#### SEWER SYSTEM MANAGEMENT PLAN UPDATE

May 11, 2020

For the

Olivenhain Municipal Water District 1966 Olivenhain Road Encinitas, CA 92024 WDID: 9SSO10644

Certified

Kimberly A. Thorner, General Manager

Prepared by:

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DWE Job No. 142-002



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#### EXECUTIVE SUMMARY AND DISTRICT OVERVIEW

The Olivenhain Municipal Water District (District) was incorporated in 1959 and is organized and operating under Water Code Sections 71000 et seq of the State of California. In 1960, residents of the District voted to become a member of the San Diego County Water Authority. At over 48 square miles, the District serves approximately 86,000 total customers in Encinitas, Carlsbad, San Diego, San Marcos, Solana Beach, and neighboring communities.

During the late 1980s, the first portion of 4S Ranch was developed. In order to serve the sanitation needs of this development, the County of San Diego built a small wastewater treatment plant to serve the area. In 1998, the District annexed the sanitation district from the County. Since that time, the District has provided wastewater collection and treatment services for the 4S Ranch and Rancho Cielo communities.

The District owns and maintains 65 miles of gravity sewer and 20 miles of sewer force main which convey flow to the District's 4S Ranch Water Reclamation Facility for treatment and disposal via recycled water. In sum, the District currently provides sewer collection and treatment services to an approximate population of over 20,000. The District is approximately 95 percent built out based on current flow studies.

The District has five Operators plus one Supervisor who perform wastewater related work. All District maintenance, facilities, administrative equipment, personnel, service, billing, regulatory, accountants/finance, receptionists, analysts, engineers, inspectors, plan checkers and other overhead are shared with other departments of the District (e.g. potable water and recycled water).

This SSMP update has been crafted based on the May 2, 2006 Statewide General Waste Discharge Requirement (Statewide WDR) and the July 30, 2013 revision to the Monitoring and Reporting Program of the Statewide WDR. The SSMP has been certified by the Legally Responsible Official (LRO) and adopted by the District Board (Appendix A). This update and recertification satisfies the WDR/MRP requirement for recertification by May 18, 2020. This SSMP will be audited at a minimum of every two years. The next SSMP recertification deadline is May 18, 2025.

All changes to this SSMP will be logged in Appendix B.

All audits of this SSMP will be logged in Appendix C.

The SSMP and audits are posted on the District's webpage at https://www.olivenhain.com.

## **SECTION I – GOALS**

## **Background and Regulatory Requirements**

The Statewide General Waste Discharge Requirements (Statewide WDRs) governing sanitary sewers specify that the goal of each Sewer System Management Plan (SSMP) is to provide a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer system.

## **District Goals**

The District goals for the SSMP are:

- 1. The District's mission statement is to provide wastewater treatment in the most costeffective and environmentally responsible method.
- 2. As stated in the Declaration of Policy within Article 28 of the District's Administrative and Ethics Code, "It is the policy of the Olivenhain Municipal Water District to provide for the maximum public benefit from the use of Sanitation District facilities. This shall be accomplished by regulating sewer use and wastewater discharges, by providing equitable distribution of District's costs and by providing procedures that will allow the District to comply with the requirements placed upon the District by other regulatory agencies. The revenues to be derived from the application of this policy shall be used to defray all costs of providing sewerage service by the District, including, but not limited to, administration, operation, monitoring, maintenance, financing, capital construction, replacement and recovery, and provisions for necessary reserves."

As part of the 2020 SSMP update process, the District identified and developed specific tasks to accomplish surrounding the SSMP. These tasks can be found in Appendix D.

## SECTION II - DESCRIPTION OF ORGANIZATION

## **Background and Regulatory Requirements**

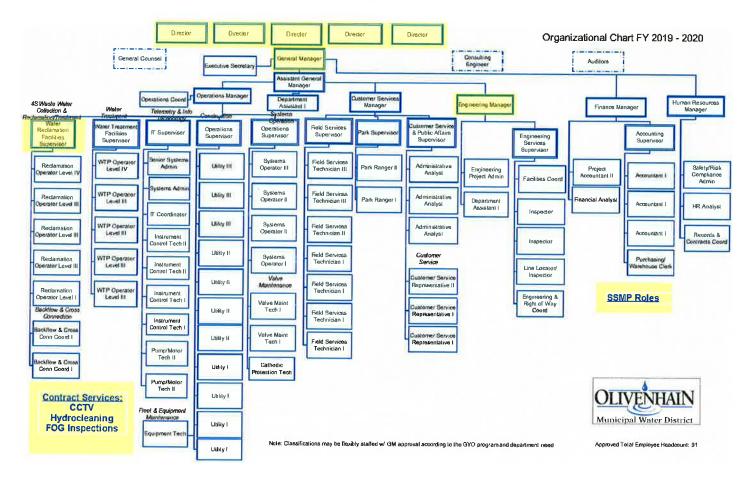
The Statewide WDRs governing sanitary sewers specify that the Sewer System Management Plan (SSMP) must identify the appropriate responsible representative, identify the organization and lines of authority, and provide a chain of communication for reporting SSOs from receipt of a complaint and include the person responsible for reporting SSOs.

## Name of Responsible or Authorized Representative

The Legally Responsible Official (LRO) is the District's Water Reclamation Facilities Supervisor, John Onkka, as well as the District's General Manager, Kimberly Thorner.

## District Organizational Chart

The overall District Organization Chart (Org Chart) is presented below. The positions within the Org Chart in yellow have roles/responsibilities related to the SSMP.



## **Roles and Responsibilities**

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

## **Board of Directors**

(Publicly Elected Officials) Establishes policies, reviews and accepts formal plans, sets overall District direction, authorizes funds for projects/plans/programs, general overview of upper management, conducts public meetings and hearings, approves SSMP.

## **General Manager**

(Kimberly Thorner)

Responsible for providing overall leadership and direction for all of the District activities including: park and recreation, water and wastewater, recycled water and hydroelectric, operations, administration, engineering, finance, human resources, public relations and capital projects. Responsible for creation and implementation of District Strategic Plan and Mission statement. Advises and makes recommendations to Board of Directors.

## **Operations Manager**

(Geoffrey Fulks)

Under general direction of the General Manager, this position is responsible for planning, directing, implementing and administering all of the following areas within the Operations Department: system maintenance and facilities: construction and maintenance; systems operation and supply maintenance; fleet maintenance, treatment plant, recycled and wastewater operations and easement maintenance. Responsible for Emergency and Disaster Preparedness Plan. Responsible for departmental safety compliance.

#### Water Reclamation Facilities Supervisor (John Onkka) Under gener

Under general supervision, this position is responsible for ensuring the District's compliance with all local, state and federal regulations relating to wastewater and recycled water production. distribution and use. Responsible for the planning, administration and implementation of the District's wastewater programs. Responsible for effectively utilizing District resources. This position is the responsible representative of the District, described in Section J of SWRCB Order No. 2006-0003. In the event of a sanitary sewer overflow, this position is responsible for contacting the Utility field crew for containment and renting a vactor truck for

clean-up. As the responsible representative of the District, this position is then responsible for all appropriate online reporting.

## **District Engineer**

(Jason Hubbard)

Under general direction of the General Manager, this position is responsible for District and developer projects within the Engineering Department. Supports the acquisition of land and rights-of-way for District projects and work related to appraisals, acquisitions, and management of real property rights for pipelines, storage reservoirs, and building sites. Responsible for coordination with developers on projects to be constructed within the District and granted to District as part of the District system.

# Reclamation Operator

(5 Field Staff)

Under general supervision, this at will position operates and maintains the District's wastewater collection, treatment and reclamation systems. This includes but is not limited to lift stations, treatment and reclamation plants, chlorinators and related facilities.

**Contract Services** (Various)

Under the oversight of the Water Reclamation Facilities Supervisor, contract services are engaged to execute preventative maintenance activities and report condition of assets (line cleaning, CCTV inspection, and FOG inspections). Contract vendors also provide emergency response assistance as directed by the District.

ENROLLEE CONTACTS RESPONSIBLE FOR SSMP			
SSMP Element	Responsible Party (Position)	Responsible Party (Name)	
1 – Goals	General Manager	Kimberly Thorner	
2 – Organization	General Manager	Kimberly Thorner	
3 – Legal Authority	General Manager	Kimberly Thorner	
4 – O&M Program	Water Reclamation Facilities Supervisor (with Contract Services)	John Onkka	
5 – Design & Performance Provisions	Engineering Manager	Jason Hubbard	
6 – Overflow Emergency Response Program	Reclamation Operator	Gabriel Hernandez	
7 – FOG Control Program	Reclamation Operator (with Contract Services)	Gabriel Hernandez	
8 – SECAP	Engineering Manager	Jason Hubbard	
9 – Monitoring, Measurement, and Program Modifications	Water Reclamation Facilities Supervisor	John Onkka	
10 – SSMP Program Audits	Water Reclamation Facilities Supervisor	John Onkka	
11 – Communication	Water Reclamation Facilities Supervisor	John Onkka	
Change Log	Water Reclamation Facilities Supervisor	John Onkka	
Appendices	Water Reclamation Facilities Supervisor	John Onkka	

KEY DISTRICT CONTACTS				
Name	Title	Phone Number	Email	
Geoffrey	Operations	Cell – (442) 222-9434		
Fulks	Manager	Work – (760) 632-4647	gfulks@olivenhain.com	
John Onkka	Water Reclamation	Cell – (760) 613-8322	jonkka@olivenhain.com	
	Facilities Supervisor	Work – (858) 485-5045	jonkka@onvennam.com	
Jason	District Engineer	Cell – (760) 415-7454	ibubb and Calinear bain	
Hubbard	District Engineer	Work - (760) 632-4640	jhubbard@olivenhain.com	
Gabriel	Chief Reclamation	Cell – (619) 851-2115	ghernandez@olivenhain.com	
Hernandez	Operator	Work - (858) 451-7837		
Affordable Drain	Contract Hydrocleaning and CCTV	General – (858) 689-4000		
		Corey – (858) 583-9950		
		Duane – (619) 818-6795	1	
DMax	Contract FOG Inspections	General – (858) 586-6600		

## **Reporting SSOs**

The chain of communication for reporting SSOs within the District primarily falls under the supervision of the Water Reclamation Facilities Supervisor. Details on the chain of communication, as well as additional spill response detail, is provided in the District's Overflow Emergency Response Plan in Section 6.

## SECTION III - LEGAL AUTHORITY

## **Background and Regulatory Requirements**

The Statewide WDRs governing sanitary sewers specify that each agency must demonstrate, through sanitary sewer system use ordinances, service agreements, or other legally binding procedures, that it possesses sufficient legal authority to prevent illicit discharges, require proper construction, ensure access to facilities, limit discharges of FOG and debris, and enforce any violation of its ordinances.

## **District Approach**

The District operates under: 1) Federal Water Pollution Control Act, commonly known as the Clean Water Act (33 U.S.C. Section 1251 et seq); 2) California Porter Cologne Water Quality Act (California Water Code section 13000 et seq.); 3) California Health & Safety Code sections 25100 to 25250; 4) Resource Conservation and Recovery Act of 1976 (42 U.S.C. Section 6901 et seq.); and 5) California Government Code, Sections 54739-54740) which grant to the District the authority to regulate and/or prohibit, by the adoption of an ordinance, and by issuance of control mechanisms, the discharge of any waste, directly or indirectly, to the District sewerage facilities.

The District's Administrative and Ethics Code (specifically Article 28) and Rules and Regulations provide the District's specific requirements and prohibitions.

Further, by District Resolution most recently updated in February 2017, the District has adopted Standard Drawings and Specifications which requires that all sewers and connections conform to said requirements for design, construction, and rehabilitation. More specifically, the table below summarizes the location of the District's specific legal authority within existing ordinances.

DISTRICT LEGAL AUTHORITY OVERVIEW				
Requirement Reference				
Public Sewers				
Ability to prevent illicit discharges into the wastewater collection system	2009 Rules and Regulations for Use of District Sewerage Facilities Section 3.1			
Ability to require that sewers and connections be properly designed and constructed	2017 District Standard Drawings and Specifications			
Laterals				
Ensure access for maintenance, inspection, or repairs for portions of the service lateral owned or maintained by the Enrollee *	2016 Administration and Ethics Code Article 28, Sec 28.13 (Lateral Ownership) & 2009 Rules and Regulations for Use of District Sewerage Facilities Section 5.10 (Access)			
FOG Source Control				
Ability to limit the discharge of FOG and other debris that may cause blockages	2009 Rules and Regulations for Use of District Sewerage Facilities Section 3.1 and 3.7			
Enforcement				
Ability to enforce any violation of the Enrollee's sewer ordinances	2009 Rules and Regulations for Use of District Sewerage Facilities Section 6			

\* Laterals are installed, operated, and maintained by the property owner

All above referced documents (Administrative and Ethics Code – Article 28, Rules and Regulations, Standard Drawings and Specifications) are available on the District's website <u>https://www.olivenhain.com</u>.

## SECTION IV – OPERATIONS AND MAINTENANCE

## **Background and Regulatory Requirements**

The Statewide WDRs governing sanitary sewers specify the development and implementation of an operation and maintenance program as an element of each Wastewater Collection Agency's Sanitary Sewer Management Plan (SSMP). When appropriate and applicable to the agency's system, the plan must include mapping activities, routine preventative operation and maintenance activities, rehabilitation and replacement plans, training, and equipment and replacement parts inventories.

## <u>Overview</u>

The District has a relatively young collection system with most infrastructure installation occurring between 1998 to 2012. The District has developed a Preventative Maintenance program that is appropriate for protecting and extending the life of this young system. The District targets to clean and closed-circuit television (CCTV) inspect the sewer system every five years via a private collection system maintenance firm. The District's current strategy for cleaning is to focus on the oldest section of the system first and work towards the newest. District staff compares current tapes with the previous tapes, to determine if areas are in need of repair or replacement.

During video review, special attention is given to areas needing more frequent cleaning – known as hot spots. Hot spots are cleaned / inspected as needed.

Due to the small size of the District's collection system, the economy of scale to own and operate a vactor truck and large amount of replacement parts does not exist. The District maintains a list of vendors who can provide services and parts for the collection system, both in emergency and in non-emergency situations.

The District maintains a summary document for regular maintenance activities. This document is titled the *Sanitary Sewer Maintenance Master Plan* (provided in Appendix E) and is updated as needed as the collection system's components change and expand.

## **Mapping Activities**

The District maintains an up-to-date Geographic Information System (GIS) database of the sanitary sewer system, including all gravity line segments and manholes, pumping facilities, forcemains, valves, and storm drains. The database is updated regularly with engineering plans and capital improvements by an outside vendor. This database is utilized as the basis of system maps of the District's wastewater facilities. In addition to the sanitary sewer infrastructure data, the system maps contain easement and access information for the collection system.

In addition to GIS, the District's field maps are in the process of being updated with the most current stormwater facility information.

## **Preventive Maintenance Program**

## Gravity Sewer Mains

The District is responsible for the ongoing maintenance and repair of the sewer main lines. This includes routine and emergency cleaning by contracted service providers. The management of the routine collection system cleaning follows best industry practices. Sewer lines are cleaned typically by hydrorodding techniques and debris is collected and disposed of at the 4S Ranch Wastewater Reclamation Facility. In order to minimize mobilization costs and best manage the cleaning program, the District has contracted with a private collection system maintenance firm to clean and televise approximately 20 percent of the District's sewer collection system annually.

The current strategy for cleaning is to focus on the oldest section of the system first and work towards the newest. As the cleaning and videoing progresses, trouble sections or hot-spots are identified. These hot-spots are evaluated to determine:

- 1. The cause of the problem: (Upstream dischargers, flat spots, sags, off-set joints, etc.)
- 2. The frequency of maintenance required to prevent an obstruction and subsequent sewer overflow
- 3. The feasibility of correcting the problem via source control techniques, or capital improvement projects.

Ultimately, the entire system will be cleaned and the District will be able to document and prioritize the hot-spots and potential capital projects necessary within the system. As new areas are added to the system, the District will incorporate those areas into the maintenance master plan.

Managing hot-spots is done by utilizing the District's computerized maintenance management software (CMMS). By using this software, the District can input a description of the hot-spots, including location and required maintenance method. In addition, the appropriate maintenance frequency is included. When due, this system will generate a work order directing the District to perform the necessary maintenance, and also allows the District to document the findings for record. Hot-spot management is a dynamic process. The monitoring frequency my increase or decrease depending on the conditions, and completion of capital improvement projects.

## Pump Stations

There are presently 14 sewer lift stations operating within the District sewer sanitation districts. District personnel routinely check each lift station and perform preventative maintenance as required. All lift stations are also monitored by the District's supervisory control and data acquisition (SCADA) system. Operators are notified of any operational problems, via a cell phone and are able to make operational changes using a laptop computer.

## **Rehabilitation and Replacement Plan**

The District integrated the rehabilitation and replacement of all District maintained sewer systems into the District's 10-Year Capital Improvement Plan (CIP). This plan identifies the areas for improvement each fiscal year, the timeline for completion, and the priority for each individual project. The CIP is based upon a report entitled *Final Capital Improvement Plan* for 4S and Rancho Cielo Wastewater Systems dated September 2015.

The CIP is the primary guide in the decision making process to rehabilitate and replace the sewer lines and pump station components within the District. The specific purpose and objectives of the plan are to:

- To develop long-range infrastructure planning and budgeting for District wastewater systems;
- Support long-term financial planning including wastewater rate adjustments;
- Provide a detailed technical analysis to back up the defined proposed projects;
- Develop a Capital Improvement Plan (CIP) based on condition deficiencies.

Updates to the 2015 CIP are captured in the District's annual budget which includes a 10 year CIP for wastewater infrastructure.

The rehabilitation and replacement program that the District uses for the collection system is based upon data gathered during the cleaning and video process. During the cleaning cycles, sections of the collection system may be found to be in a deteriorated condition. An indication of deteriorated sections would include rocks, roots, and other material observed in the debris removal process. When observed, these areas are televised to document the specific area of failure. Depending on the severity of the problem, the District may elect to immediately address those areas or place them within their capital repairs projects for future years. Until the improvement projects are completed, they will be placed on a hot-spot list, and monitored on an accelerated frequency to ensure a free-flowing condition.

As mentioned earlier in this section, the District maintains a Sanitary Sewer Maintenance Master Plan. The plan addressed the following areas:

- Sewer collection system access
- Ongoing collection system maintenance
- Recommended capital sewer collection system replacement
- Sewage lift station maintenance
- Spill response
- Spill reporting

Although the spill response and spill reporting sections have been superseded by the District's updated Overflow Emergency Response Plan (OERP), the Sanitary Sewer Maintenance Master Plan continues to provide a road map for preventative maintenance and repair and replacement of the collection system. This document is updated to reflect changes to the District's collection system, and to the OERP.

## **Training Program**

The District provides training to all sewer maintenance personnel on a regular basis and recommends becoming certified by a professional organization, such as the California Water Environment Association, to demonstrate a certain level of job-related knowledge, skills, and abilities. Training programs include simulated activities, such as, simulated spill response and containment, bypass pumping, traffic control, confined space, and any other trainings deemed necessary by the District. Other forms of training include: on-the-job training in the field, general tailgate safety meetings held monthly, a yearly review of the District's SSMP and OERP, first aid/CPR, assigned online safety classes and opportunities to attend seminars and/or conferences for additional training opportunities.

The training schedule is provided in Appendix F.

## **Equipment and Parts Inventories**

These lists are included in Appendix F.

## **SECTION V – DESIGN AND PERFORMANCE PROVISIONS**

## **Background and Regulatory Requirements**

The Statewide WDRs governing sanitary sewers specify the development and implementation of design and performance provisions as an element of each Wastewater Collection Agency's Sanitary Sewer Management Plan (SSMP). Specifically, design and construction standards and each project's specifications must be in place for the installation of new facilities and for the rehabilitation and repair of existing facilities. Additionally, procedures and standards for each project should be in place for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

## Compliance Summary

The District adopted Standard Drawings and Specifications to govern the design, construction, testing, and rehabilitation of its wastewater infrastructure.

The District's Ordinance 305 and Administrative and Ethics Code Sec. 28.4 states in part, "Establishment of Rules and Regulations. The General Manager or her or his designated representative is authorized and directed to draft and amend from time to time the Rules and Regulations for the use of Sanitation District Sewerage Facilities within the Olivenhain Municipal Water District. All such Rules and Regulations shall be approved by the Board of Directors of the District."

## Design

All gravity sewer line systems within the District are designed to meet District standards. Pipe sizes are determined by the ultimate service area and available slope. All gravity sewer line plans are designed by registered civil engineers and reviewed and approved by the Engineering Manager prior to construction. Design and District engineering services are provided by the Engineering Manager.

## **Construction**

All gravity sewer line systems are constructed by qualified contractors, who must have a Class A general contractor's license when working within the public road right-of-way. The contractor's work is inspected by the District and tested for trench compaction and pipeline integrity in compliance with the Standard Specifications and Drawings for the Construction of Water, Recycled Water, and Sewer Facilities. Live connections to the gravity sewer system are not permitted until final approval by the District is given and record drawings have been filed.

## **Connections**

All connection requests for private residences and commercial establishments are reviewed by the District. No connections are allowed until a valid wastewater discharge permit has been issued by the District.

## **Inflow and Infiltration**

Based on historical data and assessment within the collection system and pump stations, inflow and infiltration has not been a significant issue for the District. During heavy rain events inflow and infiltration is problematic. There are several manholes identified by the District that potentially could have inflow and infiltration issues. Several manholes have been lined by the District; however, this was primarily due to  $H_2S$  corrosivity issues and not inflow and infiltration. Inflow and infiltration in the Rancho Cielo area will be studied within the coming year.

## SECTION VI – OVERFLOW EMERGENCY RESPONSE PLAN

## **Background and Regulatory Requirements**

The Statewide WDRs governing sanitary sewers specify the development and implementation of an overflow emergency response plan as an element of each Wastewater Collection Agency's Sanitary Sewer Management Plan (SSMP). This element identifies the agency's practices to protect public health and the environment in the event of a spill. State Water Resources Control Board Order No. WQ2013-0058-EXEC amended the Monitoring and Reported Program (MRP) on September 9, 2013.

## **District Actions**

The District has developed and implemented an Overflow Emergency Response Plan (OERP) which: standardizes the District's response actions to the report of a possible sanitary sewer overflow or spill; identifies the safety precautions and industry practices to ensure public and environmental health and safety; and identifies the internal and external notification and reporting requirements. Key required components of this SSMP element are discussed in the following sections.

An essential component of the OERP is the identification of the proper notification procedures to the appropriate parties, starting with the person who actually receives the initial reporting call; this includes notifications to District management as well as regulatory agencies and other external agencies. The District's list of emergency contractor(s) is provided in the OERP.

In addition to general spill response practices, the plan identifies specific additional steps which should be followed for a particular spill type and procedures to contain and prevent/limit discharge to surface waters. The plan also identifies procedures to address emergency operations, such as traffic and crowd control, while adhering to District safety procedures.

Whenever there is a risk of contamination from a sewage spill to surface waters or an area of public contact, the District will initiate posting of the contaminated area with signs warning of the contamination. Upon notification, the District will remove the posted signs.

To further minimize or correct any adverse impact, the plan procedures specify that any wash-water, debris, and contaminated soil are collected and properly disposed of.

Finally, the Water Reclamation Facilities Supervisor, in concert with the appropriate agencies and contractors, would direct sampling protocols, if necessary, to determine the environmental impact and remediation of the spill. The District maintains a sampling procedure which would be modified to incorporate the concerns of any regulatory authorities, as necessary, as part of the spill response. For spills greater than 50,000 gallons, the Water Quality Monitoring Program reporting would be implemented to provide the appropriate sampling and documentation.

Training on the OERP is provided annually to District staff and emergency contractors. Training on the OERP is also a part of the new hire process for all staff in the field.

The OERP is attached to this section.

# OLIVENHAIN MUNICIPAL WATER DISTRICT

**OVERFLOW EMERGENCY RESPONSE PLAN** 

Modified 5/8/2020



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#### SECTION 1: PURPOSE

Olivenhain Municipal Water District (District) owns and operates a wastewater collection system that consists of pumping stations, gravity sewer mains, and force mains. These facilities are well maintained and normally should not result in any overflows or spills. However the possibility does exist.

This procedure provides a plan for the public health and safety. This may require that certain actions be taken to minimize the health hazards resulting from accidental sewage discharges. This policy provides guidance to District employees in procedures to be used.

This document is also in accordance with the Fiscal Year 2008 NIMS Compliance Objectives. Specifically, it is in agreement with the planning objectives of the preparedness National Incident Management System (NIMS) compliance component. This objective aims to revise and update emergency operations plans to incorporate NIMS and National Response Framework (NRF) components, principles and policies. Additionally, NIMS compliance objective #7 wants to include planning, training, response, exercises, equipment, evaluation, and corrective actions in the emergency operations plan.

#### SECTION 2: <u>BACKGROUND</u>

There is a need to standardize procedures to be followed when overflows occur. These procedures provide for a coordinated effort by trained personnel, so that all necessary actions are taken to help facilitate a timely and technically correct response.

#### SECTION 3: POLICY

The basic District policy is that in the event of an overflow, every effort consistent with safety should be made to return the system to operation. A very close second priority is to contain the spill. In some instances this could be the primary consideration, depending upon location, magnitude of spill, and availability of alternatives.

#### SECTION 4: DEFINITIONS

In order for personnel to accurately assess the probable impact on public safety and the safety of District employees, and to determine the proper level of response, the potential for outside costs associated with cleanup, potential claims for property damage and to accurately report overflows to regulatory agencies the following definitions will apply.

- **4.1 CATEGORY I SPILL**: A Category I SSO is classified as a spill whose volume is equal to or exceeds 1000 gallons; or results in a discharge to a drainage channel and/or surface water; or results in a discharge to a storm drainpipe that was not fully captured and returned to the sanitary sewer system.
- **4.2 CATEGORY II SPILL**: A Category II SSO is classified as all other discharges of sewage resulting from a failure in the District's sanitary sewer system.
- **4.3 SAFETY**: Whenever District utility field crews respond to a reported overflow they may encounter an emergency situation that requires immediate action. Remember, safety is paramount, and even during this type of incident, safe operations always take precedence over meeting schedules or getting the job done or any other commonly used short cut that may abridge proper safety practices.

Safety considerations include not only the safety of the general public, but also the safety of public works personnel. They also include traffic control and proper positioning of vehicle to avoid traffic accidents, as well as bystander safety and safety for citizens and the environment from the results of an overflow.

#### SECTION 5: INITIAL NOTIFICATION AND RESPONSE

In the event of a sewer overflow any employee observing an overflow shall immediately contact wastewater department, who shall then contact the Water Reclamation Facilities Supervisor and provide a verbal report. If, for any reason, the Water Reclamation Facilities Supervisor cannot be reached, the Operations Manager can alternately be alerted of the SSO. The Water Reclamation Facilities Supervisor shall notify sewer system maintenance utility field crew and notify a vactor truck contractor to assist in cleanup if needed. Upon arrival to the SSO site, section 7 describes field crew procedures for stopping and containing SSOs. If notified, the media may arrive to cover the event. In the event there is media coverage, District personnel will follow the established District guidelines regarding public relations. In the event of a SSO after District business hours, District's dispatch entity will immediately contact the OMWD On-Call personnel. The On-Call personnel will then inform the Water Reclamation Facilities Supervisor of the spill. Contacts can be made as follows.

Chief Plant Operator Gabriel Hernandez Office 858-451-7837 ext. 504 Mobile 619-851-2115

Water Reclamation Facilities Supervisor John Onkka Office 858-485-5045 Mobile 760-613-8322

Operations Manager Geoffrey Fulks Office 760-632-4647 Mobile 442-222-9434

#### SECTION 6: <u>REPORTING</u>

Based on the size and nature of the sanitary sewer overflow, the District shall report the overflow to the following agencies within the required time frames.

- **6.1** Complete all required reports with pertinent details, including estimates of overflow volume. Turn in reports and photos to Water Reclamation Facilities Supervisor by the start of the next workday.
- 6.2 The Water Reclamation Facilities Supervisor is the responsible representative for the District, as described in Section J of the State of California Water Resources Control Board (SWRCB) Order No. 2006-0003, entitled "Statewide General Waste Discharge Requirements for Sanitary Sewer System."
- **6.3** Category I SSOs (see section 4 for definition) must be reported as soon as: (1) the District has knowledge of the discharge, (2) reporting is possible, and (3) reporting can be provided without substantially impeding cleanup or other emergency measures. Initial reporting of SSOs must be reported to the Online SSO System as soon as possible but no later than 3 business days after the District is made aware of the SSO. Minimum information that must be contained in the 3-day report must include all information identified in Section D (ix), Monitoring and Reporting Program, of SWRCB Order No. 2006-0003 and section 6.7.3 seen below. A final certified report must be completed through the Online SSO System, within 15 calendar days of the conclusion of SSO response and remediation.

**6.4** For any Category I discharges of sewage that result in a discharge to a drainage channel or a surface water, the District shall, as soon as possible but not later than two (2) hours after becoming aware of the discharge, notify the State Office of Emergency Services, the local health officer or directors of environmental health with jurisdiction over affected water bodies, and the San Diego Regional Water Quality Control Board.

OFFICE OF EMERGENCY SERVICES (800) 852-7550 (916) 262-1677 FAX

SAN DIEGO COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH P.O. BOX 129261 SAN DIEGO, CA 92112-9261 Office: (858) 505-6700 Fax: (858) 505-6788

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION 2375 NORTHSIDE DRIVE, SUITE 100 SAN DIEGO, CA 92108 Office: (619) 516-1990 Fax: (619) 516-1994

- 6.5 Initial reporting of SSOs that do not discharge to a drainage channel or surface water but are greater than or equal to 1,000 gallons must be reported to the San Diego Water Quality Control Board within 24 hours after the District becomes aware of the SSO, notification is possible, and notification can be provided without substantially impeding cleanup or other emergency measures. Minimum information that must be contained in the 24-hour report must include all information identified in section C.2 of R9-2007-0005 and section 6.7.3 below. The District will also report the discharge to the State Board Online SSO Database within 30 days after the end of the calendar month in which the spill occurs. All Category II SSOs that do not reach surface waters or exceed 1,000 gallons will also be reported to the State Board Online SSO Database within 30 days after the end of the calendar month in which the spill occurs.
- **6.6** In the event of a private lateral sewer discharge resulting in a spill that reached surface waters or storm drainpipe the District shall, as soon as possible but not later than two (2) hours after becoming aware of the discharge, notify the State Office of Emergency Services, the local health officer or directors of environmental health with jurisdiction over affected water bodies, and the San Diego Regional Water Quality Control Board.. If the private lateral discharge didn't reach surface water or storm drainpipe but it was greater than 1,000 gallons, the District will provide notification of the discharge to the San Diego Regional Water Quality Control Board by phone, email, or fax within 24 hours after the District becomes aware of the SSO, notification is possible, and notification can be provided without substantially impeding cleanup or other emergency measures. The District will also report all private lateral discharges to the State Board Online SSO Database within 30 days after the end of the calendar month in which the Lateral Sewage Discharge occurs. The District identifies the sewage discharge as occurring and caused by a private lateral, and the responsible party (other than the District) is identified, if known. Minimum information that must be contained in the report is seen below in section 6.7.2.

- **6.7** At a minimum, the following mandatory information must be included prior to finalizing and certifying an SSO report for each category of SSO:
  - **6.7.1** Category II SSOs:
    - a. Location of SSO by entering GPS coordinates;
      - b. Applicable Regional Water Board, i.e. identify the region in which the SSO occurred;
      - c. County where SSO occurred;
    - d. Whether or not the SSO entered a drainage channel and/or surface water;
    - e. Whether or not the SSO was discharged to a storm drain pipe that was not fully captured and returned to the sanitary sewer system;
    - f. Estimated SSO volume in gallons;
    - g. SSO source (manhole, cleanout, etc.);
    - h. SSO cause (mainline blockage, roots, etc.);
    - i. Time of SSO notification or discovery;
    - j. Estimated operator arrival time;
    - k. SSO destination;
    - 1. Estimated SSO end time; and
    - m. SSO Certification. Upon SSO Certification, the SSO Database will issue a Final SSO identification (ID) Number.
  - 6.7.2 Private Lateral Sewage Discharges:
    - a. All information listed above (if applicable and known), as well as;
    - b. Identification of sewage discharge as a private lateral sewage discharge; and
    - c. Responsible party contact information (if known).
  - 6.7.3 Category I SSOs:
    - a. All information listed for Category II SSOs, as well as;
    - b. Estimated SSO volume that reached surface water, drainage channel, or not recovered from a storm drain;
    - c. Estimated SSO amount recovered;
    - d. Response and corrective action taken;
    - e. If samples were taken, identify which regulatory agencies received sample results (if applicable). If no samples were taken, NA must be selected.
    - f. Parameters that samples were analyzed for (if applicable);
    - g. Identification of whether or not health warnings were posted;
    - h. Beaches impacted (if applicable). If no beach was impacted, NA must be selected;
    - i. Whether or not there is an ongoing investigation;
    - j. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the
    - overflow and a schedule of major milestones for those steps;
    - k. OES control number (if applicable);
    - l. Date OES was called;
    - m. Time OES was called;
    - n. Identification of whether or not County Health Officers were called;
    - o. Date County Health Officer was called (if applicable); and
    - p. Time County Health Officer was called (if applicable).
- **6.8** A copy of this report shall also be submitted within 30 days to the San Diego Unified Port District if materials are released into tideland areas.

SAN DIEGO UNIFIED PORT DISTRICT P.O. BOX 488 SAN DIEGO, CA 92112 ATTENTION: ENVIRONMENTAL MANAGEMENT

#### SECTION 7: PROCEDURES

This section will provide general guidelines for actions to be taken in response to a sewer overflow after the initial notification and response has already been completed. Upon arrival, the utility field crew will assess the overflow and follow the appropriate procedure. This section will be divided into four parts: mainline blockage, private mainline or lateral blockage, force main leak, and pump station failure.

For all overflows, the Incident Command Post (ICP) shall be at the site of the overflow, in a safe location at the scene. The Incident Base (IB) shall be the District offices. Staging and mobilizing shall be done from District offices or from the 4S Water Reclamation Plant.

#### 7.1 MAINLINE

- 7.1.1 If the initial report does not include sufficient information, contact the person who reported the overflow and obtain information on location and nature of problem.
- **7.1.2** Upon arrival at the reported location a determination must be made as to the source of the overflow. Is it coming from a District owned mainline, or an individual building lateral, or private sewer? (A map of the District sewer system is provided in each sewer vehicle.)
- **7.1.3** If it is determined that the overflow is originating from a District owned mainline sewer, secure the area by placing proper traffic control around the work site, contain the overflow if necessary with sandbags of fill material, and/or bypass the affected manholes if needed. Bypassing may be done by highlining or by the uses of temporary pipeline around the affected area to transport the water to a parallel main. Inspect flow conditions in the upstream and downstream manholes to determine location of blockage. Once blockage is located relieve the blockage as soon as possible.
- **7.1.4** Once the blockage has been relieved or problem corrected, every attempt should be made to return the area to original condition. Estimate the amount of sewage that has escaped the system, and file all reports with supervisor by the following workday.
- **7.1.5** If there is property damage, notify a supervisor immediately, or if after working hours notify a supervisor by the following workday. Take necessary photographs of the affected area for District records.

#### 7.2 PRIVATE MAINLINE OR LATERAL

- **7.2.1** If it is determined that the overflow is originating from a private main or individual building lateral the owner or property manager must be notified and informed that they are responsible for corrective action and must call a licensed private contractor immediately. If needed, the District can provide contact information for vactor truck contractors.
- **7.2.2** The property owner shall report all major overflows from private lines within 24 hours to the County Department of Health Services. Please refer to Section 14 of this document for emergency contact information.

#### 7.3 FORCE MAIN LEAK

**7.3.1** In the event that an overflow has occurred due to a leak from a force main this will be bypassed while emergency repairs are made to the pipeline. This bypassing may be done by high-lining or by the uses of temporary pipeline around the affected area to transport the water to a parallel main. The use of a pump will be necessary to convey flow.

- **7.3.2** Repairs may be done by District personnel or by a private contractor depending on the nature of the damage to the pipeline, location of leak, volume of water and the depth of the pipeline.
- **7.3.3** Due to the lack of service connections to a force main it is highly unlikely that any flooding of personal property would occur as a result of a force main leak. The threat to the environment and the public health may still exist and therefore procedures similar to those for a mainline blockage overflow may be required.

#### 7.4 PUMP STATION FAILURE

- **7.4.1** Each pump station is fitted with an alarm system that will alert the District dispatchers in the event of a system failure. District personnel, or after hours stand-by crews shall respond immediately when a report of an alarm is received.
- **7.4.2** Upon arrival to the pump station from which the alarm has originated a determination must be made to the cause of the failure. Once a determination has been made as to the cause of the alarm then take the necessary steps to return the station to proper operation. Mobilize the necessary personnel and equipment to correct the problem and notify a supervisor of the situation.
- 7.4.3 If an overflow has occurred use instructions similar to those for a mainline blockage.

#### SECTION 8: LIABILITY

- **8.1** Do not volunteer or disown District liability. Instead, District personnel should use neutral comments. Be polite and sympathetic to the property owners concerns. Assure them regardless of who is at fault you are there to assist them.
- **8.2** The Water Reclamation Facilities Supervisor will advise the occupant, property owner, or property manager of the procedure for filing a claim for damages with the District Clerks office (only if there damage to real estate or personal property). A professional restoration service may be offered at the discretion of the Water Reclamation Facilities Supervisor.

#### SECTION 9: <u>RESPONSIBILITIES</u>

- **9.1** In the event of an overflow, the following Incident Command System (ICS) designations shall be used:
  - Water Reclamation Facilities Supervisor– Incident Commander (IC)
  - Water Reclamation Facilities Supervisor- Public Information Officer (PIO)
  - Operations Manager Safety Officer (SO)
  - General Manager Liaison Officer (LNO)
  - All Other General Staff
- **9.2** The Water Reclamation Facilities Supervisor is responsible for ensuring that all personnel are provided with a copy of this response plan. All personnel are responsible for following these guidelines, and completing all the proper reports with all pertinent information.

- **9.3** Reports must be submitted immediately to a supervisor. If the overflow occurs during off-hours the person responsible shall complete all required reports and notify a supervisor by the following workday.
- **9.4** No persons other than the Water Reclamation Facilities Supervisor is authorized to volunteer District liability or offer cleaning service or repair to affected property owners.
- 9.5 The Water Reclamation Facilities Supervisor is the responsible representative for the District, as described in Section J of the State of California Water Resources Control Board (SWRCB) Order No. 2006-0003, entitled "Statewide General Waste Discharge Requirements for Sanitary Sewer System." Accordingly, the Water Reclamation Facilities Supervisor must complete the required Online SSO System reporting referenced in Section 5.
- **9.6** Apart from the Online SSO System reporting, Water Reclamation Facilities Supervisor shall be responsible for notifying regulatory agencies of overflows/spills within the required time frame.

#### SECTION 10: EMERGENCY TRAFFIC AND CROWD CONTROL

In the event that the spill is located in a high traffic area, the Senior Crew Chief will utilize assistance from the San Diego County Sheriff's Department at (858) 521-5200.

#### SECTION 11: POSTING REOUIREMENTS

- **11.1** Once it has been established that the public health may be at risk, it becomes necessary to post signs warning of contamination in appropriate locations.
- **11.2** Posting of contamination signs will be done in all cases whether there is standing water or the ground is saturated.
- **11.3** Signs will be placed in locations with high visibility as so that they can be seen from all routes that the public might take to enter an area.
- **11.4** Signs will remain posted for a period of not less than five days, or as other wise determined by the Water Reclamation Facilities Supervisor.

#### SECTION 12: TRAINING

All personnel shall review this procedure at tailgate training sessions no less than semi- annually. A "table-top" practice response to a sewer overflow should be implemented no less than annually.

#### SECTION 13: NIMS COMPLIANCE

All NIMS compliance objectives for the Overflow Emergency Response Plan (OERP) are listed below with a description of the District's compliance for each objective:

#### 13.1 Command and Management

Personnel and responsibilities are given in Section 9 of this document. Designated areas are described in Section 7.

#### 13.2 Preparedness

Training and preparedness are described in Section 12 of this document.

#### 13.3 Resource Management

The District uses the services of contractors listed in Section 14 of this document.

#### **13.4** Communication and Information Management Intra-district communication is handled by phone lists given in Section 14. Coordination outside of the District is handled on a case-by-case basis.

## SECTION 14: ATTACHMENTS

- **14.1** Local Vactor Truck Contractors
- **14.2** Emergency Contact List for Sanitary Sewer Overflow

# Local Vactor Truck Contractors

The District has secured the following local contractors to be available to respond to wastewater emergencies:

- 1. National Plant Services A specialty contractor that cleans sewer lines located in San Diego near the I-5 and SR-52.
- Atlas Pumping Services A specialized trucking company that can transport sewage, and clean the spill site. Collected debris can be taken to 4S Ranch treatment plant or to a manhole. Atlas Pumping Services is located in Lakeside.
- 3. Affordable Pumping Services Sewage pumping and transportation.
- 4. Downstream Services, Inc. A firm specializing in cleaning, repairing, and rehabilitating pipelines.
- 5. Godwin Pumps Located in Mira Loma, this firm can rent and sell pumps for cleaning and bypass.
- 6. Traffic Control Specialists Traffic control specialists who can prepare traffic plans and deliver and set up traffic control equipment.
- 7. Ocean Blue Inc. Hazardous waste cleanup contractor. They are located in San Diego near the port.

#### OMWD Spill Response Emergency Contact List

#### Public Agency Notification

For any Category I discharges of sewage that result in a discharge to a drainage channel or a surface water, the District shall, as soon as possible but not later than two (2) hours after becoming aware of the discharge, notify the State Office of Emergency Services, the local health officer or directors of environmental health with jurisdiction over affected water bodies, and the San Diego Regional Water Quality Control Board.

Public Agency Notification	Office Phone	After Hours	Miscellaneous
California Office of Emergency Services	800-852-7550	858-822-8344	916-262-1677 Fax
California Regional Water Quality Control Board: San Diego (R9)	619-516-1990		619-516-1994 Fax
San Diego County Dept. of Health Services	858-495-5579	858-505-6657	619-338-2377 Fax

Name	Title	Direct	Work Cell Phone
Gabriel Hernande	z Chief Plant Operator	858-451-7837 ext. 504	619-851-2115
Jason Emerick	Operator III	858-451-7837 ext. 505	619-994-3962
Raymond Motas	Operator III	858-451-7837 ext. 503	760-415-3422
William Broadhea	d Operator III	858-451-7837 ext. 506	760-415-8230
Jymy Briseno	Operator I	858-451-7837 ext. 502	760-407-4326
Erik Harp	IT Supervisor	760-632-4202	760-415-6242
Rudy Petrovski	ICT II	760-632-4646	760-415-7221
Dan Nevitt	ICT II	N/A	760-579-3842
Jason Gray	ICT I	N/A	760-859-7393
Brian Keeler	ICT I	N/A	760-519-6524
• • • • • • • • • • • • • • • • • • • •	Water Reclamation Facilit Supervisor	ies 858-485-5045	760-613-8322
Geoffrey Fulks	Operations Manager	760-632-4647	442-222-9434
Tim Schuette	Safety Officer	760-632-4217	442-888-0836
Kimberly Thorner	General Manager	760-753-6466	760-415-6158

# Spill Response Vendor Emergency Contact List

Contractor Contact	Office Phone	After Hours Contact	Work Cell Phone
Affordable Pipeline Services	858-689-4000	Corey Duane	858-583-9950 619-818-6795
Atlas Pumping	619-443-7867	Bill	619-971-6208
Downstream Services	760-746-2544		
Traffic Supply Solutions	760-884-3735	Oscar Salcedo	760-212-1470
Godwin Pumps		Nate Warren Andy Dunfee	951-317-8250 858-243-5208
Electrical Contacts:			
Contractor Contact	Office Phone	After Hours Contact	Work Cell Phone
SDG&E Outages	800-611-7343		
Global Power Group	866-547-6937		
	619-579-1221		

## SECTION VII - FATS, OILS, AND GREASE CONTROL PROGRAM

## **Background and Regulatory Requirements**

The Statewide WDRs governing sanitary sewers specify Fats, Oils, and Grease (FOG) Control Programs as an element of each Wastewater Collection Agency's SSMP. This element requires each agency to evaluate its service area to determine whether a FOG control program is needed and to develop a FOG control program if appropriate.

## **District Actions**

The District's Rules and Regulations for Use of District Sewerage Facilities Section 3.1 and Section 3.7 contain language-describing prohibitions on the discharge of any materials or obstructions that have the potential to clog, obstruct or fill the sewer or will interfere with or prevent the effective use of the sewer system. Specifically, Section 3.7 outlines the District's FOG Program. Additionally, there is language prohibiting the discharge of various toxic substances, rain water, and surface water. District Administrative and Ethics Code Section 28 establishes the legal authority to enforce infrastructure improvements in locations with chronic FOG issues.

The District adheres to the California Plumbing Code. Stated within the code, Section 1014.8 stipulates the requirements for grease interceptors for commercial kitchens. At this time, grease interceptors are not required for individual dwelling units or for any private living quarters.

The District has a list of "hot spots" that are logged and tracked by an operator with the majority being caused other problems besides FOG (e.g. roots and debris). Those that are subject to excess FOG and are cleaned more frequently, if necessary. Current authority to inspect grease-producing facilities and enforcement is governed by District Administrative and Ethics Code Article 28. FOG inspections are currently being conducted by an outside consultant on a set quarterly schedule, and then adjusted as needed based on the discharge and compliance.

In part, these codes authorize the District to enforce all provisions of pertinent codes and for such purpose shall have the powers of a peace officer. Additionally, all actions taken by the District staff will provide for the recovery of capital and operation costs of such facilities.

Source control measures for all identified FOG "hot spots" may consist of:

- Distribution of the District's FOG fact sheet for restaurant and homeowner grease control;
- Restaurants could be required to install grease traps, grease interceptors, or oil/water separator via the District's FOG Program; or
- Inspections by District staff and/or contracted employees, as necessary.

## **District Documents Referenced By This Section**

- District Administrative and Ethics Code Section 28
- CPC Chapter 10

## SECTION VIII – SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

## **Background and Regulatory Requirements**

The Statewide WDRs governing sanitary sewers specify that each Wastewater Collection 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 as part of the SSMP.

## **District Actions**

## **Overall System and Treatment Capacity Evaluation**

Flows generated within the District are treated at the 4S Ranch Water Reclamation Facility (4S Ranch WRF). The 4S Ranch WRF is the sole treatment facility for the District and has a treatment capacity of 2 million gallons per day. There is sufficient treatment capacity at the 4S WRF to accommodate the District's projected buildout flows. This was confirmed in the District's 4S Ranch/Rancho Cielo Sewer Build-Out Study and Capacity Assurance Plan which includes future flow projections and hydraulic modeling of the collection system.

In 2015, the District updated its Capital Improvement Plan (Master Plan). An annual contribution in the overall CIP was allocated for collection system pipe rehabilitation and replacement. CIP projects at the pump stations are detailed as well. The plan further identifies the specific capital improvement projects necessary to address the improvements along with triggers related to the timing of their implementation. The current system capacity is sufficient to convey the current peak sewer flows.

## **Pump Station Evaluation**

A list of all 14 lift stations in the District is shown below with each of their respective pump flow rate and head.

Pump Station	Flow Rate, gpm	Pump Head, ft.
Neighborhood 1	1,360	225
Neighborhood 3	1,600	209
Firehouse	750	120
Mid-Point	1,700	185
Del Dios	1,000	217
Camino San Puente #1	60	150
Camino San Puente #2	60	150

Pump Station	Flow Rate, gpm	Pump Head, ft.
Camino San Puente #3	60	150
Camino San Puente #4	60	150
Cerro Del Sol #1	100	
Cerro Del Sol #2	200	
Avenida Apiece	60	
Avenida Orilla	60	
Santa Luz	120	193

## Design Criteria

All design criteria for current and future sewer projects will adhere to the District Standard Drawings and Specifications and as stated in the District's Rules and Regulations. For planning purposes, the District utilizes a 280 gpd/EDU generation rate for Rancho Cielo and a 250 gpd/EDU generation rate for 4S Ranch per District flow studies.

## Capacity Enhancement Measures

The Master Plan contains a list of each project identified as necessary to maintain the capacity of segments within the sewer system and in order to ensure continued high-quality service to District customers. If no improvements are required in the short term, then long-term improvements will be planned according to development and metered sewer flows.

## <u>Schedule</u>

Per the Master Plan update there are CIP projects currently identified for the District for long range planning (10-year and 20-year). The CIP projects are identified for the District's collection system, pump stations, as well as the 4S Ranch WRF. The 10 Year CIP from the Master Plan is continually updated as part of the District's annual budget process.

#### SECTION IX – MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS

#### **Background and Regulatory Requirements**

The Statewide WDRs governing sanitary sewers specify that each Wastewater Collection Agency shall:

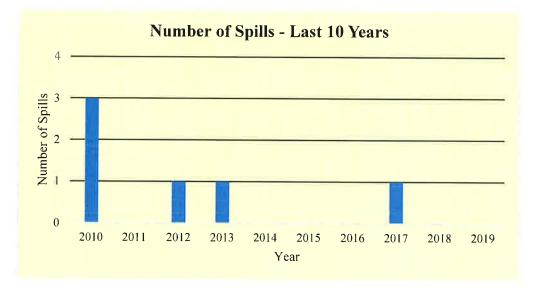
- maintain relevant information that can be used to establish and prioritize appropriate SSMP activities,
- monitor the implementation and measure the effectiveness of each element of the SSMP,
- assess the success of the preventative maintenance program,
- update program elements, as appropriate based on monitoring or performance evaluations, and
- identify and illustrate SSO trends, including frequency, location, and volume.

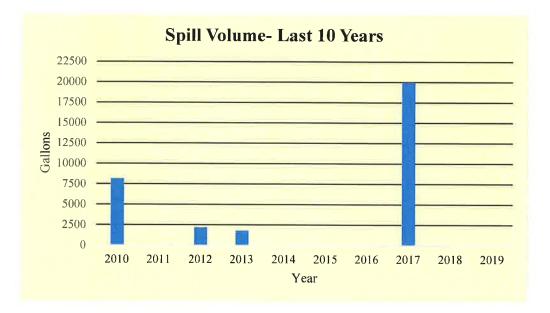
Maintaining the applicability of the SSMP to District activities necessitates ongoing evaluation of the activities the District performs, their success, and improvement if necessary.

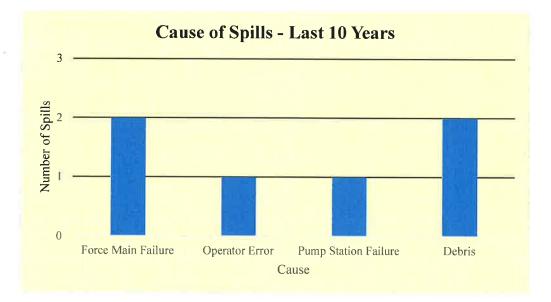
#### **District Actions**

#### Preventative Maintenance Program Evaluation

The graphs below illustrate the District's spill history over the last decade, not including private lines or laterals. Exhibit A illustrates the spill locations and Appendix G presents the spill summary list. The exact location of two spills are not known and are omitted on Exhibit A.







#### Monitoring, Measuring, and Modifying the SSMP Sections

Upon completion of the SSMP, the District will evaluate the SSMP elements and make program modifications as necessary. To ensure that all elements of the SSMP are implemented, relevant, and effective, the District will complete the SSMP Section IX Spreadsheet. The spreadsheet was developed by the District during the course of SSMP development with the specific purpose of evaluating the SSMP and will be conducted concurrent with future SSMP Audits. The spreadsheet can be found on the next pages. Changes to the spreadsheet will be documented in future audits of this SSMP.

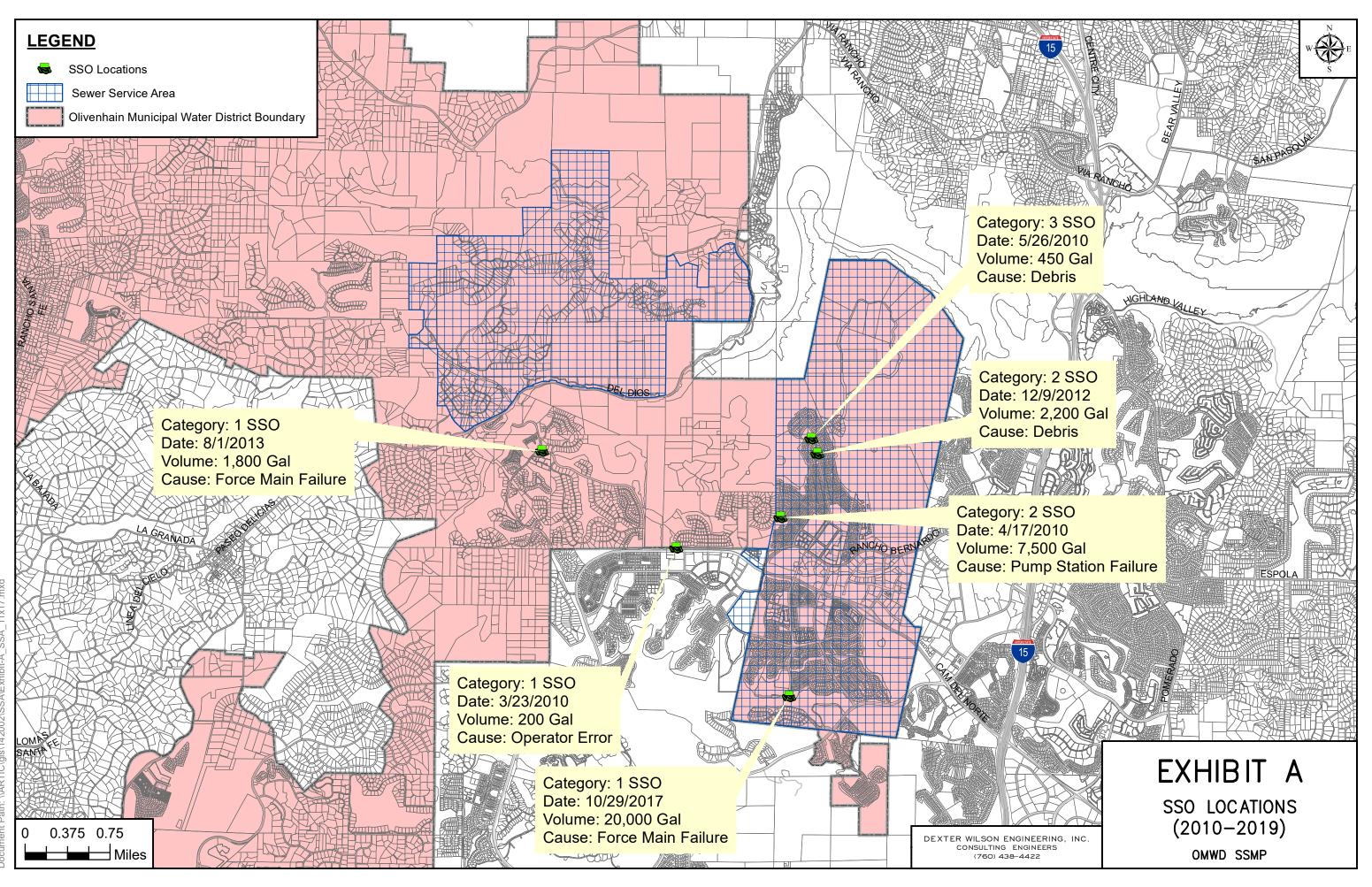
### **District Documents Referenced By This Section**

- SSMP Section IX Spreadsheet
- Exhibit A (SSO Locations 2010-2019)

Olivenhain Municipal Water District Sewer System Management Plan, Section IX

OMWD SSMP < Year>						
Monitoring, Measurement, and Pr	ogram Modification Spreads	heet				
Action			13 E- 31	2020		남자 잘 보니? 동
SSOs		Count	Gallons	Responsible Person	Date Completed	Documentation
Enter all SSOs into GIS						
Number of SSOs	Dry Weather					
	Wet Weather					
	Total					
Volume Distribution of SSOs	<100 gallons					
	100 to 999 gallons					
	1,000 to 9,999 gallons					
	>10,000 gallons					
Volume of SSOs contained						
Volume that contacted water ways						
Volume that closed down beaches						
SSO by cause	Root					
	Grease					
	Debris					
	Pipe Failure					
	Pump Station Failure					
	Capacity					
	Other					
Preventative Maintenance (PM)	the second s	Count		Responsible Date		
		Feet	Miles	Person	Completed	Documentation
Preventative gravity main	Small Diameter (6" to 12")					
inspections	, , , , , , , , , , , , , , , , , , ,					
	Large Diameter (>12")					
	Total					
Post-work gravity main inspections	Small Diameter (6" to 12")					
	Large Diameter (>12")					
	Total					
Gravity main cleaned	Small Diameter (6" to 12")					
	Large Diameter (>12")					
	Total					
Chemical root control						
Valves exercised						
Manholes inspected						
Easements inspected						
Interceptors inspected						
CCTV inspections	Pipeline					
	Manholes					
Pipe repairs						
Pipe replacements						
Manhole cover replacements						
Meter repairs						
Meter replacements						
How many new dischargers were ad potential?	-					
How many have grease interceptors devices?						
What percentage of known FOG pro	blem areas were cleaned?					

Preventative Maintenance (PM), cont.		Co	ount	Responsible	Date	
		Feet	Miles	Person	Completed	Documentation
How many new FOG problem are	as were added this year?					
Preventative Maintenance (PM) E	xpenditure					
Review and Update		Ye	s/No	Responsible Person	Date Completed	Documentation
Review and Update GIS	Facilities			1 Groon	completed	
	FOG information					
	SSOs					
	Cleaning activities					
	CCTV inspections					
Review and Update Hydraulic Model	Existing flows					
	Future flow projections					
Review and Update Organizationa						
Update Staff and Personnel Conta	act Information					
Review and Update Regulatory Ag Agency Contact	gency and Potential Affected					
Review and Update SSMP Chang	e Log and Appendices					
Training		Yes	s/No	Responsible Person	Date Completed	Documentation
CWEA O&M Vol. 1 Training				, oroon	Completed	
CWEA O&M Vol. 2 Training						
OERP and Spill Response						
First Aid						
Other						



#### SECTION X - PROGRAM AUDITS

#### **Background and Regulatory Requirements**

The Statewide WDRs governing sanitary sewers specify that the District shall conduct periodic internal audits, appropriate to the size of the system and the number of SSOs. These audits must occur at a minimum of every two years and a report must be prepared and kept on file. The audit shall focus on evaluating the effectiveness of the SSMP and the District's compliance with the SSMP requirements, including the identification of any deficiencies in the SSMP and the steps to correct them.

#### **District Actions**

Every year following the completion of this SSMP, the District will conduct an audit (internally or externally) of the SSMP using the Section IX Spreadsheet and X Checklist. Information used to monitor and measure the success of the SSMP will be used to prepare the audit and any program modifications will be documented at this time. The Appendix B Change Log will be updated as necessary. The audit will include the identification of any significant changes to components of the SSMP, the referenced compliance documents, implementation efforts over the past two years, CIP projects for the past two years and upcoming two years, and strategies to correct deficiencies. The findings of the audit will be reported to the Board and the audit report will be posted on the District's website for public review.

Section	Requirement	SSMP Current	SSMP Implemented
I - Goals	Reduce, prevent, and mitigate SSOs		
	Designate Legal Responsible Oversight		
II - Organization	Organizational Chart		
	Contact info for SSMP implementation		
	Prevent illicit discharges		
	Require proper design and construction		
III - Legal Authority	Ensure access to facilities		
Authority	Limit FOG		
	Enforce violations		
	Up to date mapping		
	Describe routine PM program		
IV - O&M	Rehabilitation and replacement plan		
Program	Proper training		
	Equipment and replacement part inventories		
	Design and construction standards for new facilities		
	Design and construction standards for rehab and		
V - Design and	replacement facilities		
Performance	Procedures and standards for inspection and		
Provisions	testing of new facilities		
	Procedures and standards for inspection and		
	testing of rehab facilities		
	Notification procedures		
177 0 7	Response plan		
VI - Overflow	Appropriate training		
Emergency Response Plan	Procedures for emergency operations		
Response Fian	Program to contain and prevent SSOs from		
	reaching waters		
VII - FOG Control Program	Determine if applicable		
	Capacity evaluation up to date		
VIII - System	Design criteria in place		
Capacity Assurance	Capacity enhancement measures		
Assurance	Schedule		
	Maintain relevant info		
	Monitor implementation		
IX - MMM	Assess success of PM program		
	Update program elements		
	Identify and illustrate SSO trends		
	Conduct annual audit		
X - SSMP Audits	Prepare audit report		
	Record changes made/corrective action taken		
XI -	Communicate regarding preparation		
Communication	Communicate regarding performance		
Program	Communicate with surrounding agencies		

#### SECTION XI - COMMUNICATIONS

#### **Background and Regulatory Requirements**

The Statewide WDRs governing sanitary sewers specify that the District 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 District as the program is developed and implemented. The District shall also have a plan of communication with systems that are tributary to the District's sanitary sewer system.

#### **District Actions**

#### <u>Website</u>

The District's website <u>https://www.olivenhain.com</u> provides information on the District ranging from sewer studies and rules and regulations to general information of how to access pertinent codes and ordinances which state current fees and charges. Additionally, the District's website provides access to Board agendas and minutes which provides access to SSMP activities when they come before the Board.

#### **Opportunity for Public Comment**

The District's website provides the community with avenues to contact the District with any questions they may have regarding the SSMP.

The District reports SSOs electronically to the California Integrated Water Quality System (CIWQS). The electronic SSO data, which has a public information section as well as information regarding regulatory actions, is available at:

#### http://www.waterboards.ca.gov/water\_issues/programs/ciwqs/publicreports.shtml

#### Interactions with Neighboring Agencies

Neighboring sewer agencies adjacent to the District are the City of San Diego and the Rancho Santa Fe Community Services District. The District also has a shared resources agreement with the San Elijo Joint Powers Authority for continued training.

#### **APPENDIX A**

#### OFFICIAL ADOPTION OF THE 2020 SSMP UPDATE BY THE OLIVENHAIN MUNICIPAL WATER DISTRICT

#### RESOLUTION NO. 2020-07

#### RESOLUTION OF THE OLIVENHAIN MUNICIPAL WATER DISTRICT BOARD OF DIRECTORS ADOPTING THE 2020 SEWER SYSTEM MANAGEMENT PLAN

WHEREAS, on May 2, 2006, the State Water Resource Control Board adopted Order No. 2006-0003-DWQ requiring all federal, and state agencies, municipalities, counties, districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California, to comply with the terms of this order; and

WHEREAS, such order requires each municipality to prepare and implement a Sewer System Management Plan (SSMP) that will include provisions to provide proper and efficient management, operation, and maintenance of sanitary sewer systems, while taking into consideration risk management and health benefits; and

WHEREAS, the SSMP must be reviewed and updated consistent with the requirements as described in the Order; and

WHEREAS, District staff has reviewed and updated the SSMP and continues to comply with the Order; and

WHEREAS, the Statewide General Waste Discharge Requirements stipulate that the District maintains continuous coverage by a Legally Responsible Official (LRO) registered with the State Water Board, for purposes of managing and certifying the activities of the District's sewer collection system; and

WHEREAS, Kimberly A. Thorner is the District's LRO and desires to expand the designation of LRO classification to assure full coverage of sewer system activities.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of Olivenhain Municipal Water District does RESOLVE as follows:

SECTION 1. The Board of Directors of Olivenhain Municipal Water District approves and adopts the updated Sewer System Management Plan as required by the State Water Resources Control Board Order No. 2006-0003-DWQ Statewide General Waste Discharge Requirements for Sanitary Sewer Systems.

SECTION 2. The Board of Directors of Olivenhain Municipal Water District acknowledges Kimberly A. Thorner's designation of the following as an additional 4S Ranch and Rancho Cielo Sewer Systems LRO for State Water Resources Control Board Sanitary Sewer System Waste Discharge Regulations:

• John Onkka, Water Reclamation Facility Supervisor

RESOLUTION NO. 2020-07 continued

PASSED, ADOPTED AND APPROVED at a regular meeting of the Board of Directors of Olivenhain Municipal Water District held on Wednesday, May 20, 2020.

Edmund K. Sprague, President Board of Directors Olivenhain Municipal Water District

ATTEST:

Kimberly A. Thorner, Assistant Secretary General Manager Olivenhain Municipal Water District

#### **APPENDIX B**

SSMP CHANGE LOG

	OLIVENHAIN MUNICIPAL WATER DISTRICT 2020 SEWER SYSTEM MANAGEMENT PLAN CHANGE LOG					
Date	SSMP Element/ Section	Description of Change/Revision Made	Change* Authorized By:			

\*See attached email from District LRO/General Manager.

#### **APPENDIX C**

AUDITS OF THE SSMP

# (PLACEHOLDER FOR FUTURE AUDITS OF THE 2020 SSMP)

#### **APPENDIX D**

SSMP TASKS

	SSMP ITEMS CHECKLIST					
Target Completion Date	Document	Action	Date Completed	SSMP Section Reference	SSMP Change Needed Once Complete*	
Jun 2020	OMWD Strategic Plan	Add cross-agency spill response activity as an objective in the 2021 Strategic Plan		-	No	
Jun 2020	Update District website	<ul> <li>a. Remove Standard</li> <li>Sewer Notes from</li> <li>Wastewater section, these are now addressed in</li> <li>OMWD Standard</li> <li>Drawings and</li> <li>Specifications. Confirm</li> <li>with Engineering.</li> <li>b. Fix links for Rules</li> <li>and Regulations and</li> <li>Buildout Sewer Study.</li> <li>c. Remove SSMP and</li> <li>replace with new once</li> <li>Board adopts.</li> </ul>		-	No	
Jun 2020	OERP	Add spill review checklist, spill data sheet, volume estimate, etc.		6	Yes	
Jun 2020 Jun 2020	OERP	Perform detailed review and include discussion about storm drains, response trailer, check phone numbers, etc. Confirm LRO and Data		6	Yes	
Jun 2020	Operation and Maintenance Program	Submitters are current Review detailed checklist and refine based on staff input (e.g. is "siphon cleaned", are there siphons? If so, why cleaning?)		4	Yes	
Dec 2020	Operation and Maintenance Program	Complete Inflow and Infiltration Study		4 and 8	No	

		SSMP ITEMS CHECK	LIST		
Target Completion Date	Document	Action	Date Completed	SSMP Section Reference	SSMP Change Needed Once Complete*
Dec 2020	Training	Create training schedule for OERP, SSO documentation, traffic control, etc. and implement		All	Yes
Dec 2020	Monitoring Measurement	Create spill estimation, reporting form, and documentation (including mapping of location, cause, volume spilled, and Category). Add estimation and reporting forms to OERP.		9	Yes
Dec 2020	Monitoring Measurement	Create folder in District office specifically dedicated to track spill information.		9	No
Dec 2020	FOG	Add list of disposal sites/vendors to FOG binder and update cover letter		7	No
Dec 2020	Operations and Maintenance	Update field map books to include storm drains. Provide copy to field staff and CCTV, Hydrocleaning, and FOG contractors.		4	Yes
Dec 2020	Rules and Regulations	Review Rules and Regulations, update as necessary.		3	Maybe
Mar 2021	Annual Audit	Complete Audit		10	No
Mar 2021	-	Confirm with Ops that Pump Station Iso Valves were exercised		4	No
Mar 2021	WDR	Check SWRCB website for revised WDR and/or MRP status		-	No
Mar 2022	Annual Audit	Complete Audit		10	No

SSMP ITEMS CHECKLIST						
Target Completion Date	Document	Action	Date Completed	SSMP Section Reference	SSMP Change Needed Once Complete*	
Mar 2022	Maintenance Master Plan	Review every 2 years and Make Changes, if necessary.		4	No	
Mar 2023	Annual Audit	Complete Audit		10	No	
Mar 2024	Annual Audit	Complete Audit		10	No	
Mar 2024	OMWD Strategic Plan	Add 2025 SSMP Revision as 2025 Calendar Year Objective (complete by May 2025)		-	No	
Mar 2025	SSMP	Review and recertify SSMP		-	Yes	

\* Yes means necessary to document change in SSMP change log, but not necessary for Board to readopt SSMP. Exception = 2025 SSMP recertification.

#### **APPENDIX E**

#### SANITARY SEWER MAINTENANCE PLAN

# OLIVENHAIN MUNICIPAL WATER DISTRICT

# SANITARY SEWER MAINTENANCE MASTER PLAN

Modified 4/23/2020



### **OLIVENHAIN MUNICIPAL WATER DISTRICT**

### SANITARY SEWER MAINTENANCE MASTER PLAN

- **Goal:** In an attempt to protect the environment and serve the customers of the Olivenhain Municipal Water District, (District) has developed a sanitary sewer maintenance master plan. The intent of this master plan is to ensure, at all times, free-flowing conditions within the sewer collection system owned by the District. Within this master plan, the necessary aspects of maintenance have been addressed under the following areas.
  - 1. Sewer collection system access
  - 2. On-going collection system maintenance
  - 3. Recommend capital sewer collection system replacement
  - 4. Sewage lift station maintenance
  - 5. Spill response
  - 6. Spill reporting

#### SEWER COLLECTION SYSTEM ACCESS

System access is the most important aspect of a properly maintained sewer collection system. System access must be addressed in the following phases of development:

- Plan Review- District Engineering staff review plans to ensure that the District is aware of any proposed encroachment on any District owned/maintained sewer main line.
- Encroachment Permits- In the event that the District allows an encroachment into a sewer easement, property owners must obtain an encroachment permit and conditions are placed on the property owner. These conditions limit the type of structures and vegetation allowed within the easement. The District does not allow the placement of any vegetation that can ultimately cause root intrusion into the sewer system or block access. Further, the District limits the type of structures that can be placed within an easement to prevent compromising the pipeline

infrastructure or limiting access to the sewer pipelines by District personnel.

• Annual inspection of sewer easements- It is the intent of the District to conduct visual inspections of the sewer easement areas on an annual basis in order to identify and correct any encroachment issues. Identified encroachments are documented in the field, and evaluated by the Engineering staff for appropriate action.

#### **ON-GOING COLLECTION SYSTEM MAINTENANCE**

The District has developed a collection system maintenance strategy, which incorporates annual sewer line cleaning and videoing.

The management of the routine collection system cleaning follows best industry practices. Sewer lines are cleaned typically by hydrorodding techniques and debris is collected and disposed of at the 4S Ranch Wastewater Treatment Plant. In order to minimize mobilization costs and best manage the cleaning program, the District has contracted with a private collection system maintenance firm to clean and televise approximately 20% of the District's sewer collection system annually.

The current strategy for cleaning is to focus on the oldest section of the system first and work towards the newest. As the cleaning and videoing progresses, trouble sections or hot-spots are identified. These hot-spots are evaluated to determine:

- 1. The cause of the problem: (Upstream dischargers, flat spots, sags, off-set joints, etc.)
- 2. The frequency of maintenance required to prevent an obstruction and subsequent sewer overflow
- 3. The feasibility of correcting the problem via source control techniques, or capital improvement projects.

Ultimately, the entire system will be cleaned and the District will be able to document and prioritize the hot-spots and potential capital projects necessary within the system. As new areas are added to the system, the District will incorporate those areas into the maintenance master plan.

Managing hot-spots is done by utilizing the District's Computerized Maintenance Management System (CMMS) program. By using this software, the District can input a description of the hot-spot, including location and required maintenance method. In addition, the appropriate maintenance frequency is included. When due, this system will generate a work order directing the District to perform the necessary maintenance, and also allows the District to document the findings for record. Hot-spot management is a dynamic process. The monitoring frequency my increase or decrease depending on the conditions, and completion of capital improvement projects. The CMMS will allow that flexibility.

#### **RECOMMEND CAPITAL SEWER COLLECTION SYSTEM REPLACEMENT**

During the cleaning cycles, sections of the collection systems may be found to be in a deteriorated condition. An indication of deteriorated sections would include rocks, roots, and other material that is observed in the debris removed. When observed, these areas will be televised to document the specific area of failure. Depending on the severity of the problem observed, the District may elect to immediately address those areas or place them within their capital repairs projects for future years.

Until the improvement projects are completed, they will be placed on a hot-spot list, and monitored on an accelerated frequency to ensure a free-flowing condition. In addition, based on the soil type and moisture content, the District has verified through video that portions of the sewer system have sagged and offer a potential for a line blockage. As the District continues to locate these areas, they will be added to the hot spot list and inspected at an appropriate frequency to insure a free-flowing condition.

#### MONITORING SEWAGE LIFT STATIONS

There are presently fourteen (14) sewer lift stations operating within the District sewer sanitation districts. These lift stations are briefly described below.

The District's Neighborhood 1 sewer lift station has been in operation since 2002. This pump station was designed with a wetwell and a ground level pump station. Located within the wetwell are two submersible pumps. These submersible pumps are paired with horizontal pumps in the ground level pump station. The submersible pump moves the wastewater from within the wetwell and pushes it into the horizontal pump. The horizontal pump then pumps the water to the treatment facility. The two submersible pumps have 75 hp motors and are capable of pumping to 1,360 gallons per minute to 123 feet of head. The horizontal pumps use 125 hp motors to pump 1,360 gallons per minute to a 223 feet. The horizontal pumps utilize VFD's, while the submersible pumps are constant speed. The wetwell is operated in a "draw" and "fill" mode. Like the 4S Ranch Sewer Lift Station, Neighborhood 1 sewer lift station has a generator to supply power in case of an electrical failure. The station also has an adjacent concrete lined basin to contain spills if the pumps are unable to operate.

The District's Neighborhood 3 sewer lift station has been in operation since 2003. This pump station was designed with a wetwell and a ground level pump station. Located within the wetwell are two submersible pumps. These submersible pumps are paired with horizontal pumps in the ground level pump station. The submersible pump moves the wastewater from within the wetwell and pushes it into the horizontal pump. The horizontal pump then pumps the water to the treatment facility. The two submersible pumps have 75 hp motors and are capable of pumping to 1,360 gallons per minute to 123 feet of head. The horizontal pumps use 125 hp motors to pump 1,360 gallons per minute to a 223 feet. The horizontal pumps utilize VFD's, while the submersible pumps are constant speed. The wetwell is operated in a "draw" and "fill" mode. This sewer lift station also has a generator to supply power in case of an electrical failure.

The District's Mid-Point sewer lift station has been in operation since 2007. This pump station was designed with a wetwell and a ground level pump station. Located within the wetwell are three vertical submersible pumps. The submersible pump moves the wastewater from within the wetwell and pushes it out to the 4S Treatment plant. The three submersible pumps have 75 hp motors and are capable of pumping to 850 gallons per minute to 193 feet of head. The submersible pumps are constant speed. The wetwell is operated in a "draw" and "fill" mode. This sewer lift station also has a generator to supply power in case of an electrical failure.

The District's Del Dios sewer lift station has been in operation since 2005. This pump station was designed with a wetwell and a ground level pump station. Located within the wetwell are two submersible pumps. These submersible pumps are paired with horizontal pumps in the ground level pump station. The submersible pump moves the wastewater from within the wetwell and pushes it into the horizontal pump. The horizontal pump then pumps the water to the Mid-Point pump station. The two submersible pumps have 75 hp motors and are capable of pumping to 1,360 gallons per minute to 123 feet of head. The horizontal pumps use 125 hp motors to pump 1,014 gallons per minute to a 217 feet. The horizontal pumps utilize VFD's, while the submersible pumps are constant speed. The wetwell is operated in a "draw" and "fill" mode. This sewer lift station also has a generator to supply power in case of an electrical failure.

The District's four (4) Camino Sin Puente lift stations have been in operation since 2007. These pump stations were designed with a wetwell and a ground level pump station. Located within each station's wetwell are two submersible pumps. The submersible pump moves the wastewater from within the wetwell and pushes it to the 4S Treatment Plant. The submersible pumps have 7.5 hp motors and are constant speed. The wetwell is operated in a "draw" and "fill" mode.

The District's Santa Luz sewer lift station has been in operation since 2007. This pump station was designed with a wetwell and a ground level pump station. Located within the wetwell are three vertical submersible pumps. The submersible pump moves the wastewater from within the wetwell and pushes it out to the 4S Treatment plant. The three submersible pumps have 75 hp motors and are capable of pumping to 850 gallons per minute to 193 feet of head. The submersible pumps are constant speed. The wetwell is operated in a "draw" and "fill" mode.

Firehouse SPS: Wetwell/Drywell pump station with emergency storage. Wetwell is a 10feet by 8-feet, 22-foot deep, reinforced concrete wetwell. Two drypit non-clog pumps (Fairbanks Morse Model D 5433 WD, 750 gpm @ 120-ft; 50HP) through a common 10" glass-lined ductile iron, 2,830-foot long forcemain. The Fire House SPS is constant speed operating on draw/fill operation. The Fire House SPS operates approximately 3.8 hours per day in draw/fill control sequence with an average of 3.9 pump starts per hour (maximum of 7 pump starts per hour). The Fire House SPS does have a flowmeter, daily flows average between 160,000 to 190,000 gallons per day. The site contains a 144,000 gallon emergency storage pond. Assuming peak hour flowrate of 365 gallons per minute (roughly 3x current average daily flow), the emergency storage pond provides 6.5 hours of emergency storage.

Avenida Orilla SPS: Duplex submersible pump station with emergency storage, which has been in operation since 2016. Wetwell is a 7-foot diameter, 25-foot deep, precast concrete wetwell with T-Lock PVC liner. Two submersible pumps (10 HP Myers Grinder Pumps) pump through 3" discharge pipes, a below grade valve vault, flowmeter and then a common 3" PVC, 1,220-foot long forcemain. The Avenida Orilla SPS operates in a "draw and fill" mode and is currently pumping ten (10) times per day. The site contains an 8,378 gallon emergency storage tank. This station does not have an emergency generator but is wired with a plug for use with a temporary/portable generator unit.

Avenida Apice SPS: Duplex submersible pump station with emergency storage, which has been in operation since 2015. Wetwell is a 7-foot diameter, 19-foot deep, reinforced pre-cast concrete wetwell with T-Lock PVC Liner. Two submersible pumps (3 HP Myers Grinder Pumps) pump through 3" discharge pipes, a below grade valve vault, and then a common 4" PVC, 429-foot long forcemain. The Avenida Apice SPS operates in a "draw and fill" mode and is currently pumping eight (8) times per day. The site contains a 9,574 gallon emergency storage tank. This station does not have an emergency generator but is wired with a plug for use with a temporary/portable generator unit.

Cerro Del Sol #1 SPS: Duplex submersible pump station with emergency storage which has been in operation since 2015. Wetwell is a 7-foot diameter, 24-foot deep, precast concrete wetwell with T-Lock PVC liner. Two submersible pumps (10 HP Myers Grinder Pumps) pump through 3" discharge pipes, a below grade valve vault, and then a common 3" PVC, 930-foot long forcemain. The Cerro Del Sol #1 SPS operates in a "draw and fill" mode and is currently pumping four (4) times per day. The site contains 23,936 gallons of emergency storage in two tanks. This station does not have an emergency generator but is wired with a plug for use with a temporary/portable generator unit.

Cerro Del Sol #2 SPS: Triplex submersible pump station with emergency storage which has been in operation since 2014. Wetwell is a 7-foot diameter, 17.5-foot deep, precast concrete wetwell. Three submersible pumps (10 HP Myers Grinder Pumps) pump through 3" discharge pipes, a below grade valve vault, and then a common 4" PVC, 1,150-foot long forcemain. The Cerro Del Sol #2 SPS is constant speed in draw/fill control sequence with an average of 53 pump starts per day (maximum of 5 pump starts per hour). The Cerro Del Sol #2 SPS does not have a flowmeter – based on pump starts and runtime, it is estimated that it pumps 3000 to 5000 gallons per day. The site does not contain emergency storage, however, in an emergency situation, wastewater will backflow to the Cerro Del Sol #1 emergency storage tank. This station does not have an emergency generator but is wired with a plug for use with a temporary/portable generator unit.

District personnel to routinely check each lift station and perform preventative maintenance as required. All lift stations are also monitored by the District's SCADA system. Operators are notified of any operational problems, via a pager and are able to make operational changes using a laptop computer.

#### **RESPONSE TO A SEWER SPILL**

The Olivenhain Municipal Water District has developed a comprehensive, thorough Overflow Emergency Response Plan (OERP). This OERP serves to protect health, the environment, and property within the District, and meets all state and local regulatory requirements. In the event of a sewer spill, District staff follow the procedures detailed in the OERP.

#### SPILL REPORTING

In the event of a sewer spill, the District must report the spill as described by the State Water Quality Control Board and by Region 9 (San Diego) Water Quality Control Board. The District's OERP details the reporting responsibilities and required timeframes. In addition, the OERP maintains contact information for reporting.

#### **APPENDIX F**

#### LIST OF CRITICAL REPLACEMENT PARTS, MAINTENANCE AND SPILL RESPONSE EQUIPMENT LIST, "HOT SPOT" LIST, AND TRAINING SCHEDULE

Operation and maintenance (O&M) manuals for pump station equipment are available. The manuals contain manufacturer information, i.e. part lists, maintenance and troubleshooting procedures. OMWD maintains and tracks inventory on critical items and other non-essential items are ordered as needed. All pump stations were designed to have redundancy in pumps and motors with emergency generators on site or possibilities to connect to a mobile generator.

The following were identified as critical items:

- Fairbanks Morse Pump (40 Hp Motor).
- Fairbanks Morse Pump (75Hp Motor).
- Hydromatic Pump (7.5 Hp)
- Motor, 10Hp 3-Phase (6Ajc8)
- Seal water pump (2 Hp)
- Pump Flow Meter (12-M-1)
- Misc. parts and supplies
- Supplies for Spill Response Trailor

#### The 4S WRF Spill Response Trailer is equipped with the following:

- 1ea. 3" trash pump (gas powered)
- 1ea. 4"-3" cam-lock adapter
- 1ea. 3"-4" cam-lock adapter
- 1ea. bag of empty sandbags (for spill containment)
- 1ea. silicon storm drain cover
- 1ea. silicon containment berm
- 4ea. Large (24") retro-reflective stop/slow paddles suitable for day or night use
- 1ea. bolt cutter (master key)
- 1ea. 25' extension cord
- 1ea. 100' extension cord
- 16ea. 28" traffic cones (with dual reflector bands) suitable for day or night use
- 5ea. 3"x50' lay-flat discharge hose with cam-lock couplers
- 8ea. 4"x50' lay-flat discharge hose with cam-lock couplers
- 1ea. 1000 Watt portable gas powered generator

- 1ea. light stand with 2500w lights
- 3ea. sewage spill signs on stakes
- 1ea. hammer
- 1ea. roll of "caution" tape
- 1ea. Generator power cable for CSPSPS, SLSPS, and CDSSPS
- 2ea. 50' ¾"garden hose with standard garden hose ends
- 1ea. fire hydrant to garden hose adapter
- 1ea. 20' 3" hard suction hose
- 5ea. tarps
- 1ea. dolly
- 1ea. fire hydrant wrench
- 1ea. spray nozzle for wash down
- 1ea. Coleman generator
- 2ea. traffic control sign base (folding)
- 2ea. traffic control sign (utility work ahead)

## Manholes with Issues

Manhole Numbers	Locations	Map Pg.	Problem	Comments
1-18	Boys and Girls Club Easement	S18	Roots	Large Pepper Tree Lt Roots Good Flow
1-9	Boys and Girls Club Easement	S18	Rocks	Rocks and Dirt on Shelf
5-21	10992 La Alberca Ave	U16	Hvy Roots	Outside Fence Hvy Roots Needs
1-20	Yard @ Deer Trail Ct. Cul-de-Sac	T18	Vegetation	Sancon Bushes Need Trim
1-388	Easement Behind Cayenne Ridge Rd.	U17	Rag Blockage	Partially Obstructed Channel Monitor
5-2	From Abudante Gravity Line	U16	Roots	Behind Plant Needs Sancon
5-4	From Abudante Gravity Line	U16	Roots	Under Tree Needs to be Exposed
2-116	RB Road and Dove Canyon	T15	Grease	
2-117	RB Road and Dove Canyon	T15	Grease	
2-46	Alva Rd. Near Bernardo Point	U14	Roots	Curb Marked w/Spray Paint
2-73	Bluestone St. Cul-de-Sac	U15	Roots	By Gate Needs to be Raised and Sancon
3-60	4S Ranch Pkwy and Craftsman Way	T15	Rags and Grease	
2-1	Goldentop to Firehouse Easement	U15	Roots	
2-2	Goldentop to Firehouse Easement	U15	Roots	
2-3	Goldentop to Firehouse Easement	U15	Roots	

2-4	Goldentop Rd.	U16	Roots	
2-5	Goldentop Rd.	U16	Roots	
2-22	Goldentop Rd.	U16	Roots	
2-44	Alva Road 1st MH up from RB Road	U15	Roots	Curb Marked w/Spray Paint

# Zones 2, 4, 5 Hot Spots

Manhole #	Map Page	Problem	Comments
five-35	U17	Concrete degradation	Top 2 rings need rehab then line
five-34	U17	Possible I & I	Check during rain event
four-2	S15	Heavy Roots	Needs Lining
four-4	S15	Light Roots Conc Degrad.	Needs Lining
two-38	U15	Slow Moving Rocks	Inspect Quarterly
two-2	U15	Hvy Roots	Sancon to Address
two-3	U15	Hvy Roots	Sancon to Address
two-81	U15	Debris in Channel	Inspect Quarterly
two-116	T16	Hvy Grease	Needs Cleaning
two-123	T16	Hvy Grease	Needs Cleaning
two-71	U15	Slow Moving Full Channel	Needs Cleaning
two-72	U15	Slow Moving Grit	Needs Cleaning and Lining
two-42	U15	Hvy Roots	Needs Lining ASAP
two-50	U15	Light Roots	Inspect Quarterly
two-100	T15	Possible I & I	Check during rain event
two-107	T15	Possible I & I	Check during rain event
two-29	U15	Light Roots	Inspect Quarterly
two-14	U16	Light Roots	Inspect Quarterly
two-15	U16	Light Roots	Inspect Quarterly
two-124	T16	Hvy Grease	Needs Cleaning
two-125	T16	Hvy Grease	Needs Cleaning

OMWD Collection Safety Training Topics					
Training Topics	Frequency				
Bloodborne Pathogens	Annual				
Heat Illness	Annual				
Confined Space Refresher	Annual				
CPR/First Aid	Every 2 years				
Hazmat Technician Refresher	Annual				
Lockout Tagout	Annual				
Defensive Driving	Annual				
Fall Protection	Annual				
Ladder Safety	Annual				
Traffic Control	Annual				
Electrical Safety	Annual				
Fire Safety and Extinguisher Training	Annual				
Emergency Response Drill	Annual				
SWPPP (Stormwater Pollution Prevention Plan) Review	Annual				
SSMP (Sanitary Sewer Management Plan) Review	Annual				
OEMP (Overflow Emergency Response Plan) Review	Annual				
SSO Simulated Training	Annual				

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ALL COMPLETED SAFETY TRAINING IS TRACKED BY THE WATER RECLAMATION FACILITY SUPERVISOR AND/OR SAFETY OFFICER.

#### **APPENDIX G**

#### SANITARY SEWER OVERFLOW (SSO) SUMMARY

	SSO_	CERT_PERSON_				
WDID	EVENT_ID	NAME	CERT_PERSON_TITLE	CERT_LOCATION	CERT_ID	CERT_DT
9SSO10644	751316	John Onkka	Recycled Water Programs Supervisor	San Diego, CA	792918	2011.02.10 00.00.00
9SSO10644	751793	John Onkka	Recycled Water Programs Supervisor	San Diego, CA 92127	832558	2010.04.26 00.00.00
9SSO10644	753850	John Onkka	Recycled Water Programs Supervisor	4S Ranch WWTP - San Diego	415752	2010.06.24 00.00.00
9SSO10644	788966	John Onkka	Recycled Water Supervisor	San Diego, CA	746892	2012.12.14 00.00.00
9SSO10644	797538	John Onkka	Recycled Water Supervisor	San Diego, CA	522060	2013.08.28 00.00.00
9SSO10644	841247	John Onkka	Water Reclamation Supervisor	San Diego, CA	451079	2017.11.14 00.00.00

			SPILL_VOL_	SPILL_	SPILL_VOL_	SPILL_VOL_	
WDID	SPILL_TYPE	SPILL_LOC_NAME	REACHED_LAND	VOL	RECOVER	REACH_SURF	SPILL_CAUSE
9SSO10644	Category 1	Mid-Pont Pump Station	0	200	195	5	Operator error
9SSO10644	Category 2	Neighborhood #3 Sewer Pump Station	0	7500	5000	0	Pump station failure
9SSO10644	Category 3	4S Ralphs Ranch Road	0	450	450	0	Debri-Rags
9SSO10644	Category 2	Corner of 4S Ranch Parkway and Black Opal Road	0	2200	2200	0	Debri-General
9SSO10644	Category 1	Old Course Road and Bing Crosby Blvd.	0	1800	600	1200	Other (specify below)
9SSO10644	Category 1	Neighborhood #1 SPS Forcemain	17000	20000	15000	3000	Pipe Structural Problem/Failure