

CITY OF SOLANA BEACH

SEWER SYSTEM MANAGEMENT PLAN

June 2023

CITY OF SOLANA BEACH SANITATION SYSTEM

SEWER SYSTEM MANAGEMENT PLAN (SSMP)

City of Solana Beach Sanitation System 635 South Highway 101 Solana Beach, California 92075

Pursuant to the provisions of the CALIFORNIA STATE WATER RESOURCES CONTROL BOARD ORDER NO WQ 2022-0103-DWQ STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS WDR FOR SANITARY SEWER SYSTEMS

June 2023: Replaced Attachment 1 with SPILL EMERGENCY RESPONSE PLAN (SERP) per SWRCB ORDER WQ 2022-0103-DWQ

The SERP supersedes prior OVERFLOW EMERGECNY RESPONSE PLAN (OERP) as included in Section 7

June 5, 2023

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ABBREVIATIONS / ACRONYMS

AB	Assembly Bill		
BAT	Best Available Technology		
BMP	Best Management Practice		
CCTV	Closed-Circuit Television		
CFR	Code of Federal Regulations		
CIP	Capital Improvement Program		
City	City of Solana Beach Sanitation System		
CIŴQS	California Integrated Water Quality System		
СМ	Corrective Maintenance		
CMMS	Computerized Maintenance Management System		
CWEA	California Water Environment Association		
ERP	Emergency Response Plan		
FOG	Fats, Oils, and Grease		
GPS	Global Positioning System		
GWDR	General Waste Discharge Requirements also referred to as the		
	Waste Discharge Requirements (WDR)		
1/1	Inflow / Infiltration		
IERP	Integrated Emergency Response Plan		
MRP	Monitoring and Reporting Program		
O&M	Operation and Maintenance		
OES	Office of Emergency Services		
Order	SWRCB Order No. 2006-0003-DWQ adopted May 2, 2006		
Pd	Predictive Maintenance		
PM	Preventative Maintenance		
PMP	Preventative Maintenance Program		
R&R	Rehabilitation and Replacement		
SDCDEH	San Diego County Department of Environmental Health		
RWQCB	Regional Water Quality Control Board		
SOP	Standard Operating Procedure <u>or</u> Standard Maintenance		
	Procedure		
SSO	Sanitary Sewer Overflow and any sewer spill or overflow of sewage		
SSMP	Sewer System Management Plan		
SWRCB	State Water Resources Control Board		
WDR	Waste Discharge Requirements also referred to as the General		
	Waste Discharge Requirements (GWDR)		
WWTP	Wastewater Treatment Plant		

EXECUTIVE SUMMARY

On May 2, 2006 the SWRCB adopted Order Number 2006-0003-DWQ that requires all publicly owned sewage collection systems having more than one mile of pipeline develop, implement and fund a Sewer System Management Plan (SSMP) which establishes the minimum requirements under which a public collection system must be operated and maintained. The purpose of the Order is to prevent SSOs, and to provide a plan and schedule for measures to be implemented to prevent SSOs, as well as measures to effectively clean up and report the spills. Subsequently the San Diego Regional Water Quality Control Board amended the Order with R9WQCB Order 2006-0013 that requires mandatory reporting of private property spills.

The City of Solana Beach operates and maintains its own sanitary collection system. All sewage collected in the City is treated at the San Elijo Water Reclamation Facility, which is operated by the San Elijo Joint Powers Authority. The majority of the system is a gravity system, although there are also three pump stations and three force mains involved in transmitting all the sewage generated in the City to the reclamation facility.

This SSMP reflects the ongoing day-to-day activities of the City of Solana Beach for the management, operation, maintenance and funding of the City's sanitary collection system. As so, this SSMP becomes a living document, subject to constant review and revision as conditions and needs of the collection systems change. This SSMP relies on numerous supporting documents, also subject to change, that form the basis for how the City conducts its collection system operation. The most current version, although it may be subject to update at anytime, is available at the City of Solana Beach or on the City's website at www.cityofsolanabeach.org.

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 or agency** A federal or state agency, municipality, county, City, 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 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.
- 8. Waste Discharge Requirements (WDR) State Water Resources Control Board (SWRCB) Order No 2006-0003-DWQ known as the WASTE DISCHARGE REQUIREMENTS, which was adopted May 2, 2006.

CHAPTER 1 – PROHIBITIONS AND PROVISIONS

This chapter describes the sewage discharge prohibitions and thirteen provisions prescribed in the Order.

1.1 **Prohibitions**

To meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, the discharger is required to comply with the following prohibitions:

- Any SSO that results in a discharge of untreated or partially treated wastewater to waters of the United States is prohibited.
- 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.

1.2 **Provisions**

The discharger must meet the following thirteen 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:

- Interception and rerouting of untreated or partially treated wastewater flows around the wastewater line failure;
- Vacuum truck recovery of sanitary sewer overflows and wash down water;
- Cleanup of debris at the overflow site;
- System modifications to prevent another SSO at the same location;
- Adequate sampling to determine the nature and impact of the release; and
- 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.

CHAPTER 2 – GOALS

This chapter describes the goals of the Sewer System Management Plan (SSMP). The goal of the SSMP is to provide a documented plan that describes all collection system activities and programs employed by an *agency* to ensure proper management of all collection system assets. Implementing an SSMP will ensure proper management, operation, and maintenance of all parts of the sanitary sewer system, ultimately helping to reduce and prevent SSOs, as well as mitigate any SSOs that do occur including meeting all applicable regulatory notification and reporting requirements. Commitment to continual improvement will also ensure that the SSMP is both a living and sustainable document that is continually updated, revised, and tailored towards the City's needs. The City is required to comply with the "State Water Resources Control Board (SWRCB), Order No. 2006-0030 DWQ" (Order) on General Waste Discharge Requirements for publicly owned sewage collection agencies having more than one mile of collection pipelines.

2.1 Purpose

This element describes the City's stated goals of the SSMP and is intended to clarify the City's desired level of service that it is providing to its customers. The purpose of the Order is to prevent sanitary sewer overflows (SSOs). The City is required to prepare and maintain the SSMP to support this purpose

2.2 Goals

The City of Solana Beach's SSMP outlines the City's plan to achieve the goal of properly managing, operating, maintaining the sanitary sewer system to prevent and reduce SSOs and to mitigate any SSOs that may occur. More specifically, the goals of Solana Beach's SSMP are:

- 1. To properly manage, operate and maintain all portions of the wastewater collection system.
- 2. To provide adequate capacity to convey the peak wastewater flows.
- 3. To control Inflow and Infiltration to minimize peak wastewater flows.
- 4. To minimize the frequency of SSOs.
- 5. To mitigate the impacts associated with any SSOs that may occur.
- 6. To meet all applicable regulatory notification and reporting requirements.

As required by the Order, a copy of the SSMP is maintained at the Solana Beach City Hall and on the City's website at: www.cityofsolanabeach.org. The SSMP is available to the public, state and RWQCB upon request (as discussed in, Section D, Provisions, Item 11 of the Order) and is available to sanitary sewer system operating and maintenance personnel at all times.

The City will also comply with the SSO "Monitoring and Reporting Program (MRP) component of Order No. 2006-0030 DWQ" and all future revisions, included by reference in the Order.

2.3 About This Document

The City has prepared this SSMP to ensure compliance with the Order. This SSMP pertains to the management, operation and maintenance of the collection systems. This was done to facilitate document management and to provide a program that is easier to understand for the general public and for City staff. This SSMP document is divided into chapters with each chapter dedicated to a specific element of the WDR. Within each chapter, the compliance efforts of the City are listed. Each chapter contains the requirement taken from the WDR and the plan the City utilizes to comply with that requirement. The Compliance Summary of each chapter summarizes the program or activities the City utilizes for compliance. The Compliance Documents section lists the supporting documents and their location that the City has developed as part of its SSMP.

Roles and Responsibilities (located only in Chapter 3 Organization) contain the title and description of duties for the City staff positions responsible for developing and/or implementing the elements of the SSMP. Actual contact information for the listed job titles is maintained as a separate file available at the City of Solana Beach. This is done to facilitate staff changes and protect staff privacy.

CHAPTER 3 – DESCRIPTION OF ORGANIZATION

This chapter describes each *agency's* organization and chain of communication. The Order requires the following:

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

3.1 Name of Responsible or Authorized Representative

The City Engineer/Public Works Director is the City's authorized representative listed on the Notice of Intent (NOI) and is responsible for the certification of SSO reports.

3.2 Administrative and Maintenance Positions

The Order requires 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. The Roles and Responsibilities section of this chapter outlines the various positions responsible for the development and implementation of the SSMP for the City of Solana Beach. The organizational chart included below lists the titles of the positions responsible for the development and implementation of the SSMP in a hierarchal format. Current names and contact information for all positions is available at the City of Solana Beach.

3.2.1 Compliance Summary

The Organization Chart attached below includes the titles of all responsible officials in hierarchal format. Included is the role that each position is responsible for in the development and implementation of the SSMP. The City's organization is revised as necessary to meet changing conditions. Organizational charts are periodically modified to reflect changes in the organization with updated organizational charts being available at the City of Solana Beach. Names and contact information for all City staff are

available at the City of Solana Beach. A narrative description of each position's involvement in the development and implementation of the SSMP is included in the Roles and Responsibilities section of this chapter.

3.2.2 Compliance Documents

The following lists and organizational charts detailed the filled positions of our organizational structure.

- Updated organizational charts located at the City of Solana Beach.
- Updated listing of staff positions located at the City of Solana Beach.
- Updated staff contact information located at the City of Solana Beach.



3.2.3 Roles and Responsibilities

The roles and responsibilities of each position in the organization chart are listed below.

- The United States Environmental Protection Agency (**USEPA**) is authorized under the Clean Water Act to enforce the Capacity Management, Operations and Maintenance (**CMOM**) requirements on the states. In response, the SWRCB and R9WRCB have adopted various orders. Relevant to this SSMP Development Plan are the **SWRCB Order DWQ 2006-0003** and **R9WQCB Order 2006-0013**.
- The **City Council** is responsible for adopting each article of compliance with orders issued by the State Water Resources Control Board and the Region 9 Water Quality Control Board.
- The **City Manager** is responsible for interdepartmental authorization and coordination delegation of responsibility and general oversight.
- The **City Attorney** is appointed by the City Council and is responsible for legal services for the City.
- The **City Engineering/Public Works Director** is responsible for providing overall direction, delegating authority and facilitating coordination between all facets of the City of Solana Beach Sanitation System.
- The **Principal Civil Engineer** is responsible for managing capital project related to the City's sanitation system, reporting any SSOs and managing the City's FOG program.
- The **Public Works Operations Manager** is responsible for operations and maintenance of the City's sanitation system which includes implementing the emergency response plan and directing mitigation/clean-up efforts. This position also oversees any contractors retained by the City for maintenance and repair support as required including the sewer system maintenance and videoing contract with Affordable Pipeline Services.
- Affordable Pipeline Services (APS) is contracted by the City for closed circuit television (CCTV) video inspection of the municipal sewer system and to clean the City's sanitary sewer and storm drain systems. In addition, APS provides 24 hour emergency response to all SSOs that occur.
- The San Elijo Joint Powers Authority (SEJPA) operates and manages the publically owned treatment works processing waste for the member agencies including the City of Solana Beach. Certain agreements provide for the SEJPA to manage remote facilities on behalf of its member agencies. Under these agreements, SEJPA staff manages all pump stations. Part of managing these pump stations includes keeping current emergency response plans, maintenance schedules, equipment inventories and other duties as may be required.

3.3 Chain of Communication

The Order requires 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.

3.3.1 Compliance Summary

The following flow chart shows the chain of communication for reporting SSOs. This flowchart, along with the reporting guidelines, was developed to manage the reporting process The Reporting Guidelines explains the thresholds for SSO reporting, the agencies that must be notified and the reporting timeframes. The detailed procedures utilized by the City for SSO reporting is in the City of Solana Beach Sewer Overflow Response Plan. This plan is kept updated by the Engineering Department under the direction of the City Engineer/Public Works Director and is executed and signed by the City Engineer/Public Works Director.

3.3.2 Compliance Documents

The following documents and charts describe the City of Solana Beach's SSO reporting.

- SSO Chain of Communications flowchart included in this SSMP.
- SSO Reporting Guidelines included in this SSMP.
- City of Solana Beach Sanitary Sewer Overflow Response Plan included in this SSMP.

3.3.3 Roles and Responsibilities

The City's SSO response is conducted in accordance with the City of Solana Beach's Sewer Overflow Response Plan. The roles and responsibilities of each position in the line of communications flowchart are described below.

City Engineer/Public Works Director	Responsible for providing overall direction, delegating authority and facilitating coordination between all facets of the City of Solana Beach Sanitation System. Also, certifies spill reports to CIWQS online SSO database.
Public Works Operations Manager	Receives call of SSO and dispatches a Crew Chief lead responder to respond to the reported SSO. Also responsible for overseeing the remediation efforts.
Environmental Programs Manager	Under the direction of the Principal Civil Engineer, after the SSO remediation is complete, responsible for completing necessary spill reporting to the CIWQS online database and SDCDEH compliant with the MRP.

Sewer Maintenance Contractor

Responsible for maintenance of the City's sanitation pipeline system and provides on-call response for clean-up of SSOs.

Risk Manager

Coordinates the financial aspects of the clean-up effort when damage occurs to private property.



Notification Type of Spill Agency(s) to Notify Timeframe Report Timeframe Category 1 – all OES (Greater than Immediate Must report on CIWQS discharges of sewage 1000 gallons). but no later within 3 business days. resulting from a failure in than 2 the Enrollee's sanitary Submit final certified RWQCB per staff hours. sewer system that: request. report within **15** A. Greater than 1000 calendar days of the Additionally, gallons; or SDCDEH per staff SSO conclusion. certify to B. Result in a discharge request. RWQCB to a drainage channel that OES and/or surface water; and SDCDEH or C. Discharge to a storm were drainpipe that was notified not fully captured and within 24 returned to the hours. sanitary sewer system. Category 2 – all other RWQCB per staff Immediate Must report and certify discharges of sewage request. on CIWQS within 30 resulting from a failure in days after the end of the Enrollee's sanitary SDCDEH per staff the calendar month in which the SSO sewer system. request. occurred. Private lateral sewage Governing Immediate Private lateral sewage discharges that are city/county. discharges must be caused by blockages or reported to the online other problems within a RWQCB per staff SSO Database based privately owned lateral. upon the SDRWQCB request. order. The Enrollee SDCDEH per staff must identify the request. sewage discharge as occurring and caused by a private laterals, and a responsible party should be identified, if known.

SSO Reporting Guidelines

CHAPTER 4 – LEGAL AUTHORITY

This chapter describes the legal authority to implement the SSMP plans and procedures.

The SSMP must include the legal authority, through sewer use ordinances, service agreements, or other legally binding procedures, 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 *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.

4.1 Compliance Summary

In compliance with state and federal requirements, the City maintains specific provisions within the Solana Beach Municipal Code (SBMC), which govern the sanitary sewer system. The City also enacts ordinances and implements service agreements or other legally binding measures as necessary to operate in accordance with jurisdictional regulatory agencies.

All applicants for sewer service or sewer connections shall be required to accept such conditions of connection and service as may be provided by the City. The construction, installation or repair of sewer service laterals and connections to the sewer system shall be completed to the satisfaction of the City Engineer and in accordance with all existing laws, ordinances, and rules of the city, county of San Diego, and the state of California or any department thereof. The type of sewage discharged into the sewer system shall meet the requirements and restrictions of the San Elijo Joint Powers Authority. The City is a member of the SEJPA and has adopted provisions for governing industrial wastewater discharges per their pretreatment ordinance. These regulations are addressed in Chapter 14.24 of the SBMC. Industrial wastewater permits are co-issued by the City and the SEJPA according to this code and SEJPA regulations. All influent or discharges into the sewer system must meet the requirements and restrictions of the SEJPA. (Ord. 338 § 1, 2005)

Overall governance and management of the municipal wastewater collection system are regulated under Title 14 of the SBMC which establishes procedures and regulations for the use and protection of the City's sanitary sewer system. (Ord. 338 § 1, 2005)

The provisions of SBMC Title 14 and sewer regulation Ordinance 338 entitle the City to enforce measures to prevent illicit discharges into the sewer system, such as pollution,

chemical dumping, unauthorized debris, cut roots, etc.; require that sewers and connections be properly designed and constructed to minimal standards; ensure access for the maintenance, inspection, or repairs for public portions of laterals; limit the discharge of fats, oils, and grease or other debris that may cause blockages; and enforce any violation of sewer regulations.

4.2 Compliance Documents

City ordinances have been codified into Title 14 of the Municipal Code and Title 16 of the Development Code to provide the City with the legal authority to manage, operate, maintain and fund its sanitary sewer system. These Titles and other Ordinances adopted, amend existing ordinances. They may be reviewed at the City of Solana Beach located at 635 South Highway 101, Solana Beach, California 92075 or on the City's website www.cityofsolanabeach.org.

Title 6 – Health and Safety

6.32 – Grease and Waste Discharges

Title 14 – Sanitary Sewer

- 14.01 General Provisions
- 14.04 General Sewer Regulations
- 14.08 Sewer Connection Fees and Sewer Service Charges
- 14.12 Sewer Construction Reimbursement Connection Fee
- 14.16 Sewer Construction Requirements
- 14.20 Cost Recovery for Protective Sewer Services
- 14.24 Industrial Wastewater Pretreatment Ordinance

Title 15 – Buildings and Construction

15.16 – Plumbing Code

CHAPTER 5 – OPERATIONS AND MAINTENANCE

Each *agency* shall properly manage, operate and maintain all parts of the sanitary sewer system owned or operated by the *agency*, and shall ensure that the system operators (including employees, contractors, or other agents) are adequately trained and possess adequate knowledge, skills and abilities.

The SSMP must include those elements listed below that are appropriate and applicable to the *agency'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 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 video 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.

5.1 Mapping

The requirement for this section is to maintain an up-to-date map of the collection system showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and stormwater conveyance facilities.

5.1.1 Compliance Summary

City staff maintains up-to-date maps of sewer facilities. Hard copies of these materials are updated as-needed and are available in the Engineering Department. The GISbased sewer maps and other documents are available online through the City's website. Updated GIS maps are included in all of the City's sewer response vehicles including the vehicles of the sewer maintenance contractor. Since the City is mostly built-out, it is rare that new publically-owned sewer lines are installed in the City. When new publically-owned sewer lines are installed, the City contracts with a consulting firm to update the GIS sewer maps.

5.1.2 Compliance Documents

The documents supporting compliance with the requirements for mapping are as follows:

- Solana Beach Sanitation System GIS mapping located at the City of Solana Beach;
- Solana Beach Storm Water System GIS mapping located at the City of Solana Beach.

5.2 **Preventive Maintenance Program**

The Order requires the City to 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.

5.2.1 Compliance Summary

The Public Services Wastewater Division manages the cleaning and inspection program and responds to and reports all SSOs. The City of Solana Beach operates and maintains approximately 50 miles of sanitary collection system pipelines. To provide cleaning and maintenance for this system the City utilizes a sewer maintenance contractor. To facilitate the cleaning effort, the City collection systems have been divided into four sections of approximately 12 miles of pipe per section. Under this system the City cleans all of the collection system every 12 months. Enhanced Maintenance Areas are cleaned quarterly or more frequently if required.

The City uses a database system (nicknamed BEACH) to track the maintenance of the sewer system. In this database, information related to all routine cleaning and repairs to the pipeline is entered. In addition, the City has an Enhanced Maintenance Area Program is in place for more frequent maintenance of sewers prone to blockage due to FOG or root intrusion. These areas are cleaned quarterly and the information related to the cleaning of these Enhanced Maintenance Areas is also entered into BEACH. In

order to assess the condition of the City's sewer pipeline system, all sewer pipelines are videotaped every three years using closed-circuit television technology. The videos are entered into BEACH and tagged to the specific pipeline section.

Per agreements with the City, the SEJPA maintains the City's facilities including pump stations and the inverted siphon. The City has developed a good working relationship with SEJPA staff to ensure that the documentation for routine preventative operation and maintenance management activities is complete and up to date.

5.2.2 Compliance Documents

Documents which support compliance of this section include the following:

- BEACH database system for tracking sewer system maintenance and repair activity. This includes tracking Enhanced Maintenance Areas and videos inspections of all pipes. Database is located at the City of Solana Beach;
- GIS located at the City of Solana Beach.

5.3 Rehabilitation and Replacement Plan

Every agency must 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. The rehabilitation and replacement plan should include a capital improvement plan (CIP) 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

5.3.1 Compliance Summary

A rehabilitation and replacement plan the currently approved CIP was prepared in response to the Sewer Master Plan Update prepared in July 2001 with a minor update in March 2003. Projects were prioritized based on the CCTV condition assessments as well as the enhanced maintenance areas program and SSO records. The Sewer Master Plan includes a listing of capital improvement projects for major infrastructure such as pump stations and force mains. The prioritization takes into account the age of the facilities, construction materials used, current use, capacity and known condition.

CCTV inspections have recently been performed for the entire sewer pipeline system. These CCTV inspections will be performed on a rotating basis so that every three years, every pipeline in the City's system is inspected via this method. The City has retained the services of an engineering consultant to assist the City with conducting a comprehensive assessment of the CCTV inspection and evaluation of the City's sewer collection system pipelines and manholes. The condition assessment program is currently underway. To date, condition assessment has been made on approximately 50 percent of the City's sewer collection system. Capital repairs of priority areas identified by the condition assessment are performed as needed. The next project to perform such repairs is currently underway and should be completed by July 2010.

To fund the management, operation and maintenance of the collection system, the City has established a dedicated Sanitation Fund. This fund has been established to provide for the operation, maintenance and replacement costs, including debt service expense and retirement of the sewer system. This fund also pays for repairs and replacement of existing capital facilities equipment and appurtenances of the sewer system as they depreciate, wear out or breakdown.

5.3.2 Compliance Documents

The documents supporting compliance with the rehabilitation and replacement plan requirements are as follows:

- CCTV Videos and assessments located at the City of Solana Beach;
- GIS located at the City of Solana Beach;
- City of Solana Beach Capital Improvement Plan located at the City of Solana Beach;
- City of Solana Beach Municipal Code Chapter 14 located at the City of Solana Beach and on the City's website;
- 2000 Sewer Master Plan Update located at the City of Solana Beach;
- City of Solana Beach Annual Work Plan located at the City of Solana Beach.

5.4 Training Program

The City is required to provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and to require contractors to be appropriately trained.

5.4.1 Compliance Summary

A comprehensive training program is in place for all public works employees (due to the small size of the city, the City does not have a dedicated to the sanitation department). The Public Works Department holds weekly training meetings which include emergency response, safety and general work practices. Annual spill response training is conducted in conjunction with the City's sewer maintenance contractor. SEJPA separately maintains a similar program for remote facilities operators assigned to work on the City of Solana Beach system. Although voluntary, the City endorses the CWEA Operator Certification Program. Currently, the City has staff members that hold various CWEA certifications.

Training for public works employees includes formal classroom and informal on-the-job and hands-on training conducted by qualified City staff and the City's sewer maintenance contractor. In addition, outside training workshops are utilized for more technical training topics. Training courses are added or existing courses revised to comply with new requirements or to incorporate changing technologies including computer aided or online training programs. In addition, the City's sewer maintenance contractor holds regular training for their staff. This training includes weekly safety and technical training, quarterly all day training on equipment, traffic control and other issues. The maintenance contractor also has several members of their company that are active in CWEA.

5.4.2 Compliance Documents

The following documents demonstrate they type of training provided to staff and what training requirements are required of contractors:

- Employee training records Plan located at the City of Solana Beach;
- Logs from weekly public works training sessions located at the City of Solana Beach;
- CWEA certifications for applicable staff members located at the City of Solana Beach.

5.5 Equipment and Parts Inventories

Each agency is required to provide equipment and replacement part inventories, including identification of critical replacement parts for the operation and maintenance of its sewer collection system.

5.5.1 Compliance Summary

The City of Solana Beach sewer system is comprised of various standard sized gravity and pressurized pipelines and does not contain any pumping or other unique facilities for which the City maintains. Although the City only maintains a small inventory of replacement parts (such as manhole adjustment rings and risers, the City has a working relationship with local contractors to provide emergency sewer repairs. The SEJPA separately maintains equipment inventories for the remote systems they manage on behalf of the City.

5.5.2 Compliance Documents

The documents supporting compliance with the requirement to maintain an inventory of equipment and parts, including identification of critical parts, are as follows:

• Operations and Maintenance Training Program and Equipment Inventories – located at the City of Solana Beach.

CHAPTER 6 – DESIGN AND PERFORMANCE PROVISIONS

This chapter references the design and construction standards & specifications for new sewer systems, pump stations, and other appurtenances, and for the rehabilitation and repair of existing sewer systems. Also included are the procedures and standards for the inspection and testing of these facilities. The Order requires the following:

- (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.

6.1 Compliance Summary

To ensure consistency in the design and construction of collection system facilities, the City requires all design and construction work for the sewer system to comply with latest edition of the Standard Specification for Public Works Construction (Greenbook), as prepared and published by Public Works Standards, Inc. The Greenbook provides the specifications to be used to establish standards of work material and construction procedures for improvements to the sanitary collection system within jurisdiction of the City of Solana Beach. In addition, the City requires all design and construction work to comply with the San Diego Regional Standard Drawings, latest edition. These standard drawings provide details for commonly used sewer materials such as manholes, laterals and pipe installations.

All design work for City must be done by a professional California registered engineer and all construction contractors must be properly licensed and insured. All inspection and testing of newly installed sewer collection system facilities must meet the standards indentified in the Greenbook before acceptance by the City.

6.2 Compliance Documents

The documents used for design and performance evaluations include the following:

- Standard Specification for Public Works Construction (Greenbook) located at the City of Solana Beach;
- San Diego Regional Standard Drawings (SDRSD) located at the City of Solana Beach.

CHAPTER 7 – OVERFLOW EMERGENCY RESPONSE PLAN

Under the Order, each *agency* 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. Also, the SSMP should include such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.

7.1 Compliance Summary

The City of Solana Beach responds to and reports all public SSOs from the City's sanitary sewer system and all private property spills of which the City becomes aware.

The City's Sewer Overflow Response Plan (SORP) works in conjunction with the City's Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS) programs. When responding to an SSO, the first public works employee on scene evaluates the situation and communicates with the Public Works Operations Manager to ensure ample resources are dispatched. City public works employees have materials on hand to contain any flow leaving the sewer collection system and are also available to provide for the public well being by keeping the public away from the area. In addition, the City has an informal agreement with the City of Del Mar to use their jetting equipment to provide for immediate system blockage.

The City's sewer maintenance contractor is contractually obligated to respond to any SSO within 60 minutes of receiving notice from the City. In most cases, the response time is significantly less than 60 minutes because they have equipment nearby. This approach is designed to provide the most efficient use of available resources to quickly remediate the SSO and its impact on the environment. When applicable, spill areas are cordoned off to prevent public contact. Local law enforcement is available for additional traffic or crowd control if needed.

The City's SORP provides detailed procedures for City employees responding to SSOs during or after normal working hours. Contact information is included for all agencies and personnel that require notification in the event of a sewage spill. Posting of warning signs and sampling procedures are covered. Notification and reporting are an important aspect of the City's response procedures. Compliant with the State Water Resources Control Board's Order No. WQ 2008-0002-Exec., the City notifies the Office of Emergency Services, San Diego County Department of Environmental Health and the San Diego Regional Water Quality Control Board of any spills that discharge to a drainage channel or surface waters within two hours of becoming aware of the spill. The City certifies within 24 hours to the San Diego Regional Water Quality Control Board that the appropriate notifications have been completed. The City of Solana Beach reports all SSOs, public and private, as per the MRP and SDRWQCB order R9-2007-0005, to the CIWQS on-line SSO database. Additionally, all spills are reported to the San Diego County Department of Environmental Health

City staff periodically reviews the SORP to ensure procedures are adequate to quickly and efficiently respond to public and private SSOs. Any necessary revisions are incorporated into the plan.

7.2 Compliance Documents

The compliance documents that detail the agency's Overflow Emergency Response Plan are as follows:

- Sewer Overflow Response Plan included in this SSMP (at end of section 3.3.3);
- CIWQS Incident Report Log located at the City of Solana Beach;
- SSO Response Quick Reference located location at the City of Solana Beach;
- Training Records located at the City of Solana Beach.

CHAPTER 8 – FATS, OILS, AND GREASE (FOG) CONTROL PROGRAM

Under the Order, each *agency* is required to evaluate its service area to determine whether a Fats, Oils and Grease (FOG) control program is needed. If the *agency* determines that a FOG program is not needed, the *agency* must provide justification for why it is not needed. If FOG is found to be a problem, the *agency* 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.

8.1 Compliance Summary

To comply with the WDR and establish a sound legal authority for the control of FOG generated, the City adopted Chapter 6.32 Grease and Waste Discharge to the Solana Beach Municipal Code. This section of the municipal code establishes the legal authority for the City's Fats, Oils and Grease Control Program. This change to the City's Municipal Code occurred in September 2004.

The FOG ordinance requires food service establishments (FSE) to install grease removal devices, implement kitchen best management practices and provides for inspections and enforcement. The City's FOG Control Program has been designed in accordance with Chapter 6.32 of the municipal code and is implemented under the direction of the Principal Engineer. Currently the sewer collection system pipelines are

cleaned one time each year. Enhanced maintenance areas are cleaned every three months. The City has a grease trap inspection firm under contract to provide onsite FOG inspections of FSE.

Public Outreach and Education

At the time the FOG ordinance was adopted, there was an 18 month phase-in period that allowed businesses required to install grease collection devices enough time to determine the best device for their establishment. The City used this phase-in period for public outreach and education of the new ordinance. Letters were written to each establishment and educational material was handed out during the storm water inspections that the FSE undergo each year.

Facility inspections are often the best opportunity for education as they allow one on one interactions and deal directly with specific requirements and practices for the business. The City will continue to ensure that its inspectors are proficiently trained to educate its business and residential communities and distribute the appropriate materials. Additional educational opportunities will be introduced as they become available.

FOG Disposal

The City does not intend to provide FOG disposal services for private businesses and property owners. It is the responsibility of the private business and property owner to hire a licensed grease hauler as needed. However, the City will keep a list of licensed grease haulers and will provide this information to FSEs and residents as needed during inspections and site visits.

All companies doing business in California that transport inedible kitchen grease must obtain a registration sticker for each of their trucks from the Department of Food and Agricultural pursuant to provisions of the Food and Agriculture Code as well as the vehicle code. Those companies doing business within Solana Beach must also obtain a business license from the City.

The San Elijo Joint Powers Authority does not accept hauled waste for disposal at their treatment facility. They are considering the possibility of accepting hauled grease into their digester but this is still in the early stages of planning and may or may not be implemented.

Legal Authority

Solana Beach Municipal Code Chapter 6.32 (Grease and Waste Discharges) establishes the legal authority for the City's FOG Control Program. Food service establishments are required to control their FOG discharge through the use of grease removal devices and best management practices per SBMC Sections 6.32.050 and 6.32.140. Design and maintenance requirements for grease control devices are established in SBMC Section 6.32.090 and 6.32.100. Compliance is enforced through various inspection requirements and legal remedies as specified in the SBMC.

Design and Maintenance Requirements

The City of Solana Beach Municipal Code specifically sets forth the design standards for grease control devices installed within the City. All grease interceptors must be certified by the International Association of Plumbing and Mechanical Officers (IAPMO), or another listing agency approved by the director, and plumbed according to the California Plumbing Code The type, capacity and construction of all grease control devices should be consistent with what is stated in the Uniform Plumbing Code. All grease control devices must be adequately maintained at the owner's expense, so that the grease control device is in proper working order at all times. A maintenance log indicating each pumping of a grease control device for the previous twelve months, and any other pertinent information, shall be maintained by each establishment. This log shall include, but not be limited to, date, time, amount pumped, hauler and disposal site. The log shall be kept in a conspicuous location for inspection by the City or an authorized inspector during normal business hours.

Best Management Practices

SBMC Section 6.32.140 outlines the best management practices (BMP) that FSE are required to implement. BMP include installation of drain screens on all drains, recycling of waste cooking oil, disposal of food waste in the trash and mandatory employee training. Employees are to be trained in FOG reduction practices such as dry wiping pots pans and utensils, grease spill clean-up, disposal of food waste and the proper disposal of cooking oils and grease. Employee training is to be documented and available for inspection. BMP are to be conspicuously posted in the food preparation and dishwashing areas at all times.

Inspection and Enforcement Plan

Section 6.32.150 of the City of Solana Beach Municipal Code provides the City with the legal authority to inspect grease control devices. Section 6.32.100 of the City of SBMC provides that food service establishments shall be open and available for inspection by an authorized inspector at all times during normal business hours to ensure that the operation and maintenance of the food service establishment complies with the requirements of this chapter. FSE are required to maintain all appropriate records of their FOG related activities including the maintenance of their grease control devices for a minimum of three years.

To assist with FSE inspections and other FOG related activities, the City contracts with an outside contractor to assist City staff. Enforcement of the City's FOG regulations is provided by SBMC Sections 6.32.150, 6.32.160 and 6.32.170 which include administrative citations, misdemeanor complaint civil penalties or criminal penalties.

FOG Enhanced Maintenance Areas

FOG enhanced maintenance areas are included in the City's Enhanced Maintenance Area Program. Enhanced maintenance areas are areas of the collection system that require maintenance above the normal scheduled maintenance. Enhanced maintenance areas are cleaned every three months or more frequently if required.

8.2 Compliance Documents

The FOG control program activities are documented under the following ordinances, reports, and studies:

• Solana Beach Municipal Code Section 6.32 (Grease and Waste Discharges) – located at the City of Solana Beach and on the City's website

CHAPTER 9 – SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

The Order requires that each *agency* 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 shortand 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.

9.1 Compliance Summary

To ensure that the City's sanitary collection system meets the needs of the population served, the City routinely commissions a Sewer Master Plan to review the operational needs of the collection system. To provide a current and complete assessment of the City's collection system, a complete Sewer Master Plan was finished in January 2008. An update to the master plan was performed in 2009.

The Sewer Master Plan includes a listing of capital improvement projects (CIP) for major structures such as pump stations and force mains. The prioritization takes into account the age of the facilities, construction materials used, current use capacity and known conditions. Additionally, the City has contracted for the services of an outside consultant to provide assessment of the sewer collection pipeline system and provide a prioritized listing of capital improvement projects for the pipeline system. Since the City is substantially built-out, there is minimal need to provide additional capacity to the system. The only capacity increasing projects results from pipelines indentified in the master plan as being undersized and upsizing six inch pipes to eight inch pipes when work is done to an existing six inch line.

Evaluation:

In addition to the computer modeling of the system and to meet full compliance with the WDR, the City contracted with an outside contractor to conducting a comprehensive CCTV video inspection and assessment of the City's sewer collection system. An outside engineering consulting firm was then hired to review all the videos and provide an assessment of the pipeline system. Data from this inspection is being integrated into the City's BEACH database program for easy access by the City staff. This data is being utilized to a priority list for the City's CIP program. The re-inspection goal of the City's CTV inspection program is for 33 percent (approximately 83,000) feet per year. The CCTV program also helps to determine defects and sources of unwanted inflow and infiltration.

9.2 Compliance Documents

The documents used for system evaluation and capacity assurance are as follows:

- Sewer System Master Plan located at the City of Solana Beach;
- City of Solana Beach CIP Program located at the City of Solana Beach;
- Collection System CCTV Inspection Videos located at the City of Solana Beach;
- BEACH database (comprehensive listing of facilities and maintenance records) located at the City of Solana Beach;
- Sewer system GIS located at the City of Solana Beach;
- City of Solana Beach annual budget located at the City of Solana Beach.

CHAPTER 10 – MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS

Under the Order, there are three key monitoring, measurement and program modification requirements. They are to:

- 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;
- e) Identify and illustrate SSO trends, including frequency, location, and volume.

10.1 Compliance Summary

The City has a number of tools available to monitor and measure the progress of its SSMP. Data from the system-wide CCTV inspection is integrated into the BEACH database system and will be used for comparison with future CCTV inspection data. This database is also used to track and register routine collection system cleaning and maintenance as well as the enhanced maintenance areas that require more frequent maintenance.

The City reports all public and private property spills. Spill reports are maintained at the City and online through the California Integrated Water Quality System. Spill reports are analyzed by management to determine strategies to prevent future occurrences. Spill response efforts are also analyzed by management to determine their efficiency and effectiveness. Spill data, along with onsite inspection data, is used to monitor the progress of the City's FOG Reduction Program.

As needed, the City updates its Sewer Master Plan. The Sewer Master Plan Update reviews multiple aspects of the City's management operation maintenance funding and CIP progress for the collection system.

10.2 Compliance Documents

The compliance documents are as follows:

- SSO Reports located at the City of Solana Beach;
- City of Solana Beach Annual Work Plan located at the City of Solana Beach;
- BEACH database (comprehensive listing of facilities and maintenance records) located at the City of Solana Beach;
- Sewer system GIS located at the City of Solana Beach;
- City of Solana Beach annual budget (includes CIP) located at the City of Solana Beach.

CHAPTER 11 – PROGRAM AUDITS

As part of the SSMP, the *agency* 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 *agency'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.

11.1 Compliance Summary

The City of Solana Beach will audit its SSMP on a two year cycle from the date of initial City Council approval. If conditions change that warrant increased audit frequency, the City will adjust its audit cycle accordingly. Audits will review the City's SSMP activities from the time of the last audit and will summarize the data accumulated through its monitoring, measuring and program modification efforts. Particular attention will be paid to each program's effectiveness in meeting its goals, objectives and priorities while ultimately being tied into the budgetary process.

The audit process will include the review of additions or improvements made to the collection system during the current audit period. The audit process will also describe planned additions and improvements for the upcoming audit period. Supporting documents will be reviewed to ensure they are up to date and that the most recent documents are available and referenced. This process will also ensure that historical documents are kept for future reference.

Employee training will be reviewed to ensure programs and mechanisms are in place to provide necessary training and that all staff is up to date with required training. As previously mentioned elsewhere in this document, training includes on the job requirements, safety, required licenses and/or certificates and professional development.

Completed audits will be retained on file by the City

11.2 Compliance Documents

The documents used for audit evaluations include the following:

- SSO Reports located at the City of Solana Beach;
- City of Solana Beach Annual Work Plan located at the City of Solana Beach;
- BEACH database (comprehensive listing of facilities and maintenance records) located at the City of Solana Beach;
- Sewer system GIS located at the City of Solana Beach;
- Complete audits located at the City of Solana Beach;

CHAPTER 12 – COMMUNICATIONS

The *agency* 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 *agency* as the program is developed and implemented.

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

12. 1 Compliance Summary

The Solana Beach City Council encourages public participation in all City activities. Time is allowed at each City Council meeting for public comment. The City maintains a website where information regarding city matters is publically available. The City also posts various city documents for public review on the City website. The City's Municipal and Development codes, which provide the legal authority to manage operate and maintain the sanitary collection system, are also online as is the Adopted Budget, which contains the CIP project list.

The City utilizes e-mail alerts, newsletters, specialized publications, participation in community events and local community groups to disseminate information and solicit feedback on its programs. Outside public relations consultants are used as needed. In addition, there are monthly meetings with the San Elijo Joint Powers Authority Member Agencies at which matters related to collection and treatment of wastewater is discussed.

12.2 Compliance Documents

The documents used for the communications program include the following:

• City of Solana Beach website – www.cityofsolanabeach.org

CHAPTER 13 – GENERAL COMPLIANCE REQUIREMENTS

13.1 SSMP and Program Certification

Both the SSMP and the City's program to implement the SSMP must be certified by the City to be in compliance with the requirements set forth above and must be presented to the City's governing board for approval at a public meeting. The City 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.

In order to complete this certification, the City'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 City is required, in accordance with D.14, when significant updates to the SSMP are made. To complete the re-certification process, the City shall enter the data in the Online SSO Database and mail the form to the State Water Board, as described above.

13.1.1 Compliance Summary

The SSMP will be presented to the Solana Beach City Council for approval on April 28, 2010. Recertification of the SSMP will occur every five (5) years from the date of the initial SSMP approval.

13.1.2 Compliance Documents

The following documents provide the legal basis for the City of Solana Beach approval of the SSMP and implementation program.

- Solana Beach City Council meeting minutes from April 28, 2010 located at the City of Solana Beach;
- Approved SSMP located at the City of Solana Beach;
- State Water Resources Control Board Order Number 2006-0003-DWQ Statewide General Waste Discharge Requirements for Sanitary Sewer Systems located at the City of Solana Beach.



Spill Emergency Response Plan (SERP)

CITY OF SOLANA BEACH

March 2010 Revised May 2023

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Appendix A: Spill Response Form

Definitions

Category 1 Spill

Sewage discharges, of any volume, resulting from a failure in the City's collection system that:

- Results in a discharge to a drainage conveyance system and/or surface water; or
- Discharges to a drainage conveyance system and were not fully captured and returned to the sanitary sewer collection system.

Category 2 Spill

Sewage discharges, 1,000 gallons or greater, resulting from a failure in the City's collection system that do not reach surface waters or a drainage conveyance system, including instances where the discharge was fully recovered from the City's storm drain system.

Category 3 Spill

Sewage discharges equal to or greater than 50 gallons and less than 1,000 gallons, resulting from a failure in the City's collection system that do not reach surface waters or a drainage conveyance system.

Category 4 Spill

Discharges less than 50 gallons resulting from a failure in the City's collection system that do not reach surface waters or a drainage conveyance system.

Drainage Conveyance System

A drainage conveyance system is the City of Solana Beach's or privately-owned storm drain 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.

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.

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.

Surface Water/Receiving Water

A waterbody into which treated or untreated water/wastewater is discharged. In Solana Beach, this includes the Pacific Ocean, San Dieguito Lagoon, River or River Mouth, or the San Elijo Lagoon.

1 Introduction

The City of Solana Beach (City) recognizes the importance of protecting the health and safety of the public as well as the environment by preventing sewer flows from reaching surface waters and waters of the United States. The City understands the need to implement procedures to minimize the impact of sanitary sewer spills and comply with state regulations' requirements.

This document, the City's Spill Emergency Response Plan (SERP), serves to ensure City staff:

- Or contractor personnel respond to identified spills appropriately and efficiently,
- Appropriately provide regulatory agencies, and other potentially affected entities notifications of all spills in a timely manner and in accordance with the State General Order for Sanitary Sewer Systems (Order),
- Conduct appropriate monitoring, notifications and reporting,
- Conduct appropriate training of staff and contractors, as applicable
- Conducts post-spill assessments to review effectiveness of the procedures described in this SERP, and make appropriate updates if necessary, and
- Conduct periodic reviews and updates of this SERP.

2 Spill Response Procedures

Engineering and Public Works (PW) staff are responsible for first responding to and containing active or potential spills. A Spill Response Tactical Form (Appendix A) guides First Responders spill response procedures and immediate notifications, i.e., within two hours of knowledge of spills.

The Spill Response Field Form:

- Guides first responders from the first awareness or notification of a sewage spill through final cleanup
- Includes procedures for each of the steps outlined in Figure 1.
- Is placed in all City PW vehicles for staff reference and use.



Figure 1: Spill Response Steps

In the event of a spill, the first responding Public Works staff (First Responders) are responsible for protecting the public's health and safety by mitigating the spill's impacts to the maximum extent possible.

Step 1: Initial Spill Response and Assessment

Suspicious circumstances, such as sewage flowing from a manhole, foul odors, backed-up plumbing, unusual flooding, and unusually low flows entering a pump station or treatment plant, may indicate a spill. A spill may be detected by City employees, the public, or via the City's pump station and lift station alarm systems.

Public detections of active or potential spills are received at the Public Work's front desk and routed to the PW Operations and Maintenance Staff. If a PW Operations and Maintenance staff member is not available or non-responsive, then a designated backup PW staff member is notified. The PW staff member that first responds to a spill is referred to as the First Responder.

After-hours calls are routed to Rancho Dispatch and then to the designated 24-hour contact point for the Public Works Department. Figure 2 provides a typical procedure for spill detection.



Figure 2: Procedure for Spill Detections

Alarm systems in the San Elijo JPA's sewer system pump stations (i.e., Fletcher Cove PS, Solana Beach PS, Eden Gardens PS and Santa Helena PS) are triggered when there is a power failure, or high/low water level is detected in the wet well(s). When triggered, an alarm signal is transmitted via the San Elijo JPA's system or Rancho Dispatch if triggered outside business hours.

Upon receipt of a detected spill via a member of the public, City-employee, or automated alarm system, the First Responder shall perform the following:

- Step 1-1If spill is flowing to surface water or City's drainage system (inlet, pipe, channel, etc.)IMMEDIATELY implement BMPs to block the spill from entering the drainage system
- **Step 1-2** Record spill detection information, such as caller's information, estimated start time of the spill, and relevant information that will enable staff to quickly locate, assess, and contain the spill.
- Step 1-3 Call Public Works Operations Manager (Direct: 951-710-7993, Main: 858-720-2470)

- **Step 1-4** If applicable, call Rancho Dispatch to confirm the response has been initiated.
- **Step 1-5** Make an initial site assessment (via desktop analysis or, if needed, in-field investigation) to determine if the spill originated in the City's jurisdiction and whether a publicly- or privately-owned sewer line was the cause of the spill.
 - **a.** If the spill originated in the City's jurisdiction and the cause is on a publicly owned sewer line, proceed with Step 2.
 - **b.** If the spill originated in the City's jurisdiction and is on a sewer line owned by either the City of Del Mar or City of San Diego, see Section 8 below.
 - **c.** If the spill is not within the City's jurisdiction or resulted from blockages or other problems within a privately-owned sewer lateral, see Section 7 below.
 - **d.** If the spill or reported problem cannot be located, obtain additional information from the incident reporter or Rancho Dispatch to clarify the spill location and issue details. If the spill still cannot be located, the First Responder shall check the system for normal flows, advise the Emergency Dispatch Operator of the non-condition, and obtain approval from the Public Works Director, the Public Works Operations Manager or other designee before leaving the site.

Step 2: Public Protection

To protect public health and safety, City staff must control public access to all areas where contact with sewage is possible. All traffic control setups shall conform to the appropriate standards to ensure the safety of the crews. Depending on the location of the spill and the applicability, the traffic and crowd controls may be implemented as follows:

- **Step 2-1** Initiate protective measures:
 - Place cones to direct traffic away from the spill area.
 - > Place caution tape and barricades to protect pedestrians from contaminated area.
 - Use City personnel to control traffic and pedestrians.
 - Close affected entrances or exits from public and/or private facilities.
 - Perform lane closures as necessary.
 - If necessary, place signage to inform the public of potential hazards to public health and safety.
- **Step 2-2** Inform the City Sheriff's Department of any law enforcement assistance necessary for roadway closures and traffic control.
- **Step 2-3** To prevent public health impacts:
 - a. Notify the Marine Safety Department (Lifeguards) (Lifeguards) and provide the location of the beach outfall that would be impacted if the sewer spill reached the outfall. Community Services will implement appropriate beach closure procedures.
 - **b.** Notify the County of San Diego Department of Environmental Health Quality (DEHQ). DEHQ will implement appropriate beach advisories/warnings/ closures.
- Step 2-4. If after PW working hours and Lifeguards are NOT on duty and spill has reached waters of the State (lagoon or beach), report spill to San Diego Department of Environmental Health and Quality (DEHQ), and/or Cal OES. Call County Communications at: (858) 505-6657 and request Environmental Health Specialist

Note: The County of San Diego Department of Environmental Health and Quality (DEHQ) determines when to post notices of polluted surface waters or ground surfaces resulting from uncontrolled wastewater discharges from City facilities. Depending on the circumstances of the spill, the DEHQ may post notices or direct the City to do so. The postings warn of potential public health risks due to sewage contamination and do not necessarily prohibit the use of recreational areas, unless posted otherwise. Should additional notification of sewage contamination be deemed necessary, DEHQ will distribute news releases and advise the public of the affected areas.

Step 3: Containment

If the spill was caused by a blockage or other problem in a City-owned sewer line, the First Responder should begin efforts to stop and/or contain the overflow immediately. Steps to stop and contain the spill are as follows:

- **Step 3-1** Take photos and/or video footage to document site and spill spread before beginning containment.
- **Step 3-2** Identify and, if necessary, request additional personnel, materials, and equipment to minimize, contain, or isolate the spill's impact. Refer to Step 6-1 for a list of contacts.
- **Step 3-3** Stop and/or contain overflow by blocking the storm drain, recovering sewage with a vacuum truck, by digging or constructing a containment pond, diverting flow into a downstream manhole, etc.
- **Step 3-4** Recover as much spilled sewage as possible.
- **Step 3-5** Obtain spill Information Determine the cause of the spill.
 - **a.** Determine the destination of the overflow (e.g., street, curb, gutter, storm drain, drainage channel, estuary, or Pacific Ocean).
 - b. Obtain photographic documentation before and after overflow containment to document the conditions of the area and the extent of the spill's impact.
 Photographs and/or video footage shall be filed with all related report documentation.
- **Step 3-6** Take photos and video:
 - **a.** To capture the extent of the spill spread.
 - **b.** Once overflow has been stopped/ contained.
 - **c.** Of any damaged property.

Step 4: Spill Characterization

Information necessary for appropriate reporting shall be collected.

- Step 4-1 Using best estimation technique for the spill situation, estimate spill rate
- **Step 4-2** Did the spill reach a drainage conveyance system? If yes, provide the information for the next five items:
 - **a.** Description of the drainage conveyance system transporting the spill, i.e., inlet, pipe, cobble gutter, etc
 - **b.** Take photos of the drainage conveyance system entry location(s)

- c. Estimated spill volume fully recovered from the drainage conveyance system
- d. Estimated spill volume remaining within the drainage conveyance system
- e. Estimated spill volume discharged to a groundwater infiltration basin, if applicable
- **Step 4-3** If spill is in the conveyance system or surface flowing towards surface water, estimate spill travel time to the receiving water.
- **Step 4-4** Did the spill reach surface water? If yes, provide the information for the next three items:
 - **a.** Description and photographs of all discharge point(s) into the surface water
 - b. Estimated spill volume that discharged to surface waters
 - c. Estimated total spill volume recovered
- **Step 4-5** Collect spill end date and time
- **Step 4-6** Identify the cause of the spill (root intrusion, grease deposition, etc.)
- **Step 4-7** Identify system failure location (main, lateral, pump station, etc.)
- **Step 4-8** Determine and describe pipe/infrastructure material
- **Step 4-9** Take photos and/or video of the following in receiving water if present:
 - Waterbody bank erosion,
 - ► Floating matter,
 - Water surface sheen (potentially from oil and grease),
 - Discoloration of receiving water, and
 - Impact to the receiving water.

Step 5: Determine Spill Category

It is critical to appropriately determine the category of the spill for the purposes of appropriate notifications, monitoring, and reporting.

Step 5-1 Determine the gallon size of the spill.

Step 5-2 Use the flow diagram below to determine the Primary Spill Category.

DISCHARGE TO DRAINAGE CONVEYANCE SYSTEM OR SUBFACE	SP A discharge conveyar	ILL TO PUBLIC LA that does not reac ice system or surfa	PRIVATE LATERAL SPILL Caused by blockage or other problem in a privately	
WATER A discharge to a drainage conveyance system and/or surface water, that was not fully captured and returned to the sanitary sewer system.	Was the spill over 1,000 gallons?	Was the spill under 1,000 gallons but greater than 50 gallons?	Was the spill under 50 gallons?	owned sewer lateral, and spill remains on Private Property. If spill enters Public ROW, it is no longer a Private Lateral Spill Determine Spill Category 1, 2, 3, or 4.
CATEGORY 1	CATEGORY 2	CATEGORY 3	CATEGORY 4	PRIVATE LATERAL SPILL

Step 6: Notification to Appropriate Entities

Timely notification to all appropriate parties allows the City to respond to the spill efficiently, ensure the health and safety of the public and responding crew, and minimize the potential impacts of the spill. Steps to notify appropriate staff, agencies, and other entities are as follows:

Step 6-1 If:

- Media is covering the spill
- There is damage to private property, OR
- The spill reaches beach/ocean/lagoon

Contact PW Director/Public Works Operations Manager IMMEDIATELY.

To secure additional resources to fully contain and recover the spill, request support from additional City staff and/or request support from City's approved on-call contractor.

Role	Office	Cell Phone
Public Works Director	(858) 720-2470	(858) 334-9958
Public Works Operations Manager	(858) 720-2481	(951) 710-7993
Principal Civil Engineer, LRO	(858) 720-2474	(760) 845-2902
Public Works Department	(858) 720-2470	NA
Public Works (after hours)	(858) 756-3006	NA

Table 1:City Staff Contact List

- **Step 6-2** If Category 1 or 2 Spill is greater than or equal to 1,000 gallons contact County DEHQ IMMEDIATELY and Cal OES within 2 hours of awareness of spill.
 - See back of Spill Response Tactical Form for information requested by CAL-OES to obtain CAL-OES Control Number.
- **Step 6-3** If the spill enters areas outside the City's jurisdiction, notify the affected agency immediately. Refer to Section 8: Other Sewer Agency Discharge for contact info.

Step 7: Corrective Actions and System Restoration

First Responders should perform corrective actions to restore sanitary sewer system operations with care to prevent additional spills from occurring due to the corrective actions. Steps include:

- **Step 7-1** Perform CCTV inspection, if needed, to determine the cause of the spill, assess the condition of the pipe or manhole, and identify the actions needed to restore operations.
- **Step 7-2** Remove the pipe blockage by flushing or rodding.
- **Step 7-3** Repair the damaged pipeline or manhole.
- **Step 7-4** If applicable, manually operate pump/lift station controls.
- **Step 7-5** In the event of a prolonged sewer line blockage or sewer line collapse, the responding City crew shall perform the following:
 - a. Establish a portable bypass pumping operation around the obstruction,
 - **b.** Continuously or periodically monitor the bypass pumping operation, and
 - c. Perform emergency repairs to stop the overflow.

Step 8: Clean up

Clean up procedures are executed as soon as possible to protect public health and safety and the environment. First Responders should be thorough and careful as clean up procedure is performed.

Steps to clean up and restore the condition of the site are as follows:

- Take photographs and, if possible, video footage of the surrounding and impacted area Step 8-1 to thoroughly document the nature and extent of the spill spread and impact.
- Step 8-2 If necessary, to access private property during clean up, obtain expressed permission from private property owner/occupant.
- Sweep, rake, or pick-up by hand, and properly dispose of any solids and debris. Step 8-3
- Step 8-4 Thoroughly flush and clean the area of any sewage using a high-pressure water hose or vactor truck.
- Step 8-5 Contain and recover all wash-down water.
- Step 8-6 Disinfect and deodorize hard surface areas that came in contact with sewage and ensure proper contact time for proper disinfection.
- Where sewage ponding formed, pump dry the pond, and remove and properly disposed Step 8-7 of any residue.
- Once cleaned, take photos and video of the site and any affected manholes, storm drain Step 8-8 inlets, etc.

Step 9: Wrap up

- **Step 9-1** Review Spill Response Tactical Form for completeness and note the time and date of spill response completion.
- Review estimate spill volume, volume discharged into surface waters or int a drainage Step 9-2 system and impacts to receiving waters and beneficial uses. If there are substantial changes from the previously submitted information, provide updates to CAL-OES.
- Provide additional information pertinent to the spill response. Step 9-3

Spill Response Monitoring 3

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 City will conduct the following water quality sampling no later than 18 hours after knowledge of a potential discharge to a surface water:

Collect one water sample, each day of the duration of the spill, at:

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

Table 2. Required Water Quality Sampling Locations

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

Sampling locations codes (e.g., RSW-001D) should be used on sample bottle labels and chain of custody documents along with City of Solana Beach name.

City staff will 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.

City staff will sample for the following constituents:

- Ammonia
- Appropriate bacterial indicator(s) per the San Diego Basin Plan water quality objectives, including the following, unless directed otherwise by the Regional Water Board:
 - Total Coliform Bacteria
- Fecal Coliform Bacteria
- Enterococcus
- E-coli

Water Quality Analysis Specifications

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. Per the 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 the 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).

Safety and Access Exceptions

Should City staff encounter access restrictions or unsafe conditions that prevents its compliance with spill response requirements or monitoring requirements as outlined in the General Order, responsible staff must provide documentation of access restrictions and/or safety hazards in the corresponding required reporting.

4 Post Spill Notifications

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

This notification is part of the Spill Response Tactical Form and spill response procedures. The First Responders are responsible for completing this notification, if applicable. The First Responders may enlist assistance to provide the notification. Still, ultimately it is the First Responders' responsibility to ensure the notification is completed and a CAL-OES Control Number is received.

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 City shall notify the CAL-OES and obtain a CAL-OES Control Number as soon as possible **but no later than two (2)** hours after:

- The City 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 City-owned and/or operated laterals, to a surface water.

The City shall provide the following spill information to the CAL-OES before receiving a Control Number, as applicable:

- Name and phone number of the person notifying the CAL-OES;
- 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 City 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.

Notification of Spill Report Updates

Following the initial notification to the CAL-OES and until such time that the City certifies the spill report in the online CIWQS Sanitary Sewer System Database, the City 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

5 First Responders Debrief

It is important to gather accurate information and documentation for reporting to appropriate agencies.

City PW staff will conduct a debrief of the First Responders involved in implementing the Spill Response. The purpose of the debrief is to:

- Collect and document the data and information necessary for appropriate reporting, and
- Identify challenges in executing the procedures as written and opportunities for enhancements to improve the efficiency and effectiveness of the Spill Response Tactical Form and procedures.

The debrief shall include an assessment of the Spill Response Tactical Form and procedures described in Section 2 above. Management questions that should be used as part of the debrief include, but are not limited to:

- Did the Spill Response Tactical Form and procedures prevent harm to human health or the environment from sewage spills to the maximum extent practicable?
- Was there any confusion or challenges in implementing the Spill Response Tactical Form and procedures?
- Were appropriate immediate notifications made in a timely manner?
- If there was confusion or challenges, what were they, and how can the SERP or Spill Response Tactical Form and procedures be modified to eliminate or reduce the confusion?
- Was a complete report submitted within the required timelines?
- Were corrective actions required from the State Board after submitting the report?
- Does the current SERP need to be immediately updated to prevent harm to human health or the environment from sewage spills to the maximum extent practicable?

This post spill assessment process should be documented, and include:

- The date of the debrief
- Participants
- Responses to the assessment questions above

The City will immediately update this SERP if it is determined that the current plan is not sufficient to prevent harm to human health or the environment from sewage spills to the maximum extent practicable.

Documenting spills and their causes provides information for various purposes, including but not limited to:

• Measuring performance and informing decision-making;

- Comply with reporting requirements;
- Planning future maintenance and repair activities;
- Engineering determinations regarding capacity, rehabilitation, or replacement; and
- Reference for historical performance or claims.

City staff implement this SERP to ensure the spill is properly responded to and documented. Information collected during the spill response, including photographs and/or video footage taken of the spill, shall be recorded in the Spill Response Tactical Form (Appendix A) and, applicable, the Sewer Stoppage Report (Appendix B). Copies of any supporting information or documentation shall also be compiled and saved with the spill event files. See Table 2 for mandatory reporting information required for spill events.

6 Reporting Preparation and Submittal

6.1 Report Submittal Timing

The following table identifies the submittal timing for draft, certified and technical reports for the various spill categories.

Table 3: Required Report Submittal Timing by Spill Category					
Spill Category	Report submittal Timelines				
Category 1 : Spills to Surface Waters	 Submit Draft Spill Report within three (3) business days of the City's knowledge of the spill; Submit Certified Spill Report within 15 calendar days of the spill end date; Submit Technical Report within 45 calendar days after the spill end date for a Category 1 spill in which 50,000 gallons or greater discharged to surface waters; and Submit Amended Spill Report within 90 calendar days after the spill end date. 				
Category 2 : Spills of 1,000 Gallons or Greater That Do Not Discharge to Surface Waters	 Submit Draft Spill Report within three (3) business days of the City's knowledge of the spill; Submit Certified Spill Report within 15 calendar days of the spill end date; and Submit Amended Spill Report within 90 calendar days after the spill end date. 				
Category 3: Spills of Equal or Greater than 50 Gallons and Less than 1,000 Gallons That Does Not Discharge to Surface Waters	 Submit monthly Certified Spill Report to the online CIWQS Sanitary Sewer System Database within 30 calendars days after the end of the month in which the spills occur; and Submit Amended Spill Reports within 90 calendar days after the Certified Spill Report due date. 				

Spill Category	Report submittal Timelines			
Category 4 : Spills Less Than 50 Gallons That Do Not Discharge to Surface Waters	 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. Upload and certify a report, in an acceptable digital format, of all Category 4 spills to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occur. 			
City Owned and/or Operated Lateral Spills That Do Not Discharge to Surface Waters	 Upload and certify a report, in an acceptable digital format, of all lateral spills (that do not discharge to a surface water) to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occur. Report a lateral spill of any volume that discharges to a surface water as a Category 1 spill. 			

6.2 Gathering Report Information

The following information is important to obtain from the Spill Response Field Form, City files, or from First Responders debrief if necessary for required report preparation:

- Description of the spill event destination(s), including GPS coordinates if available, that represent the full spread and reach of the spill;
- Spill end date and time;
- 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;
- Spill cause(s) (for example, root intrusion, grease deposition, etc.);
- System failure location (for example, main, lateral, pump station, etc.);
- Description of the pipe material, and estimated age of the pipe material, at the failure location;
- Description of the impact of the spill;
- Whether or not the spill was associated with a storm event;
- Description of spill response activities including description of immediate spill containment and cleanup efforts;
- 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;
- Spill response completion date;
- Detailed narrative of investigation and investigation findings of cause of spill;
- Reasons for an ongoing investigation (as applicable) and the expected date of completion;
- Name and type of receiving water body(s);

- Description of the water body(s), including but not limited to:
 - Observed impacts on aquatic life,
 - Public closure, restricted public access, temporary restricted use, and/or posted health warnings due to spill,
 - Responsible entity for closing/restricting use of water body, and
 - Number of days closed/restricted as a result of the spill.
- Whether or not the spill was located within 1,000 feet of a municipal surface water intake; and
- 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.

6.3 Required Report Information

The following table identifies the required information for each of the spill categories per the timing identified in Table 3 above.

	Category 1* Spill		Category 2 Spill		Category 3 Spill	Category 4 Spill
Required Item	Draft Spill Report	Certified Spill Report	Draft Spill Report	Certified Spill Report	Certified Spill Report	Certified Spill Report
Spill contact information (name and phone number of contact)	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
Spill location name	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
Date and time the City was notified, or self-discovered, the spill	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
Operator arrival time	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
Estimated spill start date and time	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
Date and time California Office of Emergency Services was notified, and the assigned control number	\checkmark	\checkmark	\checkmark	\checkmark		
Description, photographs, and GPS coordinates of where spill originated: if multiple points, describe each appearance point and provide GPS coordinates for the appearance point closest to failure point	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
Estimated total spill volume exiting system	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Description and photographs of the extent of the spill and spill boundaries	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
Did the spill reach a drainage conveyance system? If yes, provide the information for the next five items:	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
1. Description of the drainage conveyance system transporting the spill;	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
 Photographs of the drainage conveyance system entry location(s); 	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
3. Estimated spill volume fully recovered from the drainage conveyance system;	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
4. Estimated spill volume remaining within the drainage conveyance system;	\checkmark	\checkmark	\checkmark	\checkmark		

Table 4: Required Report Information by Spill Category

	Category 1* Spill		Category 2 Spill		Category 3 Spill	Category 4 Spill
Required Item	Draft Spill Report	Certified Spill Report	Draft Spill Report	Certified Spill Report	Certified Spill Report	Certified Spill Report
5. Estimated spill volume discharged to a groundwater infiltration basin or facility, if applicable			\checkmark	\checkmark	\checkmark	
Description and photographs of all discharge point(s) into the surface water;	\checkmark	\checkmark				
Estimated spill volume that discharged to surface waters; and	\checkmark	\checkmark				
Estimated total spill volume recovered.	\checkmark	\checkmark		\checkmark	\checkmark	
Description and GPS coordinates of spill event destinations		\checkmark		\checkmark	\checkmark	
Spill end date and time		\checkmark		\checkmark	\checkmark	
Description of how spill volume was calculated; including methodology, assumptions, type of data relied on		\checkmark		\checkmark	\checkmark	
Description of how spill start and end times were determined; including methodology, assumptions, type of data relied on		\checkmark		\checkmark	\checkmark	
Cause of spill (root intrusion, grease deposition, etc.)		\checkmark		\checkmark	\checkmark	
System failure location (main, lateral, pump station, etc.)		\checkmark		\checkmark	\checkmark	
Description of pipe/infrastructure material, and estimated age of the pipe/infrastructure material at failure location		\checkmark		\checkmark	\checkmark	
Description of the impact of the spill		\checkmark		\checkmark	\checkmark	
Weather or not spill was associated with a storm event		\checkmark		\checkmark	\checkmark	
Description of spill response activities including description of immediate spill containment and clean up efforts		\checkmark		\checkmark	\checkmark	
Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence, and a schedule of major milestones for those steps		\checkmark		\checkmark	\checkmark	
Local regulatory enforcement action taken against an illicit discharge in response to this spill, as applicable, and					\checkmark	
Identifiable system modifications, and operation and maintenance program modifications needed to prevent repeated spill occurrences at the same spill event location (capital improvements, adjusted maintenance schedule/methods, inspected or repaired assets)					\checkmark	
Spill response completion date		\checkmark		\checkmark		
Detailed narrative of investigation and findings of cause of spill		\checkmark		\checkmark		
Reason for ongoing investigation and expected completion date		\checkmark		\checkmark		
Name and type of receiving water body impacted		\checkmark				
Observed impacts on aquatic life		\checkmark				
Public closure, restricted public access, temporary restricted use, and/or posted health warnings due to spill		\checkmark				
Number of days closed/restricted due to spill		1				
Whether or not spill was located within 1,000 feet of a municipal surface water intake		✓		\checkmark		

		Category 1*		gory 2	Category 3	Category 4
		Spill		bill	Spill	Spill
Required Item	Draft Spill	Certified Spill	Draft Spill	Certified Spill	Certified Spill	Certified Spill
	Report	Report	Report	Report	Report	Report
If water quality samples were collected, identify sample locations and parameters the water quality samples were analyzed for (NA if no samples were taken)		\checkmark				
Total number of all Category 4 spills					vine e Caill	\checkmark

*Category 1 spills that have 50,000 gallons or greater discharged into a surface water also require a Spill Technical Report to be completed – see below in Section 6.3.3.

6.3.1 Draft Spill Report for Category 1 Spills

Within three (3) business days of the City's knowledge of a Category 1 spill, the City 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 City contact person to respond to spill-specific questions;
- 2. Spill location name;
- 3. Date and time the City was notified of, or self-discovered, the spill;
- 4. Operator arrival time;
- 5. Estimated spill start date and time;
- 6. Date and time the City 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.

6.3.2 Certified Spill Report for Category 1 Spills

Within 15 calendar days of the spill end date, the City 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 6.3.1 (Draft Spill Report for Category 1 Spills) above:

- 1. Description of the spill event destination(s), including GPS coordinates if available, that represent the full spread and reach of the spill;
- 2. Spill end date and time;
- 3. Description of how the spill volume estimations were calculated, including at a minimum:
 - The methodology, assumptions and type of data relied upon, such as supervisory control and data acquisition (SCADA) records, flow monitoring or other telemetry information used to estimate the volume of the spill discharged, and the volume of the spill recovered (if any volume of the spill was recovered), and
 - The methodology(ies), assumptions and type of data relied upon for estimations of the spill start time and the spill end time;
- 4. Spill cause(s) (for example, root intrusion, grease deposition, etc.);
- 5. System failure location (for example, main, lateral, pump station, etc.);
- 6. Description of the pipe material, and estimated age of the pipe material, at the failure location;
- 7. Description of the impact of the spill;
- 8. Whether or not the spill was associated with a storm event;
- 9. Description of spill response activities including description of immediate spill containment and cleanup efforts;
- 10. Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the spill, and a schedule of major milestones for those steps;
- 11. Spill response completion date;
- 12. Detailed narrative of investigation and investigation findings of cause of spill;
- 13. Reasons for an ongoing investigation (as applicable) and the expected date of completion;
- 14. Name and type of receiving water body(s);
- 15. Description of the water body(s), including but not limited to:
 - Observed impacts on aquatic life,
 - Public closure, restricted public access, temporary restricted use, and/or posted health warnings due to spill,
 - Responsible entity for closing/restricting use of water body, and
 - Number of days closed/restricted as a result of the spill.
- 16. Whether or not the spill was located within 1,000 feet of a municipal surface water intake; and
- 17. If water quality samples were collected, identify sample locations and the parameters the water quality samples were analyzed for. If no samples were taken, Not Applicable shall be selected.

6.3.3 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 City 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:

- Complete and detailed explanation of how and when the spill was discovered
- Photographs illustrating the spill origin, the extent and reach of the spill, drainage conveyance system entrance and exit, receiving water, and post-cleanup site conditions;
- Diagram showing the spill failure point, appearance point(s), the spill flow path, and ultimate destinations;
- Detailed description of the methodology employed, and available data used to calculate the discharge volume and, if applicable, the recovered spill volume;
- Detailed description of the spill cause(s);
- Description of the pipe material, and estimated age of the pipe material, at the failure location;
- Description of the impact of the spill;
- Copy of original field crew records used to document the spill; and
- Historical maintenance records for the failure location.
- 2. City's response to spill causes:
 - Chronological narrative description of all actions taken by the City 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. City's response to spill causes:
 - 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

6.3.4 Amended Certified Spill Reports for Individual Category 1 Spills

The City 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 City shall certify the amended report.

After **90 calendar days**, the City shall contact the State Water Board at SanitarySewer@waterboards.ca.gov to request to amend a Spill Report. The Legally Responsible Official

<u>SanitarySewer@waterboards.ca.gov</u> to request to amend a Spill Report. The Legally Responsible Official shall submit justification for why the additional information was not reported within the Amended Spill Report due date.

6.3.5 Draft Spill Report for Category 2 Spills

Within three (3) business days of the City's knowledge of a Category 2 spill, the City 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 City contact person to respond to spill-specific questions;
- 2. Spill location name;
- 3. Date and time the City was notified of, or self-discovered, the spill;
- 4. Operator arrival time;
- 5. Estimated spill start date and time;
- 6. Date and time the City 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.

6.3.6 Certified Spill Report for Category 2 Spills

Within 15 calendar days of the spill end date, the City shall submit a Certified Spill Report for the Category 2 spill, to the online CIWQS Sanitary Sewer System Database

(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 6.3.5 (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.

6.3.7 Amended Certified Spill Reports for Individual Category 2 Spills

The City 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 City shall certify the amended report.

After 90 calendar days, the City shall contact the State Water Board at

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.

6.3.8 Monthly Certified Spill Reporting for Category 3 Spills

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

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

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

6.3.9 Monthly Certified Spill Reporting for Category 4 Spills

The City 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.

6.3.10 Amended Certified Spill Reports for Category 3 Spills

Within 90 calendar days of the certified Spill Report due date, the City 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 City shall certify the amended report.

After 90 calendar days, the Legally Responsible Official shall contact the State Water Board at 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.

7 Private-Lateral Sewer Discharge

Private property owners are responsible for the private lateral to and including the connection to the City sewer main per City ordinances. If a spill is determined to be a private-lateral sewer discharge (PLSD), PW staff must use discretion when responding, as the City or the responding staff may be held liable for any damages to private property.

If the PLSD poses an imminent danger to the public, public health, property, or to local waterways, then the First Responder shall perform the following steps.

- Step 1 Notify the responsible agency, homeowner, or business owner to respond to the overflow if not already present on site. Contact PW Admin Assistant to obtain resident or business contact info
- **Step 2** Take emergency action to mitigate the spill until the responsible party arrives.
 - If the flow extends into the public right-of-way, execute spill response procedures in Section 2 and initiate completion of the Spill Response Tactical Form. Containment and cleanup procedures are at the property owner's expense to prevent the spill from reaching adjacent private properties, the storm drain system, and local water bodies.
- **Step 3** In the event the property owner is not acting responsibly in response to the spill event, stop the delivery of water to the property by closing the water supply at the City meter.
- Step 4 If the Lateral Spill is equal to or exceeds 1,000 gallons, results in a discharge to a drainage conveyance system and/or surface water channel and/or surface water, and were not fully captured and returned to the sanitary sewer collection system notify CAL-OES within 2 hours of becoming aware of the spill and the San Diego Region Water

Quality Control Board by phone or fax within 24 hours after becoming aware of the PLSD.

Step 5 Complete Spill Response Tactical Form (Appendix A).

Private Lateral Sewer Discharge Reports

The City is encouraged to report all known PLSDs to the SWRCB via CIWQS Sanitary Sewer System Database within 24 hours of becoming aware of the spill (as described below):

- 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, City staff are 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.

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 City, the City 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.

As required, 30 days after the end of the calendar month in which the PLSD occurs, the City shall complete a monthly certification. These reports identify the sewage discharge as occurring and caused by a private lateral. If known, a responsible party (other than the City) is identified. The City is not responsible for the cause, cleanup, or repair of PLSDs.

8 Other Agency Sewer Discharge

There are sewer lines within the City's limits that are owned by either the City of Solana Beach or City of San Diego. If a spill is determined to be at a sewer line owned by one of these agencies, the First Responder shall perform the following steps:

- Step 1 Take emergency action to mitigate the spill until the responsible party arrives. Deploy crew and vactor truck to prevent environmental exposure and protect public health. Carry out Public Protection measures and spill Containment measures (Section 2 Steps 2 and 3).
- **Step 2** Notify the responsible agency:
 - If originating from the City of , call Del Mar PW or Receptionist If outside business hours, call North Com Dispatch (858-756-3006).

- ▶ If originating from the City of San Diego, call 619-515-3525, available 24/7.
- **Step 3** Remain on site until the responsible party arrives.
- **Step 4** Complete a Spill Response Tactical Form (Appendix A).

9 Plan Review, Updates, and Training

At a minimum, once per year, the City will assess the entire SERP. Program and related elements to be assessed include:

- Spill Response Field Form
- Processes for:
 - Notifications
 - Spill response
 - Spill monitoring
 - Documentation, and
 - Reporting procedures
- Spill reporting documents submitted to the State Board
- Post-spill assessments conducted after each spill, see Step 8 in Section 2. Spill Response Procedures above
- New or emerging regulations related to the SERP
- New, proven technologies that may be incorporated into this SERP to support efficient and effective spill response efforts.

The City shall conduct annual SERP training for Public Works staff to include a review of response procedures, notifications, reporting, practice drills and spill volume estimation. In-house and external training (as-needed) will be provided on an annual basis for sanitary sewer system operations and maintenance staff and contractors. The training must cover:

- The requirements of General Order;
- The City's SERP procedures and practice drills;
- Skilled estimation of spill volume for field operators; and
- Electronic CIWQS reporting procedures for staff submitting data.

Each element above shall be assessed to determine whether the current SERP is effective. Criteria and management questions for the assessment include, but are not limited to, can procedures be modified to:

- Reduce response times to get First Responders, proper equipment and necessary personnel to a spill site?;
- Reduce or eliminate sewage discharge human contact?;
- Reduce or eliminate sewage discharge from reaching surface waters, conveyance systems or the City's storm drain system?;
- Improve appropriate notifications to City or external entities?; and
- Improve reporting?

Based on a comprehensive review and outcome of the assessment above, the City may elect to update this SERP.

APPENDIX A – Spill Response Field Form

Responder #1 Name:					
Responder #2 Name (If Applicable):					
Arrive on	site Time: a.m. or p.m.				
	Step 1: Initial Spill Response				
1	If spill is flowing to surface water or City's drainage system (inlet, pipe, channel, etc.) IMMEDIATELY implement BMPs to block the spill from entering the drainage system.				
	Record spill detection information, as applicable: Source of initial notification (Circle one): City Employee Public Pump Station Alarm Caller information, if applicable (name, phone number): a.m. or p.m. Date and time reported or identified: a.m. or p.m. Estimated start date and time of the spill: a.m. or p.m.				
2	Specific location (address, cross street, latitude, longitude, etc.):				
	Description of problem:				
	Observations of the caller (e.g., odor, duration, back or front of the property, etc.):				
3	Public Works Operation Manager Direct: 951-710-7993 or Public Works Department: (858) 720- 2470				
4	If applicable, call Rancho Dispatch to confirm response has been initiated (858-756-3006)				
5	Determine if the spill originated in the City's jurisdiction.				
6	If spill is originating from City of Del Mar, call Del Mar PW or Receptionist. If outside business hours, call North Com Dispatch. See <i>duty sheet</i> for contact information. If spill is originating from City of San Diego, call City of San Diego. If spill is originating from County of San Diego, call County of San Diego. See <i>duty sheet</i> for contact information. <i>If applicable, enter city contacted and call time below, and continue to Step 2.</i> City Contacted: Time of call:a.m. or p.m.				
7	If spill is affecting private property, call the Public Works Department. See <i>duty sheet</i> for contact information. <i>If applicable,</i> Time of call:a.m. or p.m.				
8	If spill is caused by an issue in a privately-owned sewer lateral, contact the responsible party. If applicable: Time of call:				
10	If spill cannot be located, contact incident reporter or Rancho Dispatch to clarify info. If spill still cannot be located 1) check system for normal flows, 2) advise Emergency Dispatch Operator of the non-condition, 3) obtain approval from PW Director before leaving site.				
11	Description of where spill originated: if multiple points, describe each appearance point and provide appearance point closest to failure point: Description:				

12	Take photos and/or video footage of site before beginning containment for spill estimation. Take photos of where spill originated: if multiple points, take photos of each appearance point.
	Step 2: Public Protection
1	Set up traffic/crowd controls, such as cones or barricades to prevent public access to the spill site.
2	Call NorthCom/Fire Department to contact Sheriff if traffic control is needed.
	To prevent public health impacts:
	Notify the Marine Safety Department (Lifeguards) and provide the location of the beach outfall that would be impacted if the sewer spill reached the outfall. Marine Safety Department will implement appropriate beach closure procedures.
3	If Lifeguards are ON DUTY : Ask lifeguards to check outlet pipes for evidence of spillage onto the beach, when appropriate. Lifeguards will assist with any labor or investigation issues that are needed. Lifeguards to post warning signs only after instructions are given to the City from County Department of Environmental Health Quality DEHQ.
	If sewage reaches the beach, notify DEHQ. DEHQ will implement appropriate beach advisories/warnings/ closures.
4	If after PW working hours and Lifeguards are NOT ON DUTY and spill has reached waters of the State (lagoon or beach), report spill to San Diego Department of Environmental Health and Quality (DEHQ), and/or SDRWQCB, and/or Cal OES. Call County Communications at: (858) 505-6657 and request Environmental Health Specialist
	Step 3: Containment
1	Take photos and/or video footage to document site and spill spread before beginning containment.
2	Identify and request any additional personnel, materials, and equipment to minimize, contain, or isolate the spill's impact
3	Perform operations to contain and stop and/or contain the flow. i.e., blocking the storm drain, recovering sewage with a vacuum truck, by digging or constructing a containment pond, diverting flow into a downstream manhole, etc.
4	Recover as much spilled sewage as possible.
5	Determine the cause of the spill. Determine the destination of the overflow (e.g., street, curb, gutter, storm drain, drainage channel, estuary, or Pacific Ocean).
6	Take photos and/or video footage once overflow has been stopped/contained. Take photos and/or video footage of any damaged property.
	Ston 4: Spill Charactorization
	Step 4. Spin Characterization
1	Using best estimation technique for the spill situation, estimate spill rate: gallons/min
	Did the spill reach a drainage conveyance system? If yes, provide the information for the next five items:
2	1. Description of the drainage conveyance system transporting the spill, i.e., inlet, pipe, cobble gutter, etc:
	2. Take photos of the drainage conveyance system entry location(s)
	3. Estimated spill volume fully recovered from the drainage conveyance system: gallons

	4. Estimated spil	ll volume remainir	ng within the drain	age conveyance s	ystem:	gallons	
	5. Estimated spill volume discharged to a groundwater infiltration basin, if applicable: gallons						
3	If spill is in the conveyance system or surface flowing towards surface water, provide estimated spill travel time to the receiving water: minutes						
	Did the spill reach surface water? If yes, provide the information for the next three items:						
4	1. Description and photos of all discharge point(s) into the surface water						
	2. Estimated spill volume that discharged to surface waters: gallons						
	3. Estimated total spill volume recovered: gallons						
5	Spill end date and	time: Date	Time:		a.m. or p.m.		
6	Cause of spill (root intrusion, grease deposition, etc.):						
7	System failure location (main, lateral, pump station, etc.):						
8	Description of pipe/infrastructure material:						
9	 Take photos and/or video of the following in receiving waters if present: Waterbody bank erosion, Floating matter, Water surface sheen (potentially from oil and grease), Discoloration of receiving water, and Impact to the receiving water. 						
	Step 5: Determine Spill Category						
1	Determine gallon size of the spill.						
	Estimation of total spill volume exiting system:gallons						
2	Use the flow diagram below to determine the Primary Spill Category.						
3	Did the spill originate from a private lateral or building structure? Circle one Y or N						
DISCHARGE TO DRAINAGE		SPILL TO PUBLIC LAND A discharge that does not reach a drainage conveyance system or surface waters.			PRIVATE LATERA Caused by block other problem in a	AL SPILL (age or privately	
OR SURFACE SYSTEM, OR SURFACE WATER A discharge to a drainage conveyance system and/or surface water, that was not fully captured and returned to the sanitary sewer system.		Was the spill over 1,000 gallons?	Was the spill under 1,000 gallons but greater than 50 gallons?	Was the spill under 50 gallons?	spill remains on Property.	Private	
					If spill enters Pub it is no long a Private Latera Determine Spill Ca 2, 3, or 4.	lic ROW, er al Spill ategory 1,	
CATEGORY 1		CATEGORY 2	CATEGORY 3	CATEGORY 4	PRIVATE LATERA	AL SPILL	

Spill Category: Circle one category below and PLS if private lateral spill.

Category 1 Category 2 Category 3 Category 4 PLS

	Step 6: Notify Necessary Entities					
1	If: Media is covering the spill There is damage to private property, OR The spill reaches beach/ocean/lagoon Contact PW Director/Operations Manager IMMEDIATELY. See duty sheet for contact information. Time of call to PW Director/Operations Manager: Secure additional resources to fully contain and recover the spill					
2	If Category 1 or 2 Spill is greater than or equal to 1,000 gallons: Contact County DEHQ IMMEDIATELY and CAL-OES within <u>2 hours of awareness of spill</u> . See <i>duty sheet</i> for contact information. See back of this tactical form for the info requested by CAL-OES. DEHQ Notification Date and Time:a.m. or p.m. CAL-OES Notification Date and Time:a.m. or p.m. CAL-OES Control Number:					
3	If the spill enters areas outside the City's jurisdiction, notify the affected agency immediately See <i>duty sheet</i> for contact information. Agency Contacted: a.m. or p.m.					
	Step 7: Corrective Actions and System Restoration					
1	Perform CCTV inspection, if needed, to determine the cause of the spill, assess the condition of the pipe or manhole, and identify the actions needed to restore operations.					
2	Remove the pipe blockage by flushing or rodding.					
3	Repair the damaged pipeline or manhole.					
4	If applicable, manually operate pump/lift station controls.					
5	 In the event of a prolonged sewer line blockage or sewer line collapse, the responding City crew shal perform the following: Establish a portable bypass pumping operation around the obstruction, Continuously or periodically monitor the bypass pumping operation, and Perform emergency repairs to stop the overflow. 					
	Step 8: Clean Up					
1	Take photographs and, if possible, video footage of the surrounding and impacted area to thoroughly document the nature and extent of the spill spread and impacts.					
2	If necessary, to access private property during clean up, obtain expressed permission from private property owner/occupant.					
3	Sweep, rake, or pick-up by hand, and properly dispose of any solids and debris.					
4	Thoroughly flush and clean the area of any sewage using a high-pressure water hose or vactor truck.					
5	Contain and recover all wash-down water.					
6	Disinfect and deodorize hard surface areas that came in contact with sewage and ensure proper contact time for proper disinfection.					

7	If sewage ponded, pump dry the pond and properly dispose of any residue.					
8	Once cleaned, take photos and video of the site and any affected manholes, storm drain inlets, etc.					
	Step 9: Wrap Up					
1	Date and Time of spill response completion: Date: Time: a.m. or p.m.					
2	Review estimate spill volume, volume discharged into surface waters or int a drainage system and impacts to receiving waters and beneficial uses. If there are substantial changes from the previously submitted information, provide updates to CAL-OES.					
3	Additional Information					

The notification requirements below apply to individual spills of 1,000 gallons or greater, from a Cityowned and/or operated laterals, to a surface water.

The City shall provide the following spill information to the CAL-OES before receiving a Control Number, as applicable:

- Name and phone number of the person notifying the CAL-OES;
- 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.