction, any identified gaps in required core competencies.

Through SWRCB Employee Knowledge Expectations training the employee will be able to answer the following:

1. Please briefly describe your name and job title.
2. Please describe for us approximately when you started in this field and how long you have worked for your agency.
3. Please expand on your current position duties and role in responding in the field to any spill complaints.
4. Please describe your SOPs used to respond/mitigate spills when they occur.
5. Describe any training your agency provides or sends you to for conducting spill volume estimates.
6. We are interested in learning more about how your historical spill response activities have worked in the field. We understand from discussions with management earlier that you use the SERP from the SSMP. Please elaborate on how you implement and utilize the procedures in the plan.
7. Historically, before any recent changes, can you please walk us through how you would typically receive and respond to any spill complaints in the field?
8. Can you tell us who is responsible for estimating spill volumes discharged? If it is you, please describe how you go about estimating the spill volume that you record on the work order/service request forms?
9. What other information do you collect or record other than what is written on the work order form?
10. Describe if and when you ever talk with people that call in spills (either onsite or via telephone) to further check out when the spill might have occurred based on what they or others know? If you do this, can you tell us where this information is recorded?
11. We understand you may be instructed to take pictures of some sewer spills/backups into structures. Other than these spills, when else would you typically take any pictures of a spill?
12. Please walk us through anything else you'd like to add to help us better understand how your field crews respond and mitigate spill complaints.

## **14.2 Sewer Spill Response Drills**

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

### **14.3 Sewer Spill Training Record Keeping**

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

### **14.4 Contractors Working on City Sewer Facilities**

All construction contractors working on City sewer facilities will be required to develop a project-specific SERP, will provide project personnel with training regarding the content of the contractor's SERP and their role in the event of a sewer spill, and to follow that SERP in the event that they cause or observe a sewer spill. Emergency response procedures shall be discussed at project pre-construction meetings, regular project meetings and after any contractor involved incidents.

All service contractors will be provided, and required to observe contractor procedures.

## **15. Authority**

- Health & Safety Code Sections 5410-5416
- CA Water Code Section 13271
- Fish & Wildlife Code Sections 5650-5656
- State Water Resources Control Board Order No. 2006-0003-DWQ
- State Water Resources Control Board Order No. WQ 2013-0058-EXEC effective September 9, 2013
- State Water Resources Control Board Order No. WQ 2022-0103-DWQ effective June 5, 2023

## **16. Appendices**

- Appendix A: WWC Event Notification List
- Appendix B: Sewer Spill Reference Guide Pamphlet: Your Responsibilities as a Private Property Owner
- Appendix C: Door Hanger
- Appendix D: Warning Sign
- Appendix E: Sanitary Sewer Spill/Backup Response Workbook

**APPENDIX A:**  
WWC Event Notification List

## WWC Event Notification List (DD-D-002.0)

The Event Notification List identifies all parties that are notified in the event of a sanitary sewer spill. The parties that are notified are dependent on the type, magnitude, and location of the event.

The Duty Supervisor's responsibility is to notify all of the appropriate persons. Any changes to this listing should be sent to the Deputy Director at once.

TYPE OF EVENT	DESCRIPTION	NOTIFICATION GROUP(S)
Sanitary Sewer Spill	A discharge of sewage from the public sanitary sewer collection system of the City of San Diego at any point upstream of the sewage treatment plant. Includes Category 2 and 3 Sewer Spills as defined in Order No. WQ 2013-0058-EXEC.	1 and 2
Sanitary Sewer Spill (surface waters)	A discharge of sewage from the public sanitary sewer collection system of the City of San Diego, which enters a surface water body of water such as the Pacific Ocean, bay, river, lake, stream, creek, or domestic water supply where there is a potential for human contact as defined by the County Department of Environmental Health. Includes Category 1 Sewer Spills as defined in Order No. WQ 2013-0058-EXEC and private spills greater than 1,000 gallons or private spills to surface waters.	1, 2, and 3
Emergency Incidents	<p>Definition: A situation which has or could cause widespread damage, such as a significant sewer system failure affecting parts of a community area.</p> <ul style="list-style-type: none"> <li>A. Failure of a sewer pipeline 18 inches in diameter or larger or extensive damage caused by a pipeline failure.</li> <li>B. A sewer stoppage or spill affecting three or more residences or a commercial or retail establishment.</li> <li>C. A sewer pump station failure that can't be immediately corrected on site.</li> </ul>	1
Unusual Occurrences	<p>Examples of Unusual Occurrences are as follows:</p> <ul style="list-style-type: none"> <li>A. Repeat sewer backups at the same building or residence, resulting in damage claim.</li> <li>B. The news media appears on or has inquired about any incident related to spills or sanitary sewer back-ups, station, or facility.</li> <li>C. Loss of electrical power to a sewer pump station if backup generator does not function effectively.</li> </ul>	1

**GROUP 1:**

**Sanitary Sewer Spills, Spills to Surface Waters, Emergency Incidents and Unusual Occurrences**

The Duty Supervisor will notify via cell phone by text message all relevant information to the following:

**Please see Notification Contact List attachment for current list with names and contact information.**

GWUS, ER Section	Executive Assistant Director Public Utilities Department
PWUS, ER Section	Director, Public Utilities Department
Deputy Director, WastewaterCollection Division	Assistant Deputy Director, WastewaterCollection Division
Supervising Public InformationOfficer, Communications Department	Assistant Director, Water Recovery Branch
Director, Public WorksDepartment	

Depending on the nature of the Emergency Incident or Unusual Occurrence, the following may also need to be notified:

Director, Transportation & StormWater Department	Assistant Director, Pure Water Branch
Deputy Director, Engineering &Program Management Division	Deputy Director, WastewaterTreatment & Disposal Division
Safety, Security & Warehouse Interim Program Manager, Public Utilities Dept.	Deputy Director, Public UtilitiesDepartment
External Affairs & Water Policy Program Manager,Public Utilities Department	Supervising ManagementAnalyst, Public Utilities Department

(continued)

(Group 1 continued)

The Emergency Response Supervisor will include the following in the email Distribution List for all Sewer Spill Reports including sewer spills to surface waters:

**Please see Notification Contact List attachment for current list with names and contact information.**

Deputy Chief Operating Officer, Mayor's Office	Director, Public Utilities Department
Assistant Director, WaterRecovery Branch	Executive Assistant Director, Public Utilities Department
Deputy Director, Wastewater Collection Division	Assistant Deputy Director, Wastewater Collection Division
Director, Transportation & StormWater Department	Director, Public WorksDepartment
Public Information Officer, Communications Department	FEWD Program Manager, Wastewater Collection Division
General Water Utility Supervisor, Main Cleaning Section, Wastewater Collection Division	Senior Civil Engineer, Wastewater Collection Division
General Water Utility Supervisor, Construction Section, Wastewater Collection Division	General Water Utility Supervisor, Sewer Pump Section, Wastewater Collection Division
Senior Water Utility Supervisor, Emergency Response, Wastewater Collection Division	Principal Water Utility Supervisor, Canyons Section, Wastewater Collection Division
Principal Water Utility Supervisor, Emergency Response, Wastewater Collection Division	Deputy Director, Environmental Monitoring & Technical Services, Public Utilities Department
Senior Biologist, Environmental Monitoring & Technical Services, Public Utilities Department	Biologist III, Environmental Monitoring & Technical Services, Public Utilities Department
Storm Water Environmental Specialist, Transportation & Storm Water Department	Storm Water Environmental Specialist
Deputy Chief of Staff/Chief of Communications, Mayor's Office	Press Secretary, Mayor's Office
TSW Storm Water Division Email – <a href="mailto:SWPPP@sandiego.gov">SWPPP@sandiego.gov</a>	

**GROUP 2**  
Sanitary Sewer Spills, Spills to Surface Waters

---

**Please see Notification Contact List attachment for current list with names and contact information.**

The *Duty Supervisor* will ensure that all the notification under this group is followed:

**San Diego County Department of Environmental Health & Quality**

During Business Hours 7 a.m. – 4 p.m. M-F

Beach and Bay Water Quality Hotline:

After Business Hours:

County Communications Dispatch:

**Regional Water Quality Control Board (RWQCB)**

- RWQCB will be notified through CIWQS system
- After Hours Hotline

**City Council Offices**

Copies of all public and private sewer spills are to be emailed to all Council Offices impacted by the sewer spill.

Council District 1	Council District 6
Council District 2	Council District 7
Council District 3	Council District 8
Council District 4	Council District 9
Council District 5	

**Navy Public Works Center (NAFAC Southwest Utilities Duty Desk)**

If spill is from Navy/Marine Facilities, or housing (excluding The Marine Corps Recruit Depot)

- 24/7 – Duty Desk

**Storm Water Pollution Prevention Hotline:**

All sewer spills, public or private, email Spill Report to: [swppp@san Diego.gov](mailto:swppp@san Diego.gov)

**San Diego Police Department**

If spill is due to vandalism, notify to conduct investigation:

- San Diego Police Dept. via Station #38
- File Electronic Vandal Report (SDPD)



### **GROUP 3**

Sanitary Sewer Spills that reach surface waters including: Mission Bay, Pacific Ocean, San Diego River, San Diego Bay, Penasquitos Lagoon, and Domestic Water Supply

---

**Please see Notification Contact List attachment for current list with names and contact information.**

**The *Duty Supervisor* will ensure that all the notification under this group is followed:**

#### **Marine Microbiology Lab**

- WWCD Standby List and Notify On Call Biologist

#### **City Council Offices**

- Copies of all public and private sewer spills are to be emailed to all Council Offices.

#### **If flow reaches Mission Bay, notify all of the following:**

- Mission Bay District Manager (Bay)
- Mission Bay Park District Manager (Shoreline)

#### **For Sewer Spills of 1000 Gallons or more to surface waters notify:**

Office of Emergency Services (OES)

#### **If flow reaches Ocean Beach, Mission Bay, or San Diego River, west of 1-5, notify:**

S.D. Lifeguards Service:

Also, email Lifeguard Sergeant – San Diego Fire-Rescue

#### **If flow reaches San Diego Bay, notify:**

- National Wildlife Refuge
- San Diego Port District Environmental Management
- Living Coast Discovery Center (Gunpowder Point area):  
Executive Director & Facilities Manager
- San Diego Bay FWS: Project Leader or Deputy Project Leader
- US Fish and Wildlife Service Spill Response
- Tijuana Slough and San Diego Bay National Wildlife Refuges:  
Refuge Manager

#### **If spill comes from Mexico, notify:**

IBWC Office

*(continued)*

*(Group 3 continued)*

**If spill results in the posting at waters of another City, notify appropriate Public Works Director/Department below:**

- **Imperial Beach**
- **Coronado**
- **Del Mar**
- **Chula Vista**
- **National City**

**If spill reaches a Lake, Reservoir, or Other Domestic Water Supply notify:**

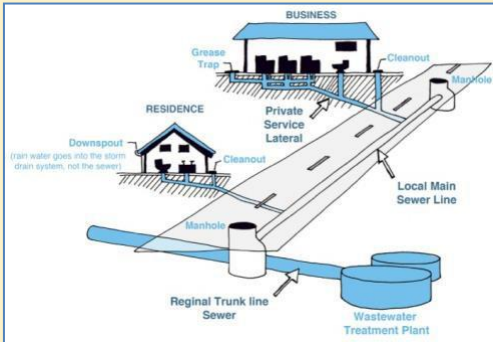
- 1. Water Production Division:**  
Deputy Director - Call Station 38
- 2. State Department of Health Services**
  
- 3. California Department of Fish and Wildlife**
  
- 4. Lake Hodges (only):**  
Escondido CWA  
Control Center

**R.E. Badger Filtration Plant**

APPENDIX B:  
Sewer Spill Reference Guide Pamphlet:  
Your Responsibilities as a Private Property Owner

## How a Sewer System Works

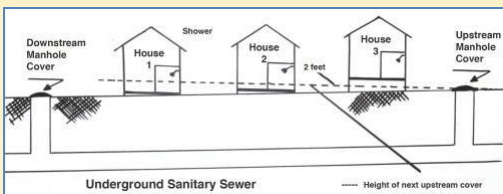
A property owner's sewer pipes are called **service laterals** and are connected to larger local main and regional trunk lines. Service laterals run from the connection at the home to the connection with the public sewer. These laterals are the responsibility of the property owner and must be maintained by the property owner.



## Is my home required to have a backflow prevention device?

Section 710.1 of the Uniform Plumbing Code (U.P.C.) states: *"Drainage piping serving fixtures which have flood level rims located below the elevation of the next upstream manhole cover or private sewer serving such drainage piping **shall** be protected from backflow of sewage by installing an approved type of backwater valve."* The intent of Section 710.1 is to protect the building interior from mainline sewer spills or surcharges.

Additionally, U.P.C. 710.6 states: *"Backwater valves **shall** be located where they will be accessible for inspection and repair at all times and, unless continuously exposed, shall be enclosed in a masonry pit fitted with an adequately sized removable cover."*



**If you have a sewage spill from your private sewer line that impacts storm drains, waterways or public property, contact:**

**City of San Diego (619) 515-3525**

**Discharge of untreated or partially treated sewage is prohibited by law. If you would like more information on this prohibition, please contact any of the following:**

### Department of Environmental Health and Quality

(858) 505-6700 or (800) 253-9933

California Health and Safety Code, Sections 5410-5416 requires:

- No person shall discharge raw or treated sewage or other waste in a manner that results in contamination, pollution, or a nuisance.
- Any person who causes or permits a sewage discharge to any state waters:
  - Must immediately notify the local health agency of the discharge.
  - Shall reimburse the local health agency for services that protect the public's health and safety.
  - Who fails to provide the required notice to the local health agency is guilty of a misdemeanor and shall be punished by a fine (between \$500-\$1,000) and/or imprisonment for less than one year.

### San Diego Regional Water Quality Control Board:

(619) 516-1990

Requires the prevention, mitigation, response to, and reporting of sewage spills.

### California Governor's Office of Emergency Services (CalOES): (800) 852-7550

California Water Code, Article 4, Chapter 4, Sections 13268-13271 & California Code of Regulations, Title 23, Division 3, Chapter 9.2, Article 2, Sections 2250-2260 require:

- Any person who causes or permits sewage in excess of 1,000 gallons to be discharged to state waters shall immediately notify the Office of Emergency Services.
- Any person who fails to provide the notice required by this section is guilty of a misdemeanor and shall be punished by a fine (less than \$20,000) and/or imprisonment for not more than one year.

# Sewer Spill Reference Guide

The City of  
**SAN DIEGO**

Your Responsibilities as a  
Private Property Owner

Provided to you by:

**City of San Diego**  
9150 Topaz Way  
San Diego, CA 92123  
(619) 515-3525

Copyright © 2004-2021  
DKF Solutions Group  
All rights reserved.

### How do sewage spills happen?

Sewage spills occur when the wastewater in underground pipes spills through a manhole, cleanout, or broken pipe. Most spills are relatively small and can be stopped and cleaned up quickly, but left unattended they can cause health hazards, damage to homes and businesses, and threaten the environment, local waterways, and beaches.

### CAUTION!

**When trying to locate a sewer problem, never open manholes or other public sewer structures. Only our crews are allowed to open & inspect these structures.**

**Call for assistance: (619) 515-3525**

### Common causes of sewage spills

- Grease build-up
- Tree roots
- Broken/cracked pipes
- Missing or broken cleanout caps
- Undersized sewers
- Groundwater/rainwater entering the sewer system through pipe defects and illegal connections

### Prevent most sewage backups with a Backflow Prevention Device

This type of device can help prevent sewage backups into homes and businesses. If you don't already have a Backflow Prevention Device, contact a professional plumber or contractor to install one as soon as possible.

### Protect the environment!

If you let sewage from your property discharge to a gutter or storm drain, you may be subject to penalties and/or out-of-pocket costs for clean-up and enforcement efforts. A property owner may be charged for costs incurred by agencies responding to spills from private properties.

### What to look for:

Sewage spills can be a very noticeable gushing of water from a manhole or a slow water leak that may take time to be noticed. Don't dismiss unaccounted-for wet areas. Look for:

- Drain backups inside the building.
- Wet ground and/or water leaking around manhole lids onto your street.
- Leaking water from cleanouts or outside drains
- Unusual odorous wet areas: sidewalks, external walls, ground/landscape around a building.

The following are indicators of a possible obstruction in your sewer line:

- Water comes up in floor drains, showers or toilets.
- Toilets, showers or floor drains below ground level drain very slowly.

### What to do if there is a spill:

Immediately notify the City of San Diego. Our crews locate the blockage and determine if it is in the public sewer; if it is the crew removes the blockage and arranges for cleanup. If the backup is in your private internal plumbing or in the private service laterals, you are required to immediately:

- Control and minimize the spill by shutting off or not using the water
- Keep sewage out of the storm drain system using sandbags, dirt and/or plastic sheeting
- Call a plumbing professional to clear blockages and make repairs as needed. Look in the yellow pages under "Plumbing Drain & Sewer Cleaning" or "Sewer Contractors."
- Always notify your sewer/public works department or public sewer district of sewage spills.

### Spill cleanup inside the home:

For large clean ups, a professional cleaning firm should be contacted to clean up impacted areas. If you hire a contractor, it is recommended to get estimates from more than one company. Sometimes, homeowner's insurance will pay for the necessary cleaning due to sewer backups. Not all policies have this coverage, so check with your agent.

If you decide to clean up a small spill inside your home, protect yourself from contamination by observing the following safety measures. Those persons whose resistance to infection is compromised should not attempt this type of clean up.

### Other Tips:

- Keep children and pets out of the affected area until cleanup has been completed.
- Turn off heating/air conditioning systems
- Wear rubber boots, rubber gloves, and goggles during cleanup of the affected area.
- Discard items that cannot be washed and disinfected (such as: mattresses, rugs, cosmetics, baby toys, etc.)
- Remove and discard drywall and insulation that has been contaminated with sewage or flood waters.
- Thoroughly clean all hard surfaces (such as flooring, concrete, molding, wood and metal furniture,

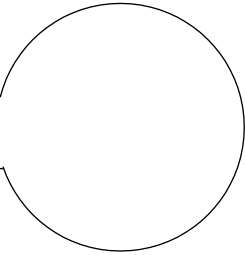
countertops, appliances, sinks and other plumbing fixtures) with hot water and laundry or dish detergent.

- Help the drying process with fans, air conditioning units, and dehumidifiers.
- After completing cleanup, wash your hands with soap and water. Use water that has been boiled for 1 minute (allow the water to cool before washing your hands) OR use water that has been disinfected (solution of 1/8 teaspoon of household bleach per 1 gallon of water). Let it stand for 30 min. If water is cloudy, use ¼ teaspoon of household bleach per 1 gallon of water.
- Wash clothes worn during cleanup in hot water and detergent (wash apart from uncontaminated clothes).
- Wash clothes contaminated with sewage in hot water and detergent. Consider using a Laundromat until your onsite wastewater system has been professionally inspected and serviced.
- Seek immediate attention if you become injured or ill.

### Spill cleanup outside the home:

- Keep children and pets out of the affected area until cleanup has been completed.
- Wear rubber boots, rubber gloves, and goggles during cleanup of affected area.
- Clean up sewage solids (fecal material) and place in properly functioning toilet or double bag and place in garbage container.
- On hard surfaces areas such as asphalt or concrete, it is safe to use a 2% bleach solution, or ½ cup of bleach to 5 gallons of water, but don't allow it to reach a storm drain as the bleach can harm the environment.
- After cleanup, wash hands with soap and water. Use water that has been boiled for 1 minute (allow to cool before washing your hands) OR use water that has been disinfected (solution of 1/8 teaspoon of household bleach per 1 gallon of water). Let it stand for 30 min. If water is cloudy, use ¼ teaspoon of household bleach per 1 gallon of water.
- Wash clothes worn during cleanup in hot water and detergent (wash apart from uncontaminated clothes).
- Wash clothes contaminated with sewage in hot water and detergent. Consider using a Laundromat until your onsite wastewater system has been professionally inspected and serviced.
- Seek immediate attention if you become injured/ill.

APPENDIX C:  
Door Hanger



On (date) \_\_\_\_\_, at  
 (location) \_\_\_\_\_,  
 we responded to a reported blockage of the sanitary  
 sewer service to your property.

We discovered a blockage in:

- The sanitary sewer main and cleared the line
- The City-maintained portion of your sanitary sewer lateral and cleared the line.
- Your portion of the sanitary sewer lateral, which is your responsibility to maintain. We also found the City's portion of the lateral and the main to be flowing normally.

If you require assistance to clear your portion of the lateral you can search the internet for "Sewer Contractors" or "Plumbing Drains & Sewer Cleaning." If you plan to hire a contractor we recommend getting estimates from more than one company.

City of San Diego representative notes:

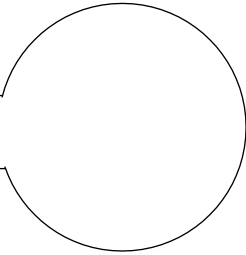
\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

City of San Diego Representative:

\_\_\_\_\_

For questions or comments, please call:

**(619) 515-3525**



On (date) \_\_\_\_\_, at  
 (location) \_\_\_\_\_,  
 we responded to a reported blockage of the sanitary  
 sewer service to your property.

We discovered a blockage in:

- The sanitary sewer main and cleared the line
- The City-maintained portion of your sanitary sewer lateral and cleared the line.
- Your portion of the sanitary sewer lateral, which is your responsibility to maintain. We also found the City's portion of the lateral and the main to be flowing normally.

If you require assistance to clear your portion of the lateral you can search the internet for "Sewer Contractors" or "Plumbing Drains & Sewer Cleaning." If you plan to hire a contractor we recommend getting estimates from more than one company.

City of San Diego representative notes:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

City of San Diego Representative:

\_\_\_\_\_

For questions or comments, please call:

**(619) 515-3525**

APPENDIX D:  
Warning Sign



Spill Emergency Response Plan  
Public Posting

# DANGER

**RAW SEWAGE • AVOID CONTACT**



# PELIGRO

**AGUA CONTAMINADA • EVITE TODO CONTACTO**

**City of San Diego**  
**(619) 515-3525**

APPENDIX E:  
Sanitary Sewer Spill/Backup Response Workbook



Spill Emergency Response Plan

Sanitary Sewer Spill and Backup  
Response Workbook

**INSERT TAB:**  
**Start Here**

- If this is a Category 1 Sewer Spill greater than or equal to 1,000 gallons, **immediately notify the Senior Shift Supervisor** to make the notification to CalOES within 2 hours.
- For Category 1 Sewer Spills:** Beach & Bay Advisory Hotline Land and Water Quality Division at (619) 338-2073. After hours contact HIRT (Hazardous Incident Response Team) at (858) 505-6657.
- Refer to the Regulatory Reporting Guide** for additional reporting requirements.
- If there is a backup into a residence or business:** Contact the Engineering Section’s designee for assessment of damages.
- For Water Sampling:** EMTS Marine Microbiology Laboratory (619) 758-2300
- For Restoration/Remediation:** Senior Shift Supervisor will contact dispatch for restoration contractor.
- For any media inquiries/requests:**  
Public Information Officer (619) 533-4571



Don't forget to take photos!

<p><b>Wastewater Crew:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Follow the instructions on the Spill/Backup Response Flowchart and complete forms in this workbook as indicated.</li> <li><input type="checkbox"/> Complete the chain of custody record (to the right) and deliver this workbook to the Senior Water Utility Supervisor.</li> </ul>	<p>Print Name: _____</p> <p>Initial: _____</p> <p>Date: _____</p> <p>Time: _____</p>
--	--

<p><b>Senior Water Utility Supervisor:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Review the Spill Event Checklist and the forms in this booklet. Contact the Wastewater Crew for additional information if necessary.</li> <li><input type="checkbox"/> Confirm that all required regulatory notifications have been made.</li> <li><input type="checkbox"/> If this was a Sewer Backup, complete the Backup Forms Checklist.</li> <li><input type="checkbox"/> Complete the Collection System Failure Analysis Form.</li> <li><input type="checkbox"/> Enter data into CIWQS.</li> <li><input type="checkbox"/> Complete the Chain of Custody record (right) and file this booklet</li> </ul>	<p>Print Name: _____</p> <p>Initial: _____</p> <p>Date: _____</p> <p>Time: _____</p>
--	--

Date of Spill: \_\_\_\_\_ Spill Location/Name: \_\_\_\_\_

CIWQS Event ID #: \_\_\_\_\_ Category?  1  2  3  4 OES#: \_\_\_\_\_

Property Damage?  Yes  No Work Order #: \_\_\_\_\_

- Effort made to contain and return a portion/all to the sanitary sewer
- Pictures/video taken of sewer spill
- Pictures taken of affected/unaffected area
- If property damage, start that process
- Pictures taken of containment efforts
- If Cat 1 > 1000 gals:  
OES Control # \_\_\_\_\_
- Impacted waters identified?
- No impacted waters?
- Spill Report Form Complete (includes fields for all required fields in CIWQS, and a sketch of spill)
- Volume Estimation Worksheet(s) done
- Start Time Determination Form done
- Initial review of forms is complete (ensure consistency with dates, times, volumes, and other data)
- Review of photos and videos (label/date)
- Start Folder for all documentation for this sewer spill event. Put everything in it (Field Reports, Worksheets/Forms, follow-up work orders, notes, pics, drawings, etc. CIWQS print outs and emails)
- Failure Analysis
  - TV to determine cause
  - Review Asset History
- Determine next steps to prevent recurrence
- Document findings and next steps on Spill Report
- Submit Draft in CIWQS w/in 3 business days (for Categories 1 and 2 only)
- Print CIWQS Draft hard copy and email
- Review CIWQS, Spill Report, Worksheets, CMMS, and any other documentation to ensure data is consistent (e.g. dates, times, volumes, cause, follow-up action, etc.)
- Attach photos, forms etc. to CIWQS
- Submit Ready to Certify in CIWQS (with sufficient time for P.W.U.S. review)
- Print CIWQS Ready to Certify and email
- Hand folder to LRO
- LRO review folder and CIWQS verify for accurate and consistent data
- Certify in CIWQS (within 15 calendar days for Categories 1 & 2, 30 days after the spill for Categories 3 & 4)
- Print Certified CIWQS and email
- Any changes? Change in CIWQS and hard copies and explain changes, print our current version
- Move completed folder to Spill Binder
- For 50, 000 gallons or larger
  - Follow Water Quality Monitoring and Sampling procedures
  - Map of where samples were taken
  - Sampling results
  - Write Technical Report
  - Attach to CIWQS
  - Add to Spill Folder/Binder
- If any changes are made to SSMP
  - Update SSMP and link on CIWQS to SSMP
  - Add change to SSMP Change Log
  - If change is substantive, re-certify SSMP

**INSERT TAB:**  
**Regulatory Reporting**

**Internal Notifications:**

If this is a Category 1 Sewer Spill, or if a business has been impacted by a mainline stoppage sewer backup, or if residents are displaced from their home due to a mainline blockage: Notify the Deputy Director or their designee using the Supervisor Spill Text Notification (B-4). They will make any additional internal notifications at their discretion.

**External Notifications:**

Deadline	Category 1 Sewer Spill	Category 2	Category 3	Category 4	PLSD
Within 2 hours after awareness of sewer spill	<ul style="list-style-type: none"> <li>Contact Beach &amp; Bay Advisory Hotline during business hours, or HIRT after hours.</li> <li>If the spill is greater than or equal to 1,000 gallons, call CalOES.</li> <li>Notify San Diego County Department of Environmental Health</li> </ul>	-	-		-
As soon as possible	<ul style="list-style-type: none"> <li>Notify Technical Services Microbiology</li> <li>If flow reaches Mission Bay, notify Mission Bay District Manager and Mission Bay Park District Manager</li> <li>If flow reaches Ocean Beaches, Mission Bay, or San Diego River, West of I-5, notify San Diego Lifeguards Service.</li> <li>If flow reaches San Diego Bay, notify San Diego Port District Environmental Management.</li> <li>If spill comes from Mexico, notify IBWC Office</li> <li>If spill results in posting at waters of another City, notify the appropriate Public Works Director/Department</li> <li>If spill reaches a lake, reservoir, or other domestic water supply, notify Water System Operations Division, State Department Health services, California Dept of Fish and Wildlife, and Escondido CWA (Lake Hodges only)</li> </ul>	-	-		-
	<ul style="list-style-type: none"> <li>Notify Storm Water Pollution Prevention Hotline.</li> <li>Notify City Council Offices</li> <li>If spill is from Navy/Marine Facilities, or housing (excluding The Marine Corps Recruit Depot), immediately notify, the Navy Public Works Center(NAFAC Southwest Utilities).</li> <li>If spill is due to vandalism, notify San Diego Police Department to conduct investigation.</li> <li>If spill impacts private property that may be a failure of the sewer main and/or if a claim for damages may be submitted against the city, notify the Claims Office.</li> </ul>				-

(Continued)



Deadline	Category 1 Sewer Spill	Category 2 Sewer Spill	Category 3 Sewer Spill	Category 4 Sewer Spill	PLSD
Within 24 hours	Notify San Diego RWQCB*	-	-		Notify San Diego RWQCB if ≥ 1,000 gal and reached, or probably will be discharged to, surface water
18 Hours after awareness of sewer spill	If 50,000 gal or more were not recovered, begin water quality sampling.	-	-		-
3 Business Days after awareness of sewer spill	Submit Draft Spill Report in the CIWQS database.	Submit Draft Spill Report in the CIWQS database.	-		-
15 Days after response conclusion	Certify Spill Report in CIWQS. Update as needed until 120 days after spill end date.	Certify Spill Report in the CIWQS database. Update as needed until 120 days after spill end time.	-		-
30 Days after end of calendar month in which sewer spill occurred	-	-	Certify Spill Report in CIWQS. Update as needed until 120 days after spill end date.	Report/certify monthly total spill volume & total number of Category 4 spills	Enter Spill Report in CIWQS.
45 days after sewer spill end date	If 50,000 gal or more were not recovered, submit Sewer Spill Technical Report in CIWQS.	-	-		-

\* Can report by phone, email or fax. Information that must be reported: Name and phone number of person reporting, responsible agency (City of San Diego), impacted surface waters (if any), start date and time of the spill (if known), spill end date and time, and confirmation that the local health services agency has or will be notified.

**Note:** For reporting purposes, if one sewer spill event results in multiple appearance points, complete one spill report in the CIWQS Sewer Spill Online Database, and report the location of the spill failure point, blockage or location of the flow condition that caused the spill, including all the discharge points associated with the spill event.

### Sewer Spill Categories and PLSDs:

**Category 1:** Discharges of untreated or partially treated wastewater of any volume resulting from an enrollee's sanitary sewer system failure or flow condition that:

- Reach surface water and/or reach a drainage channel tributary to a surface water; or
- Reach a Municipal Separate Storm Sewer System (MS4) and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).

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

**Category 3:** Discharges of untreated or partially treated wastewater of equal to or greater than 50 gallons and less than 1,000 gallons, resulting from an enrollee's sanitary sewer system failure or flow condition that do not reach surface water, a drainage channel, or a MS4 unless the entire spill discharged to the storm drain system is fully recovered and disposed of properly.

**Category 4:** Discharges of untreated or partially treated wastewater of less than 50 gallons, resulting from an enrollee's sanitary sewer system failure or flow condition that do not reach surface water, a drainage channel, or a MS4 unless the entire spill discharged to the storm drain system is fully recovered and disposed of properly.

**Private Lateral Sewage Discharge (PLSD):** Discharges of untreated or partially treated wastewater resulting from blockages or other problems **within a privately-owned lateral** connected to the enrollee's sanitary sewer system or from other private sewer assets. PLSDs that the enrollee becomes aware of will be reported to the California Integrated Water Quality System (CIWQS) Online Sewer Spill Database.

**Please see Notification Contact List attachment for current list with names and contact information.**

**Authorized Personnel:**

The City’s Legally Responsible Officials (LROs) are authorized to perform regulatory reporting of sewer spills and to electronically sign and certify spill reports in CIWQS. The LROs are:

- Deputy Director
- Assistant Deputy Director
- Program Manager

**Contact Information:**

Contact	Telephone/Email
Beach & Bay Advisor Hotline (Land and Water Quality Division)	Business hours: (619) 338-2073 Email: <a href="mailto:LWQDuty.DEHQ@sdcoounty.ca.gov">LWQDuty.DEHQ@sdcoounty.ca.gov</a> After hours: Contact HIRT
CalOES	(800) 852-7550
California Dept of Fish and Wildlife	Office(858) 467- 4218
City Council Offices	District 1: District 6: District 2: District 7: District 3: District 8: District 4: District 9: District 5:
Claims Office	Sr Claims Adjustor
County Department of Environmental Health	During Business Hours 7 a.m. – 4 p.m. M-F • Environmental Health Specialists County Communications Dispatch:
Escondido CWA (Lake Hodges only)	Control Center
HIRT (Hazardous Incident Response Team)	After hours: (858) 505-6657 Business hours: Contact B&B, see contact information above.
IBWC Office	
Mission Bay	Mission Bay District Manager (Bay): Mission Bay Park District Manager (Shoreline):

(continued)

Contact	Telephone/Email
Navy Public Works Center	24/7 Duty Desk: (619) 556-7349 Supervisor for Environmental Spill Protection: (619) 532-2273
Public Works Directors/Departments	<b>Imperial Beach:</b> <b>Coronado:</b> <b>Del Mar:</b> Public Works <b>Chula Vista:</b> Public Works  After Hours Emergency (CVPD) <b>National City:</b> Public Works After Hours Emergency (NCPD)
S.D. Lifeguards Service	(619) 221-8800 (24 hrs) Also, email Lifeguard Sergeant
San Diego Police Department	Station #38: (619) 527-7663
San Diego Port District Environmental Management	8 a.m. – 5 p.m. Week Days: (619) 686-6254 After Hours & Weekends: (619) 686-6254 Leave message Also, call Harbor Police: (619) 686-6272 (24 hrs)
State Department Health services	
State Water Resources Control Board Walter Mobley	(916) 323-0878 Walter.Mobley@waterboards.ca.gov
Stormwater Pollution Prevention Hotline	(858) 541-4360
Technical Services Microbiology	During business hours(8am– 5pm): (619) 758-2361 Email Deputy Director & Biologist
Water System Operations Division	Deputy Director, Call Station 38
R.E. Badger Filtration Plant	

## Notifications Log

<b>Agency</b>	<b>Date/Time</b>	<b>Spoke to/Left Message</b>	<b>Notes</b>

**Please see Notification Contact List attachment for current list with names and contact information.**

**Please follow the event notification process for reporting spills (Sewer Spills, SSB, and PLSD).** To disseminate critical information to management regarding any sewer spill, S.W.U.S staff, Standby Supervisor, and OCA personnel **will respond to the spill location.** Once a sewer spill has been confirmed, the following information needs to be provided immediately via text to PWUS ER Section. **If unavailable,** please contact GWUS or your direct supervisor. This includes ER Days, Nights, Weekend Shift, & Standby Duty Supervisors.

**SUBJECT TEXT: PRELIMINARY NOTIFICATION-CITY/ PRIVATE SEWER SPILL**

- OES #: \_\_\_\_\_ TIME: \_\_\_\_\_ (within 2 hours of notification)
- NOTIFICATION: \_\_\_\_\_ TIME: \_\_\_\_\_ DATE: \_\_\_\_\_ ORDER: \_\_\_\_\_
- ADDRESS/LOCATION: \_\_\_\_\_
- MAIN EQ: \_\_\_\_\_ LATERAL EQ: \_\_\_\_\_
- MANHOLE EQ: \_\_\_\_\_
- CAUSE OF SPILL: \_\_\_\_\_
- LAST CLEANED DATE: \_\_\_\_\_
- RATE – GPM: \_\_\_\_\_
- ESTIMATED TOTAL GALLONS SPILLED: \_\_\_\_\_
- FINAL SPILL DESTINATION: \_\_\_\_\_
- ANY DAMAGES: \_\_\_\_\_
- CORRECTIVE ACTIONS: \_\_\_\_\_
- CONTACT DEPUTY DIRECTOR FOR DETAILS.

**LUTH & TURLEY: (On Call Supervisor) 619-579-8673 press #9**  
**SSB/Sewer Spill Damage Investigators – WWC Engineering Section**

**PLEASE READ THE DEFINITION FOR SSB BELOW:**

SSB – A wastewater backup into a building or solely onto private property from a private lateral that is caused by a blockage or other malfunction in the Collection System and **has caused damages to private property.** *(Have dispatch call out the private restoration company, Luth and Turley to mitigate damages).*



**Please see Notification Contact List attachment for current list with names and contact information.**

**SWUS - PRIMARY NOTIFICATION CONTACTS**



**PWUS, Emergency Response Section**



**GWUS, ER/MC Section**

**EXCLUDE FROM NOTIFICATIONS BELOW PERSONNEL: NOTIFIED BY GWUS OR PWUS ONLY**

**Deputy Director, Wastewater Collection Division**

**Assistant Deputy Director, Wastewater Collection Division**

**Public Information Officer, Communications Department**

**Deputy Director, Customer Support, Public Utilities Department**

**Director, Public Utilities Department**

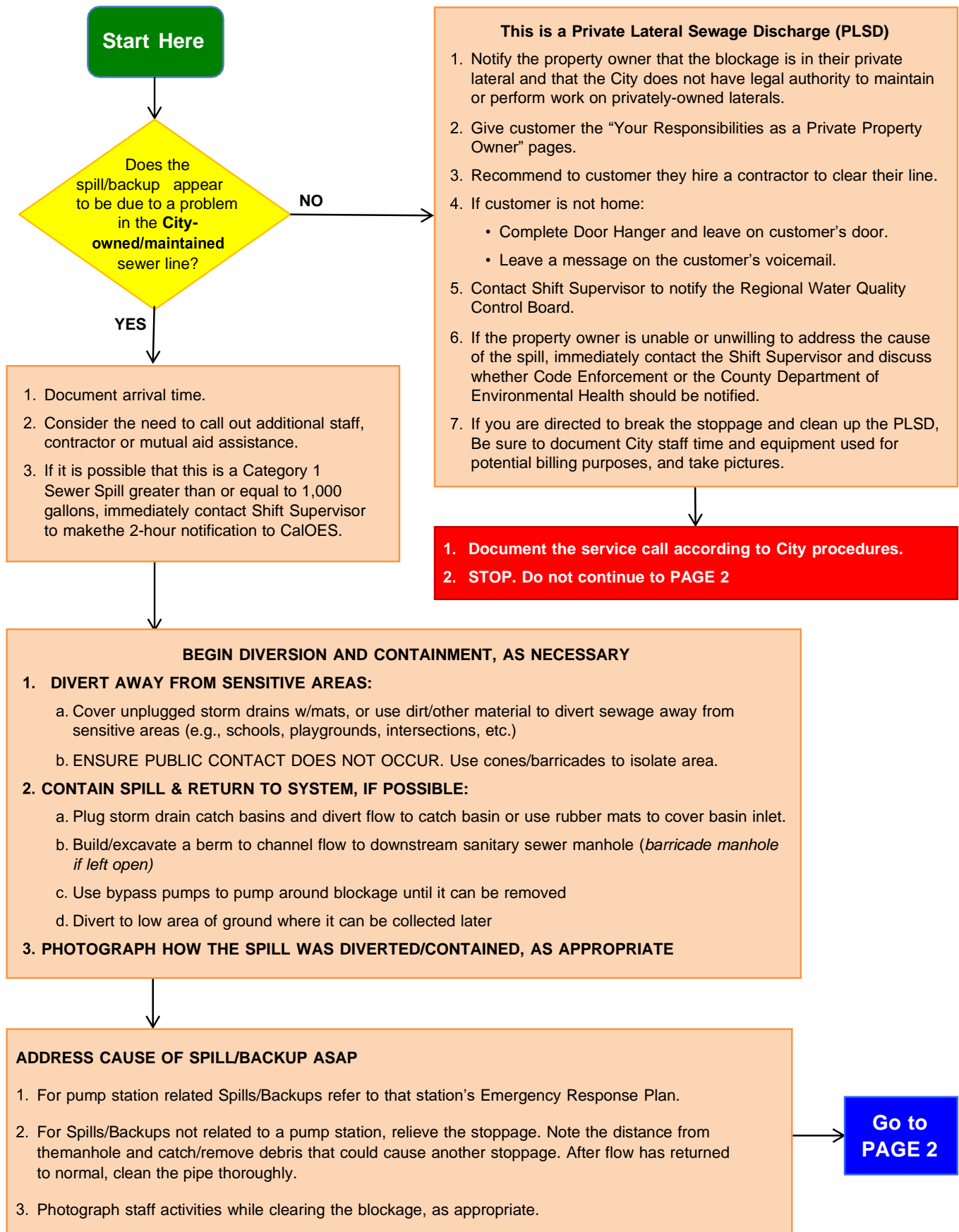
**Executive Assistant Director, Public Utilities Department**

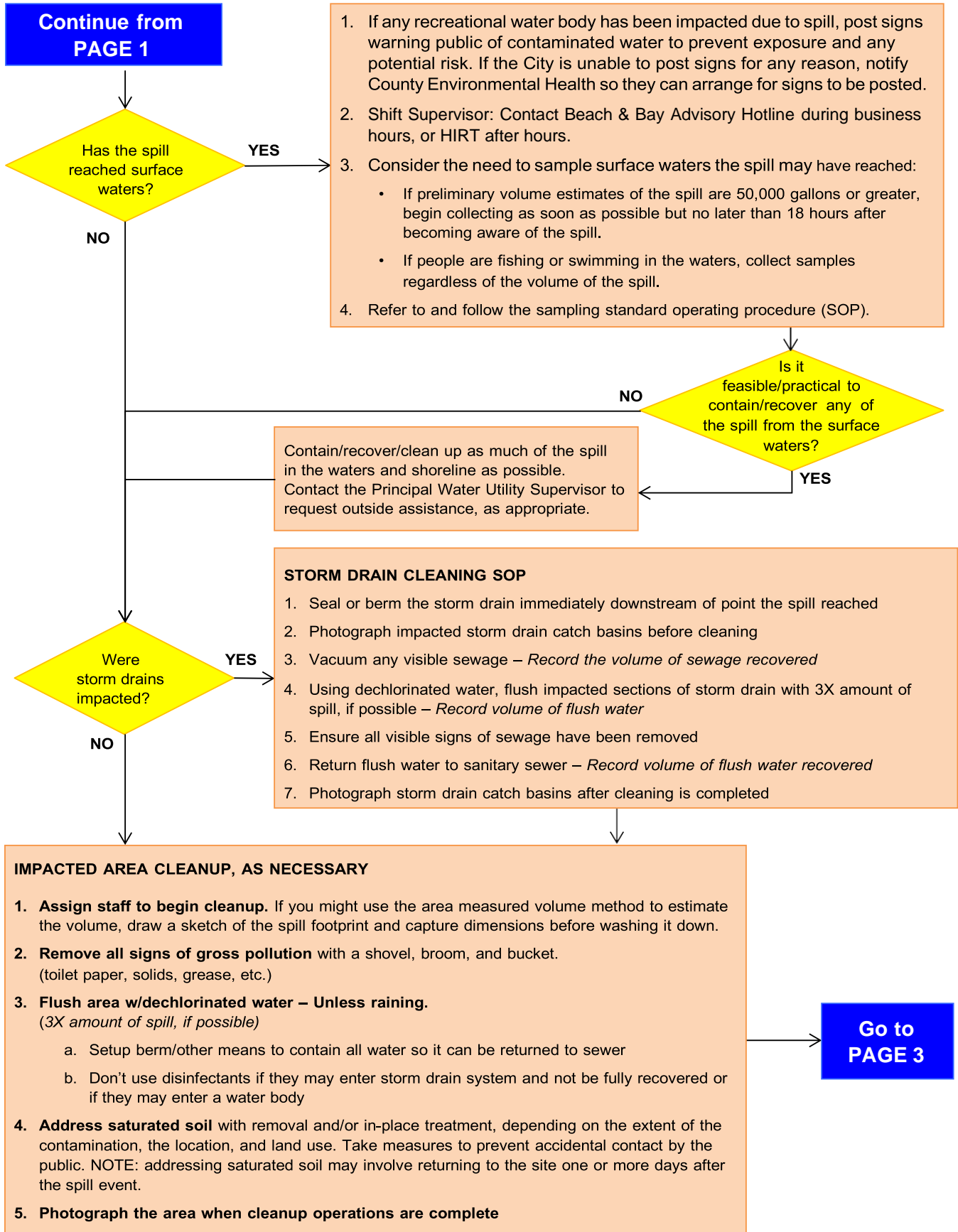
**Assistant Director, Water Recovery Branch, Public Utilities Department**

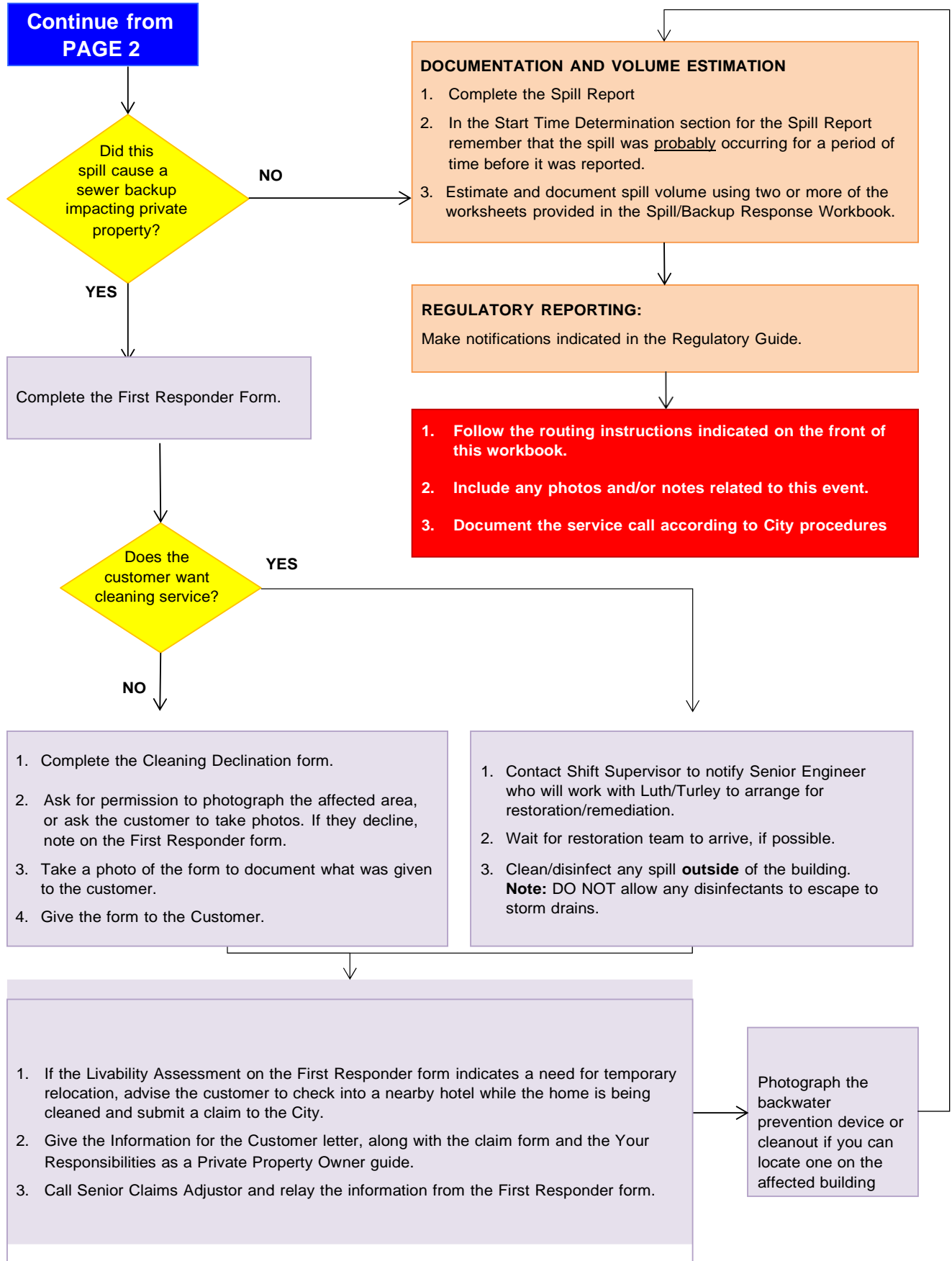


INSERT TAB:  
Flowchart










**INSERT TAB:  
Sewer Spill Report**

<b>PHYSICAL LOCATION DETAILS</b>		
Spill location name		
Latitude of spill location		
Longitude of spill location		
County	San Diego	
Regional Water Quality Control Board	San Diego – Region 9	
<b>VOLUMES BY DESTINATION</b>	<b>Volume Spilled (Gallons)</b>	<b>Volume Recovered (Gallons)</b>
2.a/2.b Estimated spill volume that reached a separate storm drain that flows to a surface body of water? (If not all recovered, this is a Category 1)		
2.c/2d Estimated spill volume that directly reached a drainage channel that flows to a surface water body? (Any volume spilled is a Category 1)		
2.e/2.f Estimated spill volume discharged directly to a surface water body? (Any volume spilled is a Category 1)		
2.g/2.h Estimated spill volume discharged to land? (Includes discharges directly to land, and discharges to a storm drain system or drainage channel that flows to a storm water infiltration/retention structure, field, or other non-surface water location. Also, includes backups to building structures).		
	<b>Volume Spilled</b>	<b>Volume Recovered</b>
Total Volume Spilled (Verify this matches the table in between 2.h and 3 in CIWQS)		
Information that was relied on to estimate the volume that reached surface waters (if applicable):		

DATE/TIME DETERMINATIONS		
	DATE	TIME
Start of Sewer Spill (Use Start Time Determination/Notes Below)		
Agency Notified		
Collection System Operator Dispatched		
Collection System Operator Arrived		
End of Sewer Spill		
End of Spill Response		

**Start Time Determination/Notes**

Don't forget to take photos! 

Witness 1: \_\_\_\_\_  
Name Contact Information

Where did you see sewage spill from?

Manhole  Inside Building  Vent/Clean Out  Catch Basin  Wet Well/Lift Station  Other: \_\_\_\_\_

When did you notice the sewage spilling? \_\_\_\_\_ AM / PM Date \_\_\_\_ / \_\_\_\_ / \_\_\_\_

When did you last observe **NO Spill** occurring? \_\_\_\_\_ AM / PM Date \_\_\_\_ / \_\_\_\_ / \_\_\_\_

Comments: \_\_\_\_\_  
 \_\_\_\_\_

Witness 2: \_\_\_\_\_  
Name Contact Information

Where did you see sewage spill from?

Manhole  Inside Building  Vent/Clean Out  Catch Basin  Wet Well/Lift Station  Other: \_\_\_\_\_

When did you notice the sewage spilling? \_\_\_\_\_ AM / PM Date \_\_\_\_ / \_\_\_\_ / \_\_\_\_

When did you last observe **NO Spill** occurring? \_\_\_\_\_ AM / PM Date \_\_\_\_ / \_\_\_\_ / \_\_\_\_

Comments: \_\_\_\_\_  
 \_\_\_\_\_

Witness 3: \_\_\_\_\_  
Name Contact Information

Where did you see sewage spill from?

Manhole  Inside Building  Vent/Clean Out  Catch Basin  Wet Well/Lift Station  Other: \_\_\_\_\_

When did you notice the sewage spilling? \_\_\_\_\_ AM / PM Date \_\_\_\_ / \_\_\_\_ / \_\_\_\_

When did you last observe **NO Spill** occurring? \_\_\_\_\_ AM / PM Date \_\_\_\_ / \_\_\_\_ / \_\_\_\_

Comments: \_\_\_\_\_  
 \_\_\_\_\_

*Start Time Determination/Notes continued*

If the volume of the spill and rate of flow are known, divide volume by rate of flow to get duration of spill event.

\_\_\_\_\_ Gallons ÷ \_\_\_\_\_ GPM = Minutes (Sewer Spill Duration).

Subtract the Duration from the Spill End Date/Time to establish the Spill Start Date/Time.

Other Efforts to Determine Start Time: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Other Comments Regarding Spill Start Time: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Estimated Spill Start Time: \_\_\_\_\_ AM / PM    Date: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

Spill End Time: \_\_\_\_\_ AM / PM    Date: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

<b>SEWER SPILL FIELD REPORT</b>		
Spill location description:		
Number of appearance points:		
Spill appearance points: (Check all that apply)		
<input type="checkbox"/> Backflow Prevention Device	<input type="checkbox"/> Force Main	<input type="checkbox"/> Gravity Mainline
<input type="checkbox"/> Inside Building/Structure	<input type="checkbox"/> Lateral Clean Out (Private/Public)	
<input type="checkbox"/> Lower Lateral (Private/Public)	<input type="checkbox"/> Manhole	<input type="checkbox"/> Pump Station
<input type="checkbox"/> Upper Lateral (Private/Public)		
<input type="checkbox"/> Other Sewer System Structure:		
Spill appearance point explanation. (Enter information here if "Other" or multiple appearance points were selected):		
Description of terrain surrounding the point of discharge/spill, including the direction of the flow:		
Final spill destination: (Check all that apply)		
<input type="checkbox"/> Building/Structure	<input type="checkbox"/> Combined Storm Drain	<input type="checkbox"/> Drainage Channel
<input type="checkbox"/> Other (Specify Below)	<input type="checkbox"/> Paved Surface	<input type="checkbox"/> Separate Storm Drain
<input type="checkbox"/> Street/Curb and Gutter	<input type="checkbox"/> Surface Water	<input type="checkbox"/> Unpaved Surface
Explanation of final spill destination (Enter information if "Other" was selected):		



**SEWER SPILL FIELD REPORT**

Spill cause: (Check One)

- Air Relief Valve (ARV)/Blow Off Valve (BOV)/Backwater Valve Failure
- Construction Diversion Failure
- CS Maintenance Caused Spill/Damage
- Damage by Others Not Related to CS Construction/Maintenance (Specify Below)
- Debris from Construction
- Debris from Lateral
- Debris-General
- Debris-Rags
- Debris Wipes/Non-Dispersible
- Flow Exceeded Capacity (Separate CS Only)
- Grease Deposition (FOG)
- Inappropriate Discharge to CS
- Natural Disaster
- Operator Error
- Other (Specify Below)
- Pipe Structural Problem/Failure
- Pipe Structural Problem/Failure – Installation
- Pump Station Failure – Controls
- Pump Station Failure – Mechanical
- Pump Station Failure – Power
- Rainfall Exceeded Design, I and I (Separate CS Only)
- Root Intrusion
- Siphon Failure
- Surcharged Pipe (Combined CS Only)
- Vandalism

Spill cause explanation: (Required if Spill Cause is “Other”)

<b>SEWER SPILL FIELD REPORT</b>		
Where did failure occur? <input type="checkbox"/> Air Relief Valve (ARV)/Blow Off Valve (BOV) Failure <input type="checkbox"/> Force Main <input type="checkbox"/> Gravity Mainline <input type="checkbox"/> Lower Lateral - Public <input type="checkbox"/> Manhole <input type="checkbox"/> Other (Specify Below) <input type="checkbox"/> Pump Station Failure – Controls <input type="checkbox"/> Pump Station Failure – Mechanical <input type="checkbox"/> Pump Station Failure – Power <input type="checkbox"/> Siphon <input type="checkbox"/> Upper Lateral - Private		
Explanation of where failure occurred: (Required if Where Failure Occurred is “Other”)		
Was spill associated with a storm event?	YES	NO
Diameter of sewer pipe at the point of blockage or failure:	inches	
Material of sewer pipe at the point of blockage or failure:		
Estimated age of sewer asset at the point of blockage or failure (if applicable):	years	
Spill Response Activities. (Check all that apply) <input type="checkbox"/> Cleaned-Up <input type="checkbox"/> Mitigated Effects of Spill <input type="checkbox"/> Contained All or Portion of Spill <input type="checkbox"/> Other (Specify Below) <input type="checkbox"/> Restored Flow <input type="checkbox"/> Returned All Spoil to Sanitary Sewer System <input type="checkbox"/> Property Owner Notified <input type="checkbox"/> Other Enforcement Agency Notified		
Explanation of spill response activities: (Required if spill response activities is “Other”):		

<b>SEWER SPILL FIELD REPORT</b>		
Spill corrective action taken: (Check all that apply) <ul style="list-style-type: none"> <li><input type="checkbox"/> Add location to, or increase frequency check, in Preventive Maintenance Program</li> <li><input type="checkbox"/> Adjusted Schedule/Method of Preventive Maintenance</li> <li><input type="checkbox"/> Enforcement Action Against FOG Source</li> <li><input type="checkbox"/> Inspected Sewer Using CCTV to Determine Cause</li> <li><input type="checkbox"/> Other (Specify Below)</li> <li><input type="checkbox"/> Plan Rehabilitation or Replacement of Sewer</li> <li><input type="checkbox"/> Repaired Facilities or Replaced Defect</li> </ul>		
Explanation of corrective action taken: (Required if spill corrective action is "Other")		
Is there an ongoing investigation?	YES	NO
Health warnings posted?	YES	NO
Did spill result in beach closure?	YES	NO
Name of Impacted Beach(es): (Enter N/A if none)		
Name of impacted surface waters:		
Information relied on to determine whether any portion of the spill reached a surface water:		

**SEWER SPILL FIELD REPORT**

Water quality samples analyzed for: (Check all that apply)

- Dissolved Oxygen
- Other Chemical Indicators(s) – Specify Below
- Biological Indicator(s) – Specify Below
- No Water Quality Samples Taken
- Not Applicable to the Spill
- Other (Specify Below)

Explanation of water quality samples analyzed for: (Required if water quality samples analyzed for is "Other chemical indicator(s)", "Biological indicator(s)", or "Other")

Water quality samples analyzed for: (Check all that apply)

- Dissolved Oxygen
- Other Chemical Indicators(s) – Specify Below
- Biological Indicator(s) – Specify Below
- No Water Quality Samples Taken
- Not Applicable to the Spill
- Other (Specify Below)

Explanation of water quality sample results reported to: (Required if water quality sample results reported to is "Other")

Method and explanation of volume estimation methods used: (Check all that apply)

- Eyeball Estimate     Measured Volume     Duration and Flow Rate
- Counting Upstream Connections
- Other (Explain):

INSERT TAB:  
Volume Estimation

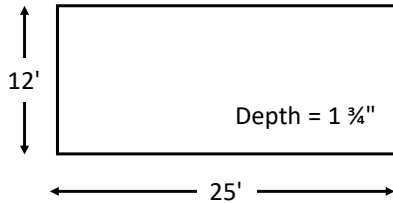
**Miscellaneous Computations & Examples**

		Convert Inches to Feet	
		Inches	Feet
To convert inches to feet (NOTE: for the purposes of this worksheet, the unit of measurement will be in feet for formula examples)	Divide the inches by 12 or use the chart on the right.  <b>Example 1:</b> $27" \div 12 = 2.25'$  <b>Example 2:</b> $1\frac{3}{4}" = ?'$  $1" (0.08') + \frac{3}{4}" (0.06') = 0.14'$	1/8"	0.01'
		1/4"	0.02'
		3/8"	0.03'
		1/2"	0.04'
		5/8"	0.05'
		3/4"	0.06'
		7/8"	0.07'
		1"	0.08'
		2"	0.17'
		3"	0.25'
		4"	0.33'
		5"	0.42'
6"	0.50'		
7"	0.58'		
8"	0.67'		
9"	0.75'		
10"	0.83'		
11"	0.92'		
12"	1.00'		
Volume of one cubic foot	7.48 gallons of liquid		
<b>Area:</b> Two-dimensional measurement represented in square feet (SQ/FT or ft <sup>2</sup> )	Square/rectangle: Area = Length x Width  Circle: Area = $\pi \times r^2$ (where $\pi \approx 3.14$ and $r = \text{radius} = \frac{1}{2} \text{ diameter}$ )  Triangle: Area = $\frac{1}{2} (\text{Base} \times \text{Height})$		
<b>Volume:</b> Three-dimensional measurement represented in cubic feet (CU/FT or ft <sup>3</sup> )	Rectangle/square footprint: Volume = Length x Width x Depth  Circle footprint (cylinder): Volume = $\pi \times r^2 \times \text{Depth}$ (where $\pi \approx 3.14$ and $r = \text{radius} = \frac{1}{2} \text{ diameter}$ )  Triangle footprint: Volume = $\frac{1}{2} (\text{Base} \times \text{Height}) \times \text{Depth}$		
<b>Depth:</b> Wet Stain on Concrete or asphalt surface	If the depth is not measurable because it is only a wet stain, use the following estimated depths: Depth of a wet stain on concrete surface: 0.0026' (1/32") Depth of a wet stain on asphalt surface: 0.0013' (1/64")  These were determined to be a reasonable depth to use on the respective surfaces through a process of trial and error. One gallon of water was poured onto both asphalt and concrete surfaces. Once the area was determined as accurately as possible, different depths were used to determine the volume of the wetted footprint until the formula produced a result that (closely) matched the one gallon spilled. This process was repeated several times.		
<b>Depth:</b> Contained or "Ponded" sewage	Measure actual depth of standing sewage whenever possible. When depth varies, measure several representative sample points and determine the average. Use that number in your formula to determine volume.		

**Miscellaneous Computations & Examples (continued)**

**Area/Volume of a Rectangle or Square**

Formula: Length x Width x Depth = Volume in **cubic feet**



$$\frac{25'}{\text{Length}} \times \frac{12'}{\text{Width}} \times \frac{0.14'}{\text{Depth}} = \underline{\underline{42 \text{ Cubic Feet}}}$$

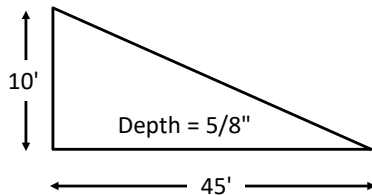
Multiply the volume by 7.48 gallons to determine the volume in **gallons**:

$$\frac{42 \text{ ft}^3}{\text{Volume}} \times \frac{7.48}{\text{gal/ft}^3} = \underline{\underline{314.16 \text{ gallons}}}$$

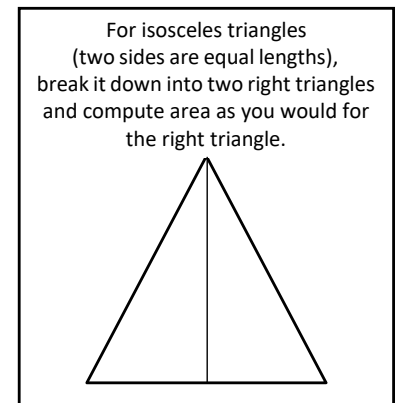
Convert Inches to Feet	
Inches	Feet
1/8"	0.01'
1/4"	0.02'
3/8"	0.03'
1/2"	0.04'
5/8"	0.05'
3/4"	0.06'
7/8"	0.07'
1"	0.08'
2"	0.17'
3"	0.25'
4"	0.33'
5"	0.42'
6"	0.50'
7"	0.58'
8"	0.67'
9"	0.75'
10"	0.83'
11"	0.92'
12"	1.00'

**Area/Volume of a Right Triangle**

Formula: 1/2 x Base x Height x Depth = Volume in **cubic feet**



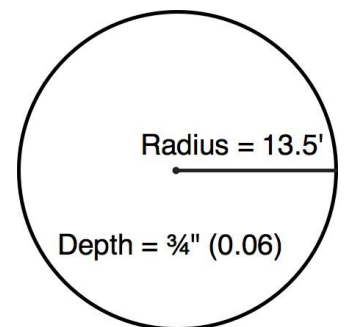
$$0.5 \times \frac{45'}{\text{Base}} \times \frac{10'}{\text{Height}} \times \frac{0.05'}{\text{Depth}} \times \frac{7.48}{\text{gal/ft}^3} = \underline{\underline{84.15 \text{ gallons}}}$$



**Area/Volume of a Circle**

Formula: π x r<sup>2</sup> x Depth = Volume in **cubic feet**

The radius is 1/2 the diameter, which is a straight line passing from side to side through the center of a circle.



$$\frac{13.5'}{\text{Radius}} \times \frac{13.5'}{\text{Radius}} \times \frac{3.14}{\pi} \times \frac{0.06'}{\text{Depth}} \times \frac{7.48}{\text{gal/ft}^3} = \underline{\underline{256.8 \text{ gallons}}}$$

STEP 1: Position yourself so that you have a vantage point where you can see the entire sewer spill.

STEP 2: Imagine one or more buckets or barrels of water tipped over. Depending on the size of the spill, select a bucket or barrel size as a frame of reference. It may be necessary to use more than one bucket/barrel size.

STEP 3: Estimate how many of each size bucket or barrel it would take to make an equivalent spill. Enter those numbers in Column A of the row in the table below that corresponds to the bucket/barrel sizes you are using as a frame of reference.

STEP 4: Multiply the number in Column A by the multiplier in Column B. Enter the result in Column C.

	A	B	C
Size of bucket(s) or barrel(s)	How many of this size?	Multiplier	Estimated Spill Volume (gallons)
1 gallon water jug		x 1 gallons	
5 gallon bucket		x 5 gallons	
32 gallon trash can		x 32 gallons	
55 gallon drum		x 55 gallons	
Other: _____ gallons		x _____ gallons	
<b>Estimated Total Spill Volume:</b>			

STEP 5: Is rainfall a factor in the spill?  Yes  No

If yes, what volume of the observed spill volume do you estimate is rainfall? \_\_\_\_\_ gallons

If yes, describe how you determined the amount of rainfall in the observed spill?

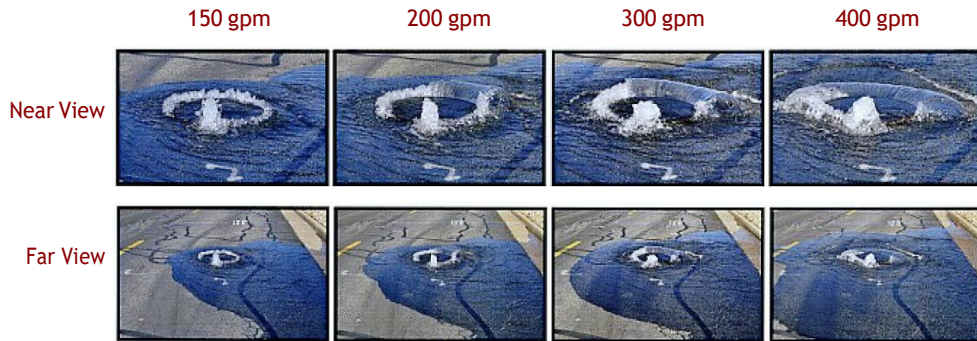
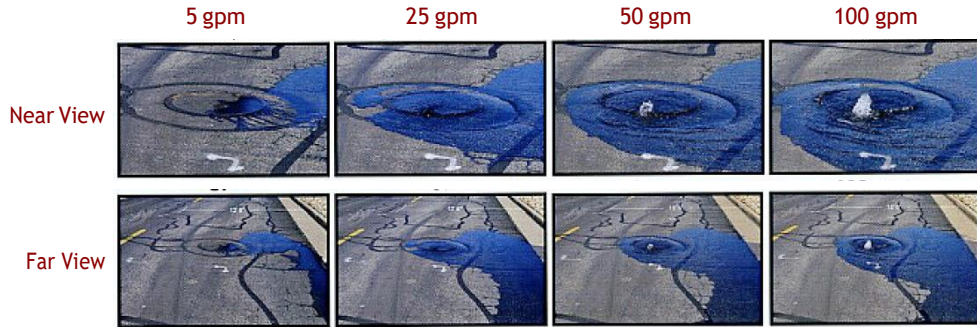
STEP 6: Calculate the estimated spill volume by subtracting the rainfall from the spill volume:

$$\begin{array}{r}
 \underline{\hspace{2cm}} \text{ gallons} \quad - \quad \underline{\hspace{2cm}} \text{ gallons} \quad = \quad \underline{\hspace{2cm}} \text{ gallons} \\
 \text{Estimated Spill Volume} \qquad \qquad \text{Rainfall} \qquad \qquad \qquad \qquad \qquad \qquad \text{Total Estimated Spill Volume}
 \end{array}$$



Compare the sewer spill to reference images below to estimate flow rate of the current spill. **NOTE: If the manhole cover in your picture has vent holes or more than one pry hole, do not use these pictures for comparison.**

Describe which reference photo(s) were used and any additional factors that influenced applying the reference photo data to the actual sewer spill:



*SSCSC Manhole Spill Gauge: CWEA Southern Section Collections Systems Committee Spill Simulation courtesy of Eastern Municipal Water District*

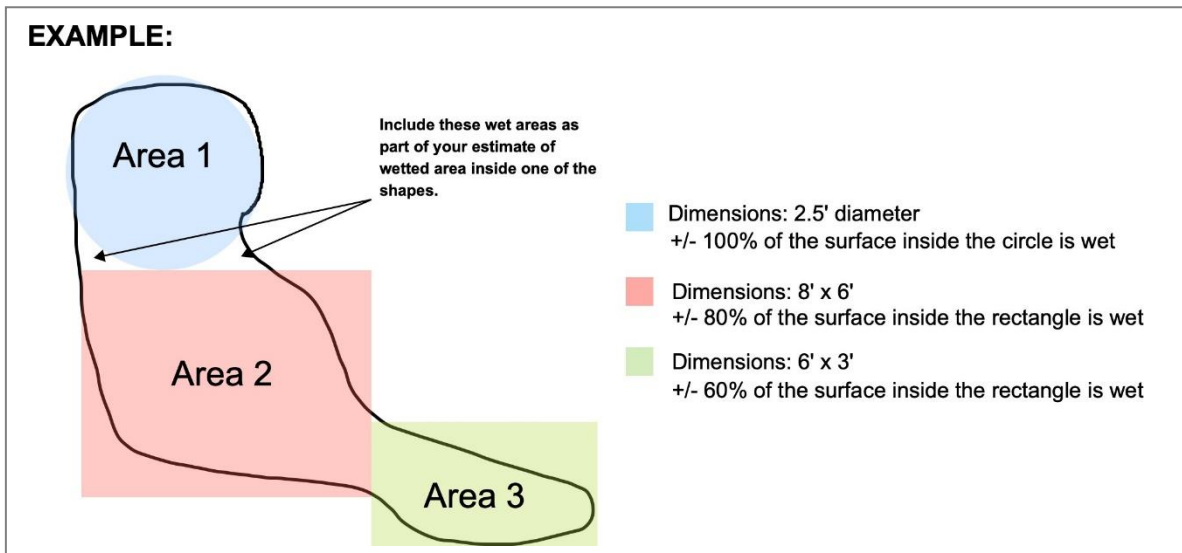
Flow Rate Based on Photo Comparison: \_\_\_\_\_ gallons per minute (gpm)

Start Date and Time	1.
End Date and Time	2.
Spill Event Total Time Elapsed (subtract Line 1 from Line 2. Show in minutes.)	3.
Average Flow Rate GPM (Account for diurnal flow pattern)	4.
Total Volume Estimated Using Duration and Flow Method (Line 3 x Line 4)	5.

Spill Date: \_\_\_\_\_ Location: \_\_\_\_\_

STEP 1: Describe spill area surface: Asphalt Concrete Dirt Landscape Inside Building  
Other: \_\_\_\_\_

STEP 2: Draw/sketch the outline (footprint) of the spill. Then break the footprint down into rectangles and circles. Label each area. See example below.



STEP 3: Calculate the area of the footprint by completing the table below for each area in Step 2. Measure actual depth of standing sewage whenever possible. When depth varies, measure several representative sample points and determine the average. If the depth is not measurable because it is only a wet stain, use the following estimated depths:

- Depth of a wet stain on concrete surface: 0.0026' (1/32")
- Depth of a wet stain on asphalt surface: 0.0013' (1/64")

**Rectangles:**

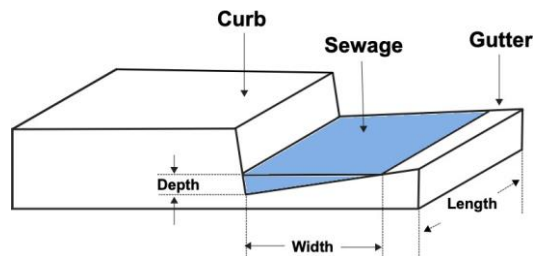
Area # (from labeled drawing)	Length	X	Width	X	% Wet	=	Area	X	Depth	=	Volume
	ft	X	ft	X	%	=	ft <sup>2</sup>	X	ft	=	ft <sup>3</sup>
	ft	X	ft	X	%	=	ft <sup>2</sup>	X	ft	=	ft <sup>3</sup>
	ft	X	ft	X	%	=	ft <sup>2</sup>	X	ft	=	ft <sup>3</sup>

**Circles:**

Area # (from labeled drawing)	π	X	Radius	X	Radius	X	% Wet	=	Area	X	Depth	=	Volume
	3.14	X	ft	X	ft	X	%	=	ft <sup>2</sup>	X	ft	=	ft <sup>3</sup>
	3.14	X	ft	X	ft	X	%	=	ft <sup>2</sup>	X	ft	=	ft <sup>3</sup>
	3.14	X	ft	X	ft	X	%	=	ft <sup>2</sup>	X	ft	=	ft <sup>3</sup>

STEP 4: If part of the spill is in a gutter, use the formula below to calculate the volume:

$$\frac{\text{Length}}{\text{Length}} \times \frac{\text{Depth}}{\text{Depth}} \times \frac{\text{Width}}{\text{Width}} \times 0.5 = \text{Volume} \text{ ft}^3$$



STEP 5: Calculate Total Spill Volume (sum of all of the volume calculations above): \_\_\_\_\_ ft<sup>3</sup>

STEP 6: Convert from cubic feet to gallons by multiplying by 7.48.

$$\text{_____ ft}^3 \text{ spill volume in cubic feet} \times 7.48 \text{ gallons} = \text{_____ gallons Total estimated volume}$$

**Volume Estimation: Upstream Connections Method**

Spill Date: \_\_\_\_\_ Location: \_\_\_\_\_

STEP 1: Determine the number of Equivalent Dwelling Units (EDUs) for this spill: \_\_\_\_\_ EDUs  
 NOTE: A single-family residential home = 1 EDU. For commercial buildings, refer to agency documentation.

STEP 2: This volume estimation method utilizes daily usage data based on flow rate studies of several jurisdictions in California. Column A shows how an average daily usage of 180 gallons per day is distributed during each 6-hour period. Adjust the table as necessary to accurately represent the actual data.

Complete Column E by entering the number of minutes the spill was active during each 6-hour time period. Multiply column D times Column E to calculate the gallons spilled during each time period. Add the numbers in Column F together for the Total Estimated Spill Volume per EDU.

Time Period	Flow Rate Per EDU				Sewer Spill	
	A	B	C	D	E	F
	Gallons per Period	Hours per period	$A \div B =$ Gallons per Hour	$C \div 60 =$ Gallons per Minute	Minutes spill was active during period	$D \times E =$ Gallons spilled per period
6am-noon	72	6	12	0.20		
noon-6pm	36	6	6	0.10		
6pm-midnight	54	6	9	0.15		
midnight-6am	18	6	3	0.05		
<b>Total Estimated Spill Volume per EDU:</b>						

STEP 3: Multiply the Estimated Spill Volume per EDU from Step 2 by the number of EDUs from Step 1.

$$\frac{\text{_____ gallons}}{\text{Volume per EDU}} \times \frac{\text{_____}}{\text{\# of EDUs}} = \frac{\text{_____ gallons}}{\text{Estimated Spill Volume}}$$

STEP 4: Adjust spill volume as necessary considering other factors, such as activity that would cause a fluctuating flow rate (doing laundry, taking showers, etc.). Explain rationale below and indicate adjusted spill estimate (attach a separate page if necessary).

Total Estimated Spill Volume: \_\_\_\_\_ gallons



**INSERT TAB:  
Backup Forms**

**Complete this form only if there is a backup into a residence or business.**

**Instructions to Wastewater Crew:**

1. Take photo of each form before giving it to the customer for documentation.
2. Tear the forms listed below from this Workbook and hand them to customer. *Leave the First Responder Form (F-2) in this Workbook, do not give it to Customer.*
3. Check each item that was provided to the customer.
4. Have customer sign below.

**Forms/Documents:**

- F-3: Declination of Cleaning Services
- F-4: Customer Information Letter
- F-5: Your Responsibilities as a Private Property Owner
- F-6: Claim Form

Forms Provided to:

\_\_\_\_\_

Customer Name

\_\_\_\_\_

Customer Signature

\_\_\_\_\_

Date

Check here if customer declines to sign:

**Formularios / Documentos:**

- F-3: Declinación de los Servicios de Limpieza
- F-4: Carta de Información del Cliente
- F-5: Sus Responsabilidades Como Propietario de Una Propiedad Privada
- F-6: Formulario de Reclamación

Formularios Proporcionados a:

\_\_\_\_\_

Nombre del cliente

\_\_\_\_\_

Firma del cliente

\_\_\_\_\_

Fecha

Marque aquí si el cliente se niega a firmar:

Forms Provided by:

\_\_\_\_\_

Employee Name

\_\_\_\_\_

Initial

\_\_\_\_\_

Date

**Instruction to Principal Water Utility Supervisor**

Send photos, including the photo of the Declination of Cleaning Services,  
and a copy of the First Responder form to:

Senior Claims Adjustor

**Complete this form only if there is a backup into a residence or business.**

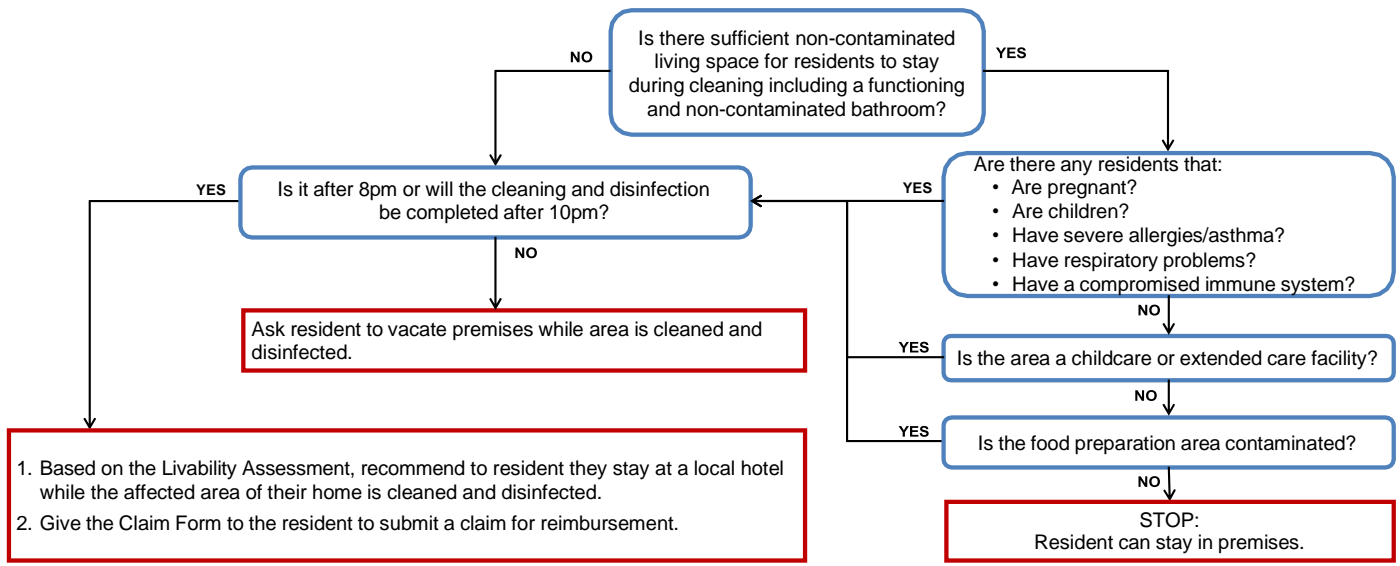
Fill out this form as completely as possible.  
 Ask customer if you may enter the home. If so, take photos of all damaged and undamaged areas.

PERSON COMPLETING THIS FORM:		PHONE:
Name: _____		DATE:
Title: _____		TIME:
TIME STAFF ARRIVED ON-SITE:		
DOES THE CUSTOMER WANT THE CITY TO CALL FOR CLEANING SERVICE? <input type="checkbox"/> Yes <input type="checkbox"/> No If no, give the customer the Cleaning Declination Form and have them sign here: _____ If customer called a cleaning contractor, provide name and contact number:		
RESIDENT NAME: <input type="checkbox"/> Owner <input type="checkbox"/> Renter ADDRESS:  PHONE:	IF RENT, PROPERTY MANAGER(S): OWNER:  ADDRESS:  PHONE:	
# OF PEOPLE LIVING AT RESIDENCE:		
Approximate Age of Home:	# of Bathrooms:	# of Rooms Affected:
Numbers of Photographs or Videos Taken: <input type="checkbox"/> Photographs <input type="checkbox"/> Video <input type="checkbox"/> Customer did not provide or allow photographs	Where are photos/video stored?	
Is nearest upstream manhole visibly higher than the drain/fixture that spilled? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Does property have a Property Line Cleanout or BPD?		<input type="checkbox"/> Cleanout <input type="checkbox"/> BPD <input type="checkbox"/> Neither <input type="checkbox"/> Unknown
If yes, was the Property Line Cleanout/BPD operational at the time of the spill?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
Have there ever been any previous spills at this location?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
Has the resident had any plumbing work done recently?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
<i>If YES, please describe:</i>		

**GO TO Page 2**



**LIVABILITY ASSESSMENT**

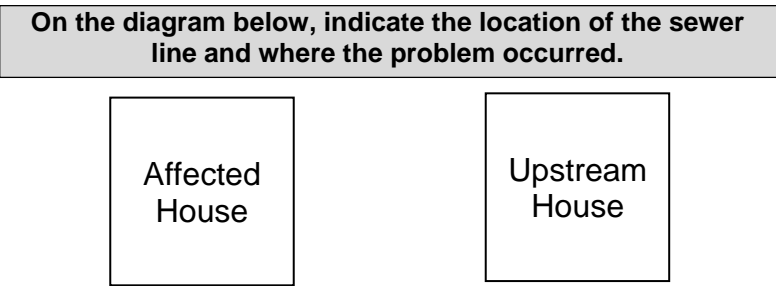


Temporary lodging was offered by the City and either (check one):  Accepted  Rejected

**SANITARY SEWER LINE BLOCKAGE LOCATION**

**PLEASE CHECK THE BOXES THAT DESCRIBE YOUR OBSERVATIONS:**

Customer Cleanout Was:	Agency Owned/Maintained Cleanout was:
<input type="checkbox"/> Non-Existent	<input type="checkbox"/> Non-Existent
<input type="checkbox"/> Full	<input type="checkbox"/> Full
<input type="checkbox"/> Empty	<input type="checkbox"/> Empty



Recommended Follow-Up Action(s):

Did sewage go under buildings?  Yes  No  Unsure

## Declination of Cleaning Services (Backup Only)

Customer Information			
NAME:	ADDRESS:	TELEPHONE:	
<b>ON</b> (date)	<b>AT</b> (time)	<b>Approximately</b> (quantity)	<b>GALLONS OF:</b> <input type="checkbox"/> Sewage <input type="checkbox"/> Grey Water <input type="checkbox"/> Toilet Bowl Water <input type="checkbox"/> Odor <input type="checkbox"/> Other (describe):
<b>Spilled from (or odor emanating from)</b> <input type="checkbox"/> Toilet <input type="checkbox"/> Shower/Tub <input type="checkbox"/> Washer <input type="checkbox"/> Other (describe):		<b>The spill affected the following areas (check one):</b> <input type="checkbox"/> Bathroom <input type="checkbox"/> Bedroom <input type="checkbox"/> Hallway <input type="checkbox"/> Garage <input type="checkbox"/> Kitchen <input type="checkbox"/> Crawlspace <input type="checkbox"/> Other (specify):	
<b>The spill affected the following flooring:</b> <input type="checkbox"/> Tile <input type="checkbox"/> Wood Flooring <input type="checkbox"/> Linoleum <input type="checkbox"/> Carpet <input type="checkbox"/> Other (specify):		<b>and/or additional materials:</b> <input type="checkbox"/> Area Rugs <input type="checkbox"/> Towels <input type="checkbox"/> Clothing <input type="checkbox"/> Other (specify):	
<b>This Form Completed By:</b> Name: _____		<b>Date:</b> _____	
<b>(Write legibly)</b> Title: _____		<b>Time:</b> _____	

**CUSTOMER, please read the following and sign below.** I/We acknowledge that the City of San Diego (City) has offered to provide professional cleaning and decontamination services to remediate the sewage backup and/or spill described above and that we declined the offer. We further understand and acknowledge that because we have declined, any necessary remediation activities will be conducted without City assistance, and that the City will not accept responsibility for work performed by persons other than those engaged by the City. The City will also not accept responsibility for any charges related to this incident that are not usual and customary.

**CLIENTE, lea lo siguiente y firme a continuación.** Reconozco / reconocemos que la Ciudad de San Diego (Ciudad) se ha ofrecido a proporcionar servicios profesionales de limpieza y descontaminación para remediar la acumulación de aguas residuales y / o el desbordamiento descrito anteriormente y que rechazamos la oferta. Además, entendemos y reconocemos que debido a que nos hemos negado, cualquier actividad de remediación necesaria se llevará a cabo sin la ayuda de la Ciudad, y que la Ciudad no aceptará responsabilidad por el trabajo realizado por personas que no sean contratadas por la Ciudad. La Ciudad tampoco aceptará responsabilidad por ningún cargo relacionado con este incidente que no sea habitual y habitual.

<b>Customer Signature Firma del cliente*:</b>	<b>Date:</b>	
The information above was explained to the customer by the following employee:	<b>Name:</b>	<b>Title:</b>
	<b>Signature:</b>	<b>Date:</b>

*\*Note to responders: if customer declines to sign this form, then have a co-worker sign here as a witness:*

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Recommendations to customer to clean up the spill:**

- Keep pets and children out of the affected area
- Turn off heating/air conditioning systems
- Wear rubber boots, rubber gloves, and goggles during cleanup of the affected area.
- Remove and discard items that cannot be washed and disinfected (such as: mattresses, rugs, cosmetics, baby toys, etc.)
- Remove and discard drywall and insulation that has been contaminated with sewage or flood waters.
- Thoroughly clean all hard surfaces (such as flooring, concrete, molding, wood and metal furniture, countertops, appliances, sinks and other plumbing fixtures) with hot water and laundry or dish detergent.
- Help the drying process with fans, air conditioning units, and dehumidifiers.
- After completing cleanup, wash your hands with soap and water. Use water that has been boiled for 1 minute (allow water to cool before washing your hands.) OR use water that has been disinfected (solution of 1/8 teaspoon of household bleach per 1 gallon of water). Let it stand for 30 min. If water is cloudy, use ¼ teaspoon of household bleach per 1 gallon of water.
- Wash all clothes worn during the cleanup in hot water and detergent (wash separately from uncontaminated clothes).
- Wash clothes contaminated with flood or sewage water in hot water and detergent. Use a laundromat for washing large quantities of clothes and linens until your onsite wastewater system has been professionally inspected and services.
- Seek immediate attention if you become injured or ill.

Dear Property Owner:

We recognize that sewer backup incidents can be stressful and require immediate response while all facts concerning how an incident occurred are still unknown. Rest assured that we do all we can to prevent this type of event from occurring in the first place. Nevertheless, occasionally tree roots or other debris in the sewer lines causes a backup into homes immediately upstream of the blockage. At this time the City is investigating the cause of this incident.

If the City is found to be responsible for the incident, we are committed to cleaning and restoring your property, and to protecting the health of those affected during the remediation process.

The cleaning contractor provided by the City has been selected because of their adherence to established protocols that are designed to assure to all parties thorough, cost-effective and expeditious cleaning services. You also have the right to select your own cleaning contractor, but the City does not guarantee payment of fees/expenses incurred and reserves the right to dispute fees/expenses deemed not usual and customary.

To discuss this matter, contact the Principal Water Utility Supervisor. To submit a claim for damages, complete the Claim Form and contact the Senior Claims Adjustor.

Sincerely,  
The City of San Diego

---

**What you need to do now:**

---

- Minimize the impact of the loss by responding promptly to the situation.
- Do not attempt to clean the area yourself, let the cleaning and restoration company handle this.
- Keep people and pets away from the affected area(s) until cleanup has been completed.
- Turn off any appliances that use water.
- Turn off heating/air conditioning systems.
- Do not remove items from the area – the cleaning and restoration company will handle this.
- If you had recent plumbing work done, contact your plumber or contractor and inform them of this incident.

Estimado Propietario:

Reconocemos que los incidentes de respaldo de alcantarillado pueden ser estresantes y requieren una respuesta inmediata, mientras que aún se desconocen todos los hechos relacionados con cómo ocurrió un incidente. Tenga la seguridad de que hacemos todo lo posible para evitar que este tipo de evento ocurra en primer lugar. Sin embargo, ocasionalmente las raíces de los árboles u otros escombros en las líneas de alcantarillado provocan un retroceso en las casas inmediatamente aguas arriba del bloqueo. En este momento, la Ciudad está investigando la causa de este incidente.

Si se determina que la Ciudad es responsable del incidente, nos comprometemos a limpiar y restaurar su propiedad y a proteger la salud de los afectados durante el proceso de remediación.

El contratista de limpieza proporcionado por la Ciudad ha sido seleccionado debido a su adherencia a los protocolos establecidos que están diseñados para asegurar a todas las partes servicios de limpieza completos, rentables y rápidos. También tiene derecho a seleccionar su propio contratista de limpieza, pero la Ciudad no garantiza el pago de las tarifas / gastos incurridos y se reserva el derecho de disputar las tarifas / gastos que se consideren no habituales y habituales.

Para discutir este asunto, comuníquese con el Supervisor Principal de Servicios de Agua. Para presentar un reclamo por daños, complete el formulario de reclamo y comuníquese con el Ajustador Senior de Reclamaciones.

Atentamente,

La Ciudad de San Diego

---

#### **Qué debes hacer ahora:**

---

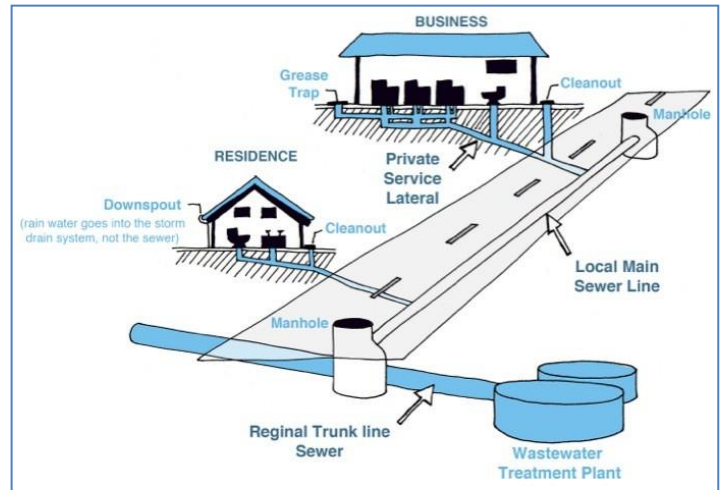
- Minimice el impacto de la pérdida respondiendo rápidamente a la situación.
- No intente limpiar el área usted mismo, deje que la empresa de limpieza y restauración se encargue de ello.
- Mantenga a las personas y las mascotas alejadas de las áreas afectadas hasta que se haya completado la limpieza.
- Apague cualquier aparato que use agua.
- Apague los sistemas de calefacción / aire acondicionado.
- No retire artículos del área; la empresa de limpieza y restauración se encargará de esto.
- Si le hicieron trabajos de plomería recientemente, comuníquese con su plomero o contratista e infórmeles de este incidente.

**How a Sewer System Works**

A property owner's sewer pipes are called **service laterals** and are connected to larger local main and regional trunk lines. Service laterals run from the connection at the home to the connection with the public sewer. These laterals are the responsibility of the property owner and must be maintained by the property owner.

**How do sewage spills happen?**

Sewage spills occur when the wastewater in underground pipes spills through a manhole, cleanout, or broken pipe. Most spills are relatively small and can be stopped and cleaned up quickly, but left unattended they can cause health hazards, damage to homes and businesses, and threaten the environment, local waterways, and beaches. Common causes of sewage spills include grease build-up, tree roots, broken/cracked pipes, missing or broken cleanout caps, undersized sewers, and groundwater/rainwater entering the sewer system through pipe defects and illegal connections.



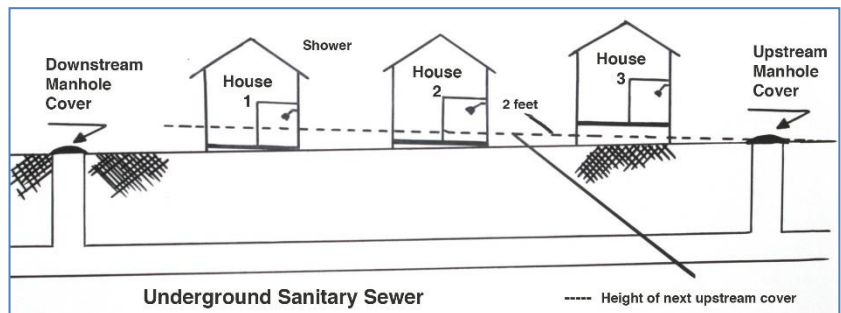
**Prevent most sewage backups with a Backflow Prevention Device**

This type of device can help prevent sewage backups into homes and businesses. If you don't already have a Backflow Prevention Device, contact a professional plumber or contractor to install one as soon as possible.

**Is my home required to have a backflow prevention device?**

Section 710.1 of the Uniform Plumbing Code (U.P.C.) states: *“Drainage piping serving fixtures which have flood level rims located below the elevation of the next upstream manhole cover or private sewer serving such drainage piping **shall** be protected from backflow of sewage by installing an approved type of backwater valve.”* The intent of Section 710.1 is to protect the building interior from mainline sewer spills or surcharges.

Additionally, U.P.C. 710.6 states: *“Backwater valves **shall** be located where they will be accessible for inspection and repair at all times and, unless continuously exposed, shall be enclosed in a masonry pit fitted with an adequately sized removable cover.”*



**Spill cleanup inside the home:**

For large clean ups, a professional cleaning firm should be contacted to clean up impacted areas, If you hire a contractor, it is recommended to get estimates from more than one company. Sometimes, homeowner’s insurance will pay for the necessary cleaning due to sewer backups. Not all policies have this coverage, so check with your agent.

If you decide to clean up a small spill inside your home, protect yourself from contamination by observing the following safety measures. Those persons whose resistance to infection is compromised should not attempt this type of clean up.

**Seek immediate attention if you become injured or ill during or after the cleanup process.**

**Other Tips:**

- Keep children and pets out of the affected area.
- Turn off heating/air conditioning systems
- Wear rubber boots, rubber gloves, and goggles during cleanup.
- Discard items that cannot be washed and disinfected (such as: mattresses, rugs, cosmetics, toys, etc.)
- Remove and discard drywall and insulation that has been contaminated with sewage or flood waters.
- Thoroughly clean all hard surfaces (such as flooring, concrete, molding, wood and metal furniture, countertops, appliances, sinks and other plumbing fixtures) with hot water and laundry or dish detergent.
- Help the drying process with fans, air conditioning units, and dehumidifiers.
- After completing cleanup, wash your hands with soap and water. Use water that has been boiled for 1 minute (allow the water to cool before washing your hands) OR use water that has been disinfected (solution of 1/8 teaspoon of household bleach per 1 gallon of water). Let it stand for 30 min. If water is cloudy, use ¼ teaspoon of household bleach per 1 gallon of water.
- Wash clothes worn during cleanup in hot water & detergent (wash apart from uncontaminated clothes).
- Wash clothes contaminated with sewage in hot water and detergent. Consider using a Laundromat until your onsite wastewater system has been professionally inspected and serviced.

**Spill cleanup outside the home:**

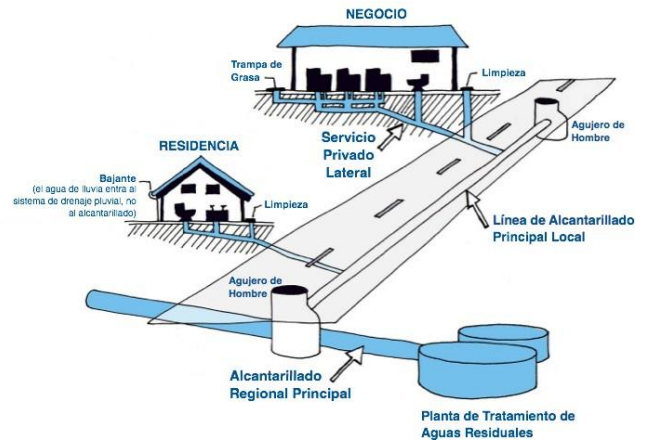
- Keep children and pets out of the affected area until cleanup has been completed.
- Wear rubber boots, rubber gloves, and goggles during cleanup of affected area.
- Clean up sewage solids (fecal material) and place in properly functioning toilet or double bag and place in garbage container.
- On hard surfaces areas such as asphalt or concrete, it is safe to use a 2% bleach solution, or ½ cup of bleach to 5 gallons of water, but don’t allow it to reach a storm drain as the bleach can harm the environment.
- After cleanup, wash hands with soap and water. Use water that has been boiled for 1 minute (allow to cool before washing your hands) OR use water that has been disinfected (solution of 1/8 teaspoon of household bleach per 1 gallon of water). Let it stand for 30 min. If water is cloudy, use ¼ teaspoon of household bleach per 1 gallon of water.
- Wash clothes worn during cleanup in hot water and detergent (wash apart from uncontaminated clothes).
- Wash clothes contaminated with sewage in hot water and detergent. Consider using a laundromat until your onsite wastewater system has been professionally inspected and serviced.

**Cómo funciona un sistema de alcantarillado**

Las tuberías de alcantarillado de un propietario se denominan servicios laterales y están conectadas a líneas troncales principales y regionales locales más grandes. Los servicios laterales se ejecutan desde la conexión en el hogar hasta la conexión con el sistema de alcantarillado del Distrito. Estos laterales son responsabilidad del propietario y deben ser mantenidos por el propietario.

**¿Cómo ocurren los derrames de aguas residuales?**

Los derrames de aguas residuales ocurren cuando las aguas residuales en las tuberías subterráneas se desbordan a través de un pozo de acceso, limpieza o tubería rota. La mayoría de los derrames son relativamente pequeños y se pueden detener y limpiar rápidamente, pero si se los deja desatendidos, pueden causar riesgos para la salud, dañar viviendas y negocios y amenazar el medio ambiente, las vías fluviales locales y las playas. Las causas comunes de derrames de aguas residuales incluyen acumulación de grasa, raíces de árboles, tuberías rotas / agrietadas, tapas de limpieza faltantes o rotas, alcantarillas de tamaño insuficiente y aguas subterráneas / pluviales que ingresan al sistema de alcantarillado a través de defectos en las tuberías y conexiones ilegales.



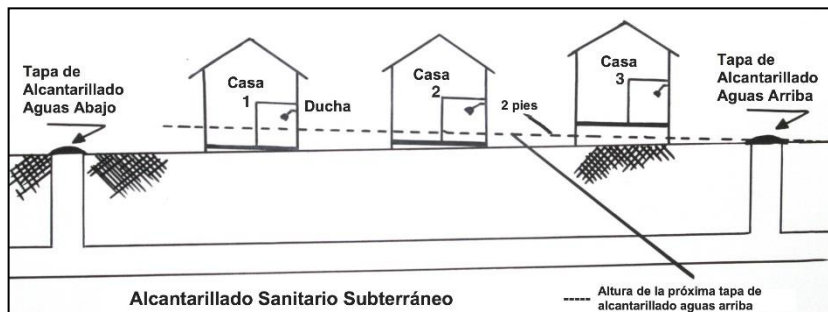
**Prevenga la mayoría de las copias de seguridad de aguas residuales con un dispositivo de prevención de reflujo**

Este tipo de dispositivo puede ayudar a prevenir las copias de seguridad de aguas residuales en hogares y empresas. Si aún no tiene un dispositivo de prevención de reflujo, comuníquese con un plomero o contratista profesional para instalar uno lo antes posible.

**¿Se requiere que mi hogar tenga un dispositivo de prevención de reflujo?**

La Sección 710.1 del Código Uniforme de Plomería (UPC) establece: "Los accesorios de tuberías de drenaje que tienen llantas de nivel de inundación ubicadas debajo de la elevación de la siguiente boca de alcantarilla corriente arriba o la alcantarilla privada que atiende dicha tubería de drenaje deben protegerse contra el reflujo de aguas residuales al instalar un tipo de válvula de evacuación". La intención de la Sección 710.1 es proteger el interior del edificio de los desagües o sobrecargas de alcantarillado de la línea principal.

Adicionalmente, U.P.C. 710.6 dice: Las válvulas de aguas residuales deben ubicarse donde puedan ser inspeccionadas y reparadas en todo momento y, a menos que estén continuamente expuestas, deben estar encerradas en un pozo de mampostería equipado con una cubierta removible del tamaño adecuado.



### Limpieza de derrames dentro de la casa:

Para grandes limpiezas, se debe contactar a una empresa de limpieza profesional para limpiar las áreas afectadas. Si contrata a un contratista, se recomienda obtener estimaciones de más de una compañía. A veces, el seguro del propietario de vivienda pagará la limpieza necesaria debido a las reservas de alcantarillado. No todas las pólizas tienen esta cobertura, así que consulte con su agente.

Si decide limpiar un pequeño derrame dentro de su casa, protéjase de la contaminación observando las siguientes medidas de seguridad. Aquellas personas cuya resistencia a la infección esté comprometida no deben intentar este tipo de limpieza.

### Otros consejos:

- Mantenga a los niños y mascotas fuera del área afectada.
- Apague los sistemas de calefacción / aire acondicionado
- Use botas de goma, guantes de goma y gafas durante la limpieza.
- Deseche los artículos que no se puedan lavar y desinfectar (como: colchones, alfombras, cosméticos, juguetes, etc.)
- Retire y deseche los paneles de yeso y el aislamiento contaminado con aguas residuales o aguas de inundación.
- Limpie a fondo todas las superficies duras (como pisos, concreto, molduras, muebles de madera y metal, mostradores, electrodomésticos, fregaderos y otros accesorios de plomería) con agua caliente y ropa o detergente para platos.
- Ayude al proceso de secado con ventiladores, unidades de aire acondicionado y deshumidificadores.
- Después de completar la limpieza, lávese las manos con agua y jabón. Use agua que haya sido hervida por 1 minuto (deje que el agua se enfríe antes de lavarse las manos) O use agua que haya sido desinfectada (solución de 1/8 cucharadita de lejía doméstica por 1 galón de agua). Dejar reposar durante 30 min. Si el agua está turbia, use ¼ cucharadita de lejía de uso doméstico por 1 galón de agua.
- Lave la ropa usada durante la limpieza con agua caliente y detergente (lave aparte de la ropa no contaminada).
- Lavar la ropa contaminada con aguas residuales en agua caliente y detergente. Considere usar una lavandería hasta que su sistema de aguas residuales en el sitio haya sido inspeccionado y reparado profesionalmente.

**Busque atención inmediata si se lesiona o se enferma durante o después del proceso de limpieza.**

### Limpieza de derrames fuera de la casa:

- Mantenga a los niños y las mascotas fuera del área afectada hasta que se haya completado la limpieza.
- Use botas de goma, guantes de goma y gafas protectoras durante la limpieza del área afectada.
- Limpie los sólidos de alcantarillado (material fecal) y colóquelos en un inodoro o bolsa doble que funcione correctamente y colóquelos en un contenedor de basura.
- En áreas de superficies duras como el asfalto o el concreto, es seguro usar una solución de lejía al 2%, o ½ taza de lejía a 5 galones de agua, pero no permita que llegue a un drenaje de tormenta ya que la lejía puede dañar la ambiente.
- Después de la limpieza, lávese las manos con agua y jabón. Use agua que haya sido hervida por 1 minuto (deje enfriar antes de lavarse las manos) O use agua que haya sido desinfectada (solución de 1/8 cucharadita de cloro por 1 galón de agua). Dejar reposar durante 30 min. Si el agua está turbia, use ¼ cucharadita de lejía de uso doméstico por 1 galón de agua.
- Lave la ropa usada durante la limpieza con agua caliente y detergente (lave aparte de la ropa no contaminada).
- Lavar la ropa contaminada con aguas residuales en agua caliente y detergente. Considere usar una lavandería hasta que su sistema de aguas residuales en el sitio haya sido inspeccionado y reparado profesionalmente.





# CLAIM AGAINST THE CITY OF SAN DIEGO

Present claim by personal delivery or mail to the **City of San Diego, Risk Management Department, 1200 Third Avenue, Suite 1000, San Diego, CA 92101** or via email to [RiskManagement@sandiego.gov](mailto:RiskManagement@sandiego.gov). Including the claimant's email address on the returned claim form is highly recommended. Claims for death, injury to person or personal property must be filed no later than six (6) months after the occurrence (Gov. Code Section 911.2). All other claims must be filed within one (1) year of the occurrence.

### Time Stamp

\* = **Required** (Gov. Code Section 910)

Received Via     Email     US Mail     Over the Counter     Inter-Office Mail

**A.**

Claimant Name* (First, Middle, Last)		Claimant Date of Birth		
		Mo	Day	Year
Claimant Address*		Claimant Phone Number		
City*	State*	Zip*	Claimant Social Security Number	

**B.**

Send Official Notices and Correspondence To: \* Phone Number

---

Address\*

---

City\* State\* Zip\* Email Address

**C.**

Date of Incident*	Day	Year	Time of Incident	DAM <input type="checkbox"/> PM
-------------------	-----	------	------------------	------------------------------------

Location of Incident or Accident (Be Specific)\*

Basis of Claim - State in detail all facts and circumstances of the incident.\*

---

---

State why you believe the City is responsible for the alleged injury, property damage, or loss

---

---

**D.**

Description of Alleged Injury, Property Damage, or Loss\*

---

---

---



# CLAIM AGAINST THE CITY OF SAN DIEGO

**Vehicle Information** - If your claim relates to a motor vehicle or impound, provide the following information and attach proof of insurance and a copy of the current registration.

<b>Year</b>	<b>Make of Vehicle</b>	<b>Model</b>	<b>License Plate No.</b>	<b>Driver's License No.</b>
<b>Insurance Company</b>		<b>Policy Number</b>		<b>Claim Number</b>
<b>Contact Name</b>		<b>Phone Number</b>		<b>Email Address</b>

**Additional Information** - Please provide any additional information that might be helpful in considering your claim, including names of witnesses, treating physicians, hospitals, proof of damages such as invoices, receipts, estimates, a diagram, and photographs.

---



---



---

E.		
<b>Name and Department of City Employee who Allegedly Caused Injury or Loss (If Known)*</b>	<b>City Vehicle Type/Description</b>	<b>License Plate No./Unit No.</b>

F.	
<b>Damages Claimed*</b> - If your claim does not exceed ten thousand dollars (\$10,000), state the basis of your computation of the amount claimed. (Attach supporting medical bills, invoices, repair estimates, etc.)	
a. Amount claimed as of claim date	\$ _____
b. Estimated amount of future costs	\$ _____
<b>Total Amount</b>	\$ _____

If your claim exceeds ten thousand (\$10,000), Government Code 910(f) requires that you indicate whether or not the claim is a "limited civil case." Check one.\*

**Limited** (up to \$25,000)                       **Unlimited** (over \$25,000)

G.
----

**Signature\*** - Claim form **must** be signed by claimant or party filing the claim. (Gov. Code Section 910.2)

**Warning: It is a criminal offense to file a false claim. (California Penal Code § 72).** I have read the matters and statements made in the above claim and I know the same to be true of my own knowledge, except as to those matters stated upon information or belief and as to such matters. I believe the same to be true. I certify under penalty of perjury that the foregoing is true and correct.

\_\_\_\_\_  
**Printed Name of Signatory and Relationship to Claimant**

_____ <b>Date</b>	_____ <b>Signature of Claimant or Person Acting On Behalf of Claimant*</b>
----------------------	---

## Claim Form Instructions

**Disclaimer:** The instructions that follow are to assist you in filling out the attached claim form. These instructions are in no way legal advice. Please be sure that your claim is against the City of San Diego, California. Claims can be filed in person during regular business hours M-F or by mail at 1200 Third Ave., Ste.1000, San Diego, CA 92101. Please allow 45 days to process your claim.

### Section A

- **Claimant Name, Address, and Phone Number** - State the full name, mailing address, and phone number of the person or entity claiming personal injury, damage, or loss, or the party who is filing a claim on behalf of another person or entity, such as an insurance carrier filing a claim as subrogee of their named insured.
- **Date of Birth** - State claimant's date of birth including month, day, and year.
- **Social Security Number** - State the claimant's social security number. Section 111 of the Medicare, Medicaid, and SCHIP Extension Act of 2001 (MMSEA) requires all Responsible Reporting Entities (RREs), including the City of San Diego, to report all claims involving bodily injury or medical treatment. The City is unable to process payments without a Social Security Number or Tax Identification Number. Failure to provide your SSN#, Tax ID# and/or your Medicare Health Insurance Claim Number (HCIN) will delay the processing of your claim and any settlement that may be due.

### Section B

- **Official Notices and Correspondence** - Provide the name, mailing address, and phone number of the person to whom all official notices and other correspondence should be sent, if other than claimant. This official contact person can be the claimant or a representative of the claimant. If this section is completed, all official notices and correspondence will be sent to the person listed.

### Section C

- **Date of Incident** - State the exact month, day, and year of the incident giving rise to your claim.
- **Time of Incident** - State the exact time, including AM or PM, of the incident giving rise to your claim.
- **Location of Incident or Accident** - Include the city, exact street address, block number and/or cross street.
- **Basis of Claim** - State in detail all facts supporting your claim, including all facts and circumstances of the incident.

### Section D

- **Description of Alleged Injury, Property Damage, or Loss** - Provide a detailed description of the alleged injury, damages or loss.
- **Vehicle Information** - For claims relating to property damage to a motor vehicle or injuries arising out of the operation of a motor vehicle, please provide the following: year, make, model and vehicle license plate number of your vehicle or the vehicle you were in, along with the name of the driver, insurance carrier, policy number, the insurance company claim number and their contact information. We also need vehicle information to process vehicle impound claims.
- **Additional Information** - Provide photographs, diagrams, invoices, estimates and/or receipts in support of your allegations. Include name, address, and phone number of witnesses, medical providers, and/or hospitals. You may also attach additional pages as needed.

### Section E

- **Name and Department of City Employee, if known.**

### Section F

- **Damages Claimed** - State the total amount of money you claim in damages. Provide a breakdown of each item of damages and how that amount was computed. You may include future anticipated expenses or losses. Please attach copies of all bills, receipts, and repair estimates. If the claim involves property damage, please provide two repair estimates. The Government Code provides that if the claim is for less than \$10,000, the claimant must state the total amount claimed and the basis of this computation. If the claim exceeds \$10,000, no dollar amount needs to be provided, but the claimant must indicate the applicable court jurisdiction. Limited civil jurisdiction cases are those involving damages under \$25,000; unlimited civil jurisdiction cases are those involving damages of \$25,000 or more.

### Section G

- **Signature of Claimant or Representative** - Please be sure to sign and date the Claim Form. Print the name of signatory and your relationship to claimant. The claim must be signed by the claimant or by an official representative of the claimant.
- To receive a date/time stamped copy of your claim, please submit the original Claim Form and a copy of the completed Claim Form along with a self-addressed stamped envelope.

For additional information, contact the Risk Management Department, Public Liability Division at 619-236-6670.

INSERT TAB:  
Failure Analysis

**OFFICE USE ONLY**

Incident Report #		Prepared By	
<b>Spill/Backup Information</b>			
Cause			
<b>Summary of Historical Spills/Backups/Service Calls/Other Problems</b>			
Date	Cause	Date Last Cleaned	Crew
Records Reviewed By:		Record Review Date:	
<b>Summary of CCTV Information</b>			
CCTV Inspection Date		Tape Name/Number	
CCTV Tape Reviewed By		CCTV Review Date	
Observations			

Go to Side B

<b>Recommendations</b>					
✓	Type	Specific Actions	Who is Responsible?	Completion Deadline	Who Will Verify Completion?
	No Changes or Repairs Required	n/a	n/a	n/a	n/a
	Repair(s)				
	Construction				
	Capital Improvement(s)				
	Change(s) to Maintenance Procedures				
	Change(s) to Spill Response Procedures				
	Training				
	Misc.				
Comments/Notes:					
Reviewed by:			Review Date:		