



EOCWD
EAST ORANGE COUNTY
WATER DISTRICT

Sewer System Management Plan Volume I

Revised January 17, 2019

CONTENTS

ABBREVIATIONS / ACRONYMS

EXECUTIVE SUMMARY	i
CHAPTER 1 – PROHIBITIONS.....	1-1
CHAPTER 2 – GOAL.....	2-1
CHAPTER 3 – DESCRIPTION OF ORGANIZATION	3-1
CHAPTER 4 – LEGAL AUTHORITY.....	4-1
CHAPTER 5 – OPERATION AND MAINTENANCE PROGRAM.....	5-1
CHAPTER 6 – DESIGN AND PERFORMANCE PROVISIONS.....	6-1
CHAPTER 7 – OVERFLOW EMERGENCY RESPONSE PLAN	7-1
CHAPTER 8 – FATS, OILS, AND GREASE (FOG) CONTROL.....	8-1
CHAPTER 9 – SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN	9-1
CHAPTER 10- MONITORING, MEASUREMENT AND PROGRAM MODIFICATIONS	10-1
CHAPTER 11 – PROGRAM AUDITS	11-1
CHAPTER 12 – COMMUNICATION PROGRAM.....	12-1

NOTE: APPENDICES ARE LOCATED IN VOLUME II OF THIS PLAN.

EXECUTIVE SUMMARY

The East Orange County Water District is required to comply with the State Water Resources Control Board Order No. 2006-0003-DWQ adopted May 2, 2006, entitled Statewide General Waste Discharge Requirements for Sanitary Sewer Systems.” Information on the State’s SSO Reduction Program can be found at: http://www.waterboards.ca.gov/water_issues/programs/ss0/index.shtml.

The purpose of the Order is to prevent SSOs or sewer spills by establishing a statewide Monitoring and Reporting Program (MRP) and requiring each local or regional sewer agency to create and implement their own Sewer System Management Plan (SSMP) based on the mandatory requirements of the Order.

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

To comply with the essence of this Order:

- EOCWD has enrolled and applied for coverage and agrees to comply with all conditions and provisions of this Order.
- EOCWD shall take all feasible steps to eliminate SSOs. In the event that an SSO does occur, EOCWD shall take all feasible steps to contain and mitigate the impacts of an SSO.
- In the event of an SSO, EOCWD shall take all feasible steps to prevent untreated or partially treated wastewater from discharging from storm drains into flood control channels or waters of the United States by blocking the storm drainage system and by removing the wastewater from the storm drains.
- EOCWD shall report all SSOs in accordance with Section G of the WDR.
- EOCWD shall properly, manage, operate, and maintain all parts of its sanitary sewer system, and shall ensure that the system operators (including employees, contractors, or other agents) are adequately trained and possess adequate knowledge, skills, and abilities.
- EOCWD shall allocate adequate resources for the operation, maintenance, and repair of its sanitary sewer system, and a proper rate structure, accounting mechanisms, and auditing procedures to ensure an adequate measure of revenues and expenditures. These procedures are in compliance with applicable laws and regulations and comply with generally acceptable accounting practices.
- EOCWD shall provide adequate capacity to convey base flows and peak flows, including flows related to wet weather events.

This SSMP is organized similarly to paragraph D (Provisions) of the Order. Each section begins with a summary of the Order requirements, followed by these subsections:

- Compliance Summary – A description of how compliance was achieved;
- Compliance Documents – A listing of source documents that support compliance and the location of these documents; and,
- Roles and Responsibilities – A listing of relevant staff roles and responsibilities.

The SSMP has 11 mandatory elements in chapters 2 through 12. Chapter 1 discusses the prohibitions and provisions of the WDR.

- **Chapter 1 – Prohibitions and Provisions:** This chapter describes the sewage discharge prohibitions and provisions as stated in the “Statewide General Waste Discharge Requirements for Sanitary Sewer Systems.”
- **Chapter 2 – Goal:** The goal is to prevent and/or reduce SSOs and mitigate the effect of any SSOs that do occur. The goal requires a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer collection system.
- **Chapter 3 – Organization:** The SSMP must identify the LRO or authorized representative as described in the Order. It must list and identify the organization responsible for operating and maintaining the sanitary sewer collection system including names and telephone numbers for management, administrative and maintenance positions and the chain of communication for reporting SSOs.
- **Chapter 4 – Legal Authority:** Each Enrollee must demonstrate through legally binding procedures such as ordinances, agreements, etc. that it possesses the necessary legal authority to do what is required by the Order.
- **Chapter 5 – Operation and Maintenance Program:** The SSMP must include those elements that are required by the Order that are appropriate and applicable to the sewer agency’s system.
- **Chapter 6 – Design and Performance Provisions:** The SSMP must demonstrate that the sewer agency has and appropriately uses design and construction standards and specifications for the installation of new sewer systems, rehabilitation and repair of existing sewer systems and has procedures and standards for inspecting and testing the installation of new sewers, pumps, etc. and for rehabilitation and repair projects.
- **Chapter 7 – Overflow Emergency Response Plan:** Each Enrollee shall develop and implement an overflow emergency response plan that identifies measures to protect public health and the environment and meets the minimum requirements of the Order.
- **Chapter 8 – FOG Control Program:** Each Enrollee shall evaluate its sewer system and determine if a Fats, Oils and Grease control program is needed. The FOG control plan, if needed, must meet all the requirements of the Order.
- **Chapter 9 – System Evaluation and Capacity Assurance Plan:** The Enrollee shall prepare and implement a Capital Improvement Plan that will provide adequate hydraulic capacity for the sewer collection system required by the Order.

- **Chapter 10 – Monitoring, Measurement, and Program Modifications:** The Enrollee shall maintain relevant information to establish and prioritize SSMP activities, monitor the implementation and measure the effectiveness of the SSMP activities, and provide assessment of the performance and/or modification of the SSMP activities as required by the Order.
- **Chapter 11 – SSMP Program Audits:** The Enrollee shall conduct periodic internal audits appropriate to the size of the sewer system and the number of SSOs. At a minimum, these audits must occur every two years as required by the Order.
- **Chapter 12 – Communication Program:** The Enrollee shall communicate on a regular basis with the public on the development, implementation, and performance of its SSMP. The communication system shall provide the public the opportunity to provide input to the sewer agency and shall also create a plan of communication with other local sewer agencies that may be tributary or satellite to the sewer agency's sewer collection system.

This revision, which follows the initial development and adoption of the SSMP, addresses findings and recommended changes, as well as modifications that

reflect EOCWD's current organizational practices and structure, that were identified as part of EOCWD's first SSMP audit.

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CHAPTER 1 – PROHIBITIONS

This chapter describes the sewage discharge prohibitions and provisions as stated in Section C of the “Statewide General Waste Discharge Requirements for Sanitary Sewer Systems.” [WDR]

1. ANY SSO THAT RESULTS IN A DISCHARGE OF UNTREATED OR PARTIALLY TREATED WASTEWATER TO WATERS OF THE UNITED STATES IS PROHIBITED.
2. ANY SSO THAT RESULTS IN A DISCHARGE OF UNTREATED OR PARTIALLY TREATED WASTEWATER THAT CREATES A NUISANCE AS DEFINED IN CALIFORNIA WATER CODE SECTION 13050(M) IS PROHIBITED.

1.1 Provisions

As stated in the Order, EOCWD agrees to meet the following provisions:

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

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

5. EOCWD shall report SSOs in accordance with Section G of the general WDR.
6. When an SSO occurs, EOCWD shall take all feasible steps and necessary remedial actions to 1) control or limit the volume of untreated or partially treated wastewater discharged, 2) terminate the discharge, and 3) recover as much of the wastewater discharged as possible for proper disposal, including any wash down water.

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

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

11. In accordance with the California Business and Professions Code sections 6735, 7835, and 7835.1, all engineering and geologic evaluations and judgments shall be performed by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities. Specific elements of the SSMP that require professional evaluation and judgments shall be prepared by or under the direction of appropriately qualified professionals, and shall bear the professional(s)' signature and stamp.

EOCWD met all of the mandatory elements of the SSMP as specified in the SSMP Time Schedule below, including completion of the SSMP Audit by January 31, 2019. EOCWD conducted an internal, three-month review of the SSMP, utilizing weekly, all-hands training meetings. The recommended audit improvements, clarifications and error corrections were included in the revised SSMP and approved by the Board at their January 17, 2019 meeting.

<u>SSMP Task</u>	<u>Milestone Due/Completion Date</u>
Notice of Intent and Fee Payment Approval	July 12, 2016
SSMP Development Plan and Schedule received from SWRCB	July 14, 2016
Spill Reporting Program and date the sewers were transferred by OCSD to EOCWD with OC LAFCO's approval	August 1, 2016
CIWQS Questionnaire & Registration	August 26, 2016
Goal and Organization Structure	August 31, 2016
Legal Authority (Fog Fee Schedule completed by May 31, 2017)	August 31, 2016
Overflow Emergency Response Program	September 30, 2016
Grease Control Program (Fog Fee Schedule completed by May 31, 2017)	October 31, 2016
Operation and Maintenance Program	November 30, 2016
Design and Performance Provisions	December 31, 2016
System Evaluation and Capacity Assurance Plan (this item refers only to developing the requirements for this section, not to completion of the actual Plan itself which is scheduled for completion by August 1, 2018)	December 31, 2016
Draft SSMP Released for Comment	December 31, 2016
Final SSMP, incorporating the above items and all of the other SSMP requirements	January 31, 2017
Audit of EOCWD's SSMP	January 31, 2019

CHAPTER 2 – GOAL

This chapter describes the goal of the SSMP as required by Section D.13.(i) of the Order.

Section D.13(i)

GOAL: THE GOAL OF THE SSMP IS TO PROVIDE A PLAN AND SCHEDULE TO PROPERLY MANAGE, OPERATE, AND MAINTAIN ALL PARTS OF THE SANITARY SEWER SYSTEM. THIS WILL HELP REDUCE AND PREVENT SSOS, AS WELL AS MITIGATE ANY SSOS THAT DO OCCUR.

2.1 Purpose

The purpose of the WDR Order is to prevent SSOs. EOCWD has prepared and will maintain the SSMP to support this purpose.

2.2 Goal

Consistent with the requirements in D.13.(i) the goal of the SSMP is to provide a plan and schedule to properly manage, operate, and maintain all parts of the OCSO sanitary sewer system to prevent SSOs and mitigate any SSOs that do occur.

2.3 How we inform staff about our SSMP

A copy of the WDR Order and the certified EOCWD SSMP is available at all times to personnel operating and maintaining the EOCWD sanitary sewer system via their tablet computer and/or a printed copy that is retained in a binder in the both the Administrative and Operations Departments. A copy of the Order is also included as **Appendix A** in Volume II of this SSMP. Pursuant to California Water Code Section 13267(b), EOCWD will also comply with the SSO “Monitoring and Reporting Program (MRP) No. 2006-0003 DWQ” and all future revisions, included by reference in the Order. A copy of the MRP is included in **Appendix B** of Volume II. Awareness training is also provided to staff: all collection system field staff and related management and mid-management staff participate on a regular basis in a thorough review of the SSMP through the Audit process.

2.4 How we organized our SSMP

Volume I provides a general description of how EOCWD complies with the various provisions of the Order and provides references to supporting documents as Appendix items. Volume II contains specific information and supporting documents in each Appendix section. Some supporting materials, such as the electronic GIS in SEDARU, the Hydraulic Model, Design Guidelines, Master Specifications and Standard Drawings, large format drawings, relational databases, and voluminous documents may not be physically included in the SSMP. In these cases, a reference is provided that indicates the type, staff owner, and location of these supporting materials if not located in Volume

II. Locations can be hard copy files, EOCWD's computer server and/or in the SEDARU electronic system.

CHAPTER 3 – DESCRIPTION OF ORGANIZATION

This chapter describes the EOCWD organization and chain of communication as required in Section D.13.(ii). of the Order.

Section d.13.(ii)

ORGANIZATION: THE SSMP MUST IDENTIFY:

- (A) THE NAME OF THE RESPONSIBLE OR AUTHORIZED REPRESENTATIVE AS DESCRIBED IN SECTION J OF THIS ORDER.
- (B) THE NAMES AND TELEPHONE NUMBERS FOR MANAGEMENT, ADMINISTRATIVE, AND MAINTENANCE POSITIONS RESPONSIBLE FOR IMPLEMENTING SPECIFIC MEASURES IN THE SSMP PROGRAM. THE SSMP MUST IDENTIFY LINES OF AUTHORITY THROUGH AN ORGANIZATION CHART OR SIMILAR DOCUMENT WITH A NARRATIVE EXPLANATION; AND
- (C) THE CHAIN OF COMMUNICATION FOR REPORTING SSOS, FROM RECEIPT OF A COMPLAINT OR OTHER INFORMATION, INCLUDING THE PERSON RESPONSIBLE FOR REPORTING SSOS TO THE STATE AND REGIONAL WATER BOARD AND OTHER AGENCIES IF APPLICABLE (SUCH AS COUNTY HEALTH OFFICER, COUNTY ENVIRONMENTAL HEALTH AGENCY, REGIONAL WATER BOARD, AND/OR STATE OFFICE OF EMERGENCY SERVICES (OES)).

3.1 Organization

The Order requires that the SSMP include the administrative and maintenance positions responsible for implementing measures in the SSMP program, including lines of authority. These positions are shown in our EOCWD organization chart in **Appendix C**. A table in the same Appendix shows which EOCWD positions or private contractors or professional service providers are responsible for various parts of the SSMP when delegated by the General Manager.

The General Manager is the legally responsible official (LRO) listed on the Notice of Intent to Enroll and is responsible for the certification of SSO reports involving the sewer system. Positions that are part of the chain of communications and a part of our spill response program are shown in our Overflow Emergency Response Plan in Chapter 7. Staff assigned to the positions are all available through the EOCWD office at 714-538-5815

3.1.1 Compliance Summary. EOCWD has provided sufficient staffing including contractors and service providers to operate the sewer system on a sustainable basis, and to comply with all requirements of this Order.

3.1.2 Compliance Documents. EOCWD has developed an SSMP Program Table in **Appendix C**. Positions with titles and SSMP responsibility are included in the table. On an annual basis, the chart is reviewed by the General Manager and updated if needed.

3.1.3 Roles and Responsibilities. Job descriptions for the positions listed in the organizational charts are available from the General Manager. Primary responsibility for the day-to-day management and O&M of the sewer system assets resides within the Operations Manager who reports to the General Manager. In addition, specific SSMP roles and document responsibilities are described in **Appendix C**.

3.2 Chain of Communication.

The Order requires the SSMP to contain a chain of communication for SSO reporting, from receipt of a complaint or other information through reporting to the regulatory agencies. This information is shown in Chapter 7.

3.2.1 Compliance Summary

EOCWD has a flow chart that shows the chain of communication for reporting SSOs. It starts with the receipt of a complaint or other information, and includes the name and title of the person responsible for reporting SSOs from receipt at the EOCWD office phone number which is monitored on a 24-hour basis to the State of California CIWQS website, the Santa Ana Regional Water Quality Control Board, Orange County Health Care Agency, and if required, California Emergency Management Agency (Cal EMA). This is also provided in Chapter 7. The response flowchart is part of the SSO Reporting Guidelines developed to manage the reporting process, and exists as a supplemental guide to be used with the current EOCWD SSO Emergency Response Plan. This flow chart is also known as the SSO Response Flow Chart and is found in Chapter 7.

3.2.2 Compliance Documents

The organizational/procedural flow charts can be found in the following appendices for contacts and information provided in the chain of communication flow chart for reporting SSOs.

Appendix P of the SSMP Volume II includes the SSO Response Flow Chart. This flow chart contains the chain of communication for reporting SSOs in compliance with the Order.

Appendix Q of the SSMP Volume II includes the SSO ERP. This plan is also required in compliance with Section D, paragraph 13 (vi) the Order – Overflow Emergency Response Plan.

3.2.3 Roles and Responsibilities

The roles and responsibilities of each position are described in the documents listed above as well as in the appendices.

CHAPTER 4 – LEGAL AUTHORITY

This chapter describes the legal authority to implement the SSMP as required by WDR Order Section D.13.(iii).

Section D.13.(iii)

LEGAL AUTHORITY: EACH ENROLLEE MUST DEMONSTRATE, THROUGH SANITARY SEWER SYSTEM USE ORDINANCES, SERVICE AGREEMENTS, OR OTHER LEGALLY BINDING PROCEDURES, THAT IT POSSESSES THE NECESSARY LEGAL AUTHORITY TO:

- (A) PREVENT ILLICIT DISCHARGES INTO ITS SANITARY SEWER SYSTEM (EXAMPLES MAY INCLUDE I/I, STORMWATER, CHEMICAL DUMPING, UNAUTHORIZED DEBRIS AND CUT ROOTS, ETC.);
- (B) REQUIRE THAT SEWERS AND CONNECTIONS BE PROPERLY DESIGNED AND CONSTRUCTED;
- (C) ENSURE ACCESS FOR MAINTENANCE, INSPECTION, OR REPAIRS FOR PORTIONS OF THE LATERAL OWNED OR MAINTAINED BY THE PUBLIC AGENCY;
- (D) LIMIT THE DISCHARGE OF FATS, OILS, AND GREASE AND OTHER DEBRIS THAT MAY CAUSE BLOCKAGES, AND
- (E) ENFORCE ANY VIOLATION OF ITS SEWER ORDINANCES.

4.1 Compliance Summary

This SSMP complies with the Order requirements for legal authority under the following enacted ordinances/resolutions or agency policies.

- (a) **Water Code Section 31016**, granting a county water district the general power to enforce its ordinances, including entry (by consent or warrant) onto private property where necessary for investigation of violations.
- (b) **Government Code Sections 54739 and 54740**, which provide industrial waste pretreatment ordinance authority for local agencies with treatment works or collection systems.
- (c) **Ordinance No. 2016-1** “Establishing Wastewater Discharge Regulations” effective September 15, 2016. This has general prohibitions, limits and requirements for discharge which apply to all users of the sewer system. This Ordinance complies with and meets the minimum legal authority for EOCWD required by the General WDR.

- (a) **The WDR requires that OCSD sewers and connections** be properly designed and constructed. The design and construction requirements for EOCWD sewers and private laterals that connect to them are kept and managed by the Engineering Consultant. See also SSMP Chapter 6 – Design and Performance Provisions and related Appendices. This is also legally enforced through EOCWD’s connection permit program.
- (b) **To ensure access for maintenance**, inspection, or repairs for the sewers we inspect easements and initiate corrective actions as needed.
- (c) **To limit the discharge of FOG** and other debris that may cause blockages; EOCWD established a comprehensive policy regarding limitation of the discharge of FOG into the sewer system. These requirements are contained in **Ordinance No. 2016-02** “Adopting Fats, Oils, and Grease (FOG) Control Regulations applicable to Food Service Establishments”, effective Date, 2016 (**Appendix D**). This ordinance provides EOCWD with the legal authorities necessary to limit FOG and debris entering into the sewer system.

4.2 Compliance Documents

The legal authority for enacting the SSMP programs and policies are included in the following documents:

- FOG Ordinance No. 2016-02 (**Appendix D**)
- Wastewater Discharge Regulations Ordinance No. 2016-01 (**Appendix E**)
- FOG Fee Resolution No. 799 (**Appendix H**)
- Legal authority, as outlined in Water Code Section 31016
- Legal authority – Government Code Sections 54739 and 54740
- EOCWD Connection Permits

4.3 Roles and Responsibilities

The roles and responsibilities for enforcement of the legal authority to enact the SSMP programs and policies is derived from acts of EOCWD’s governing Board. Legal interpretation of the enabling state legislation giving authority to EOCWD is provided by our General Counsel.

The General Manager is responsible for periodically reviewing and updating all related documents, as the need arises, to ensure that the legal authority is comprehensive and covers all aspects of the FOG Control Program.

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CHAPTER 5 – OPERATION AND MAINTENANCE PROGRAM

This chapter describes the legal authority to implement the SSMP as required by WDR Order Section D.13.(iv).

Section D.13.(iv)

OPERATION AND MAINTENANCE PROGRAM. THE SSMP MUST INCLUDE THOSE ELEMENTS LISTED BELOW THAT ARE APPROPRIATE AND APPLICABLE TO THE ENROLLEE'S SYSTEM:

- (A) MAINTAIN AN UP-TO-DATE MAP OF THE SANITARY SEWER SYSTEM, SHOWING ALL GRAVITY LINE SEGMENTS AND MANHOLES, PUMPING FACILITIES, PRESSURE PIPES AND VALVES, AND APPLICABLE STORMWATER CONVEYANCE FACILITIES;
- (B) DESCRIBE ROUTINE PREVENTIVE OPERATION AND MAINTENANCE ACTIVITIES BY STAFF AND CONTRACTORS, INCLUDING A SYSTEM FOR SCHEDULING REGULAR MAINTENANCE AND CLEANING OF THE SANITARY SEWER SYSTEM WITH MORE FREQUENT CLEANING AND MAINTENANCE TARGETED AT KNOWN PROBLEM AREAS. THE PREVENTATIVE MAINTENANCE (PM) PROGRAM SHOULD HAVE A SYSTEM TO DOCUMENT SCHEDULED AND CONDUCTED ACTIVITIES, SUCH AS WORK ORDERS;
- (C) DEVELOP A REHABILITATION AND REPLACEMENT PLAN TO IDENTIFY AND PRIORITIZE SYSTEM DEFICIENCIES AND IMPLEMENT SHORT-TERM AND LONGTERM REHABILITATION ACTIONS TO ADDRESS EACH DEFICIENCY. THE PROGRAM SHOULD INCLUDE REGULAR VISUAL AND TV INSPECTIONS OF MANHOLES AND SEWER PIPES, AND A SYSTEM FOR RANKING THE CONDITION OF SEWER PIPES AND SCHEDULING REHABILITATION. REHABILITATION AND REPLACEMENT SHOULD FOCUS ON SEWER PIPES THAT ARE AT RISK OF COLLAPSE OR PRONE TO MORE FREQUENT BLOCKAGES DUE TO PIPE DEFECTS. FINALLY, THE REHABILITATION AND REPLACEMENT PLAN SHOULD INCLUDE A CAPITAL IMPROVEMENT PLAN THAT ADDRESSES PROPER MANAGEMENT AND PROTECTION OF THE INFRASTRUCTURE ASSETS. THE PLAN SHALL INCLUDE A TIME SCHEDULE FOR IMPLEMENTING THE SHORT- AND LONG-TERM PLANS PLUS A SCHEDULE FOR DEVELOPING THE FUNDS NEEDED FOR THE CAPITAL IMPROVEMENT PLAN;
- (D) PROVIDE TRAINING ON A REGULAR BASIS FOR STAFF IN SANITARY SEWER SYSTEM OPERATIONS AND MAINTENANCE, AND REQUIRE CONTRACTORS TO BE APPROPRIATELY TRAINED; AND
- (E) PROVIDE EQUIPMENT AND REPLACEMENT PART INVENTORIES, INCLUDING IDENTIFICATION OF CRITICAL REPLACEMENT PARTS.

5.1 Mapping

EOCWD acquired the sewer system on August 1, 2016 and maintains record drawings provided by OCSD of the facilities which were originally designed and constructed by others.. Sewer maps were developed and maintained by OCSD and were also provided by OCSD.

GIS Maps

- EOCWD Maps and SEDARU – Paper as well as electronic files were provided by OCSD at the time of transfer. This information was also imported into EOCWD's new paperless SEDARU GIS. SEDARU is available to staff and contractors through mobile handheld devices and desktop/laptop programs. Historic sewer maps and drawings are able to be accessed in SEDARU; the older paper maps are a back-up if ever needed. Updates can be made at any time by staff as new information is discovered in the field or in the office. When discrepancies are identified between the field conditions and electronic records, staff Notifies the Operations Manager who is authorized to add new and delete obsolete facilities. Management reviews and approves all requested changes by staff and/or contractors. Upon the completion and inspection of repairs or construction of new and/or improved facilities, updates are also made to SEDARU.
- Record Drawings – SEDARU provides access to scanned image files of record drawings of the gravity sewer system. These electronic images reside on EOCWD's Sewer Server hardware. EOCWD also maintains a hard copy file of record drawings received from OCSD for staff access and reference if ever needed.
- Land Records – easement documents have been coordinated with the electronic sewer mapping information in SEDARU and are also accessible from the program. for providing proof of right to access and for security purposes.

5.1.1 Compliance Summary. The asset inventory of all collection system assets is contained in SEDARU, which is maintained as a part of our Information Management System. We do not own or operate any pumping facilities. The sewer system assets contained in SEDARU have various types of scheduled activities at various frequencies assigned to them; these activities may include any combination of investigations of possible problems, condition assessments including CCTV and/or physical inspections, and preventive and corrective maintenance activities necessary to properly maintain the assets and re-establish proper operating conditions.

Every month, EOCWD reviews the asset and performance information in SEDARU. The current asset management element in SEDARU has several data collection points, and is integrated into the computerized maintenance management program-element and other reporting elements in SEDARU. This program also contains the historic CMMS records imported from OCSD's database. An example of performance reports generated from the program is shown in **Appendix L**.

5.1.2 Compliance Documents. The documents supporting compliance with the requirements for mapping are as follows:

- The SEDARU System
- Record Drawings

- Land Records
- Historic OCSD records on file at EOCWD

5.1.3 Roles and Responsibilities. The Operations Manager is responsible for recommending needs to the General Manager for approval and also Board approval as needed.

5.2 Routine Preventive Operations and Maintenance Program (PMP)

We have planned and scheduled preventive operations and maintenance activities. These are performed by staff and some are performed by contractors. These planned and scheduled activities at various frequencies are shown in SEDARU; this forms the basis of the work required of the contractor performing the annual cleaning

5.2.1 Compliance Summary.

Staff conducts various activities including managing contractors to inspect, maintain and repair the gravity sewer system assets. As part of the work order closeout process, all operational and structural condition information is recorded in SEDARU. This work history documentation is analyzed to identify potential operational failures which could result in spills. Maintenance tasks might be added, deleted, or altered based on the analysis findings. Tasks might be altered by modifying the task work content, adjusting task frequencies. Procedures are in place to ensure that all work history is memorialized in SEDARU.

5.2.2 Compliance Documents. Documents that support compliance of this section include the following:

- Preventive Maintenance Program in SEDARU;
- Improvement District 1 - Vehicle Inventory (**Appendix K**);
- CCTV and Manhole condition assessment records, also in SEDARU (**Appendix L**);
- Annual operating budget including contracted services.

5.2.3 Roles and Responsibilities. The Operations Manager is responsible for recommending needs to the General Manager for approval and Board ratification as required.

5.3 Developing a Rehabilitation and Replacement Plan

Through our ongoing pipe cleaning on a 12-month cycle, hot spots cleaning on a 4-26 week basis, routine manhole inspections, and CCTV programs, EOCWD identifies and prioritizes structural deficiencies in the sewer system and is in the ongoing process of scheduling and completing repairs. We are also working on a long-term repair or rehabilitation program needed to extend pipe and manhole asset life. This program includes routine CCTV inspection of sewer pipes (all pipelines are CCTV'd once every 7 years) and a system for assessing and ranking the condition of the line segments and manhole structures. We have adopted the NASSCO PACP rating system. The long-term rehabilitation and replacement plan when complete in December of 2019, will include a financial plan that properly funds the R&R of the infrastructure assets.

5.3.1 Compliance Summary. The task descriptions for all current inspections, preventive maintenance, repairs and replacements when needed are contained in SEDARU. Work planned and completed by staff and contractors are also tracked in SEDARU.

5.3.2 Compliance Documents. Documents that support compliance of this section include the following:

- 2019 Plan of Operations - (**Appendix J**)
- SEDARU System

5.3.3 Roles and Responsibilities. The organizational chart that identifies EOCWD staff positions and consultants and contractors responsible for developing the Rehabilitation and Replacement Plan is shown in **Appendix J**.

5.4 Training

EOCWD regularly provides training for staff in collection system operations, maintenance, and monitoring, and requires that contractors' staffs are appropriately trained by their firms. This training for staff at EOCWD is divided into two general parts: (1) Mandatory Safety Training and (2) Job Required and also Voluntary Technical Training.

5.4.1 Compliance Summary. EOCWD's staff participates in the CWEA Technical Certification Program for collection workers, Grades I through IV. EOCWD also adopted NASSCO's Pipeline Assessment Certification Program (PACP) for our CCTV inspection program of our gravity sewers. Our CCTV Contractor's staff are PACP Certified at this time. The EOCWD Operations Manager and contract District Engineer will also seek PACP Certification in 2017. EOCWD provides on-going in-house technical, job skills, and safety training for its staff. All mandatory and optional training for each staff member is documented in EOCWD's records and are available for inspection.

EOCWD has completed an SSO Response Training program for all collection system maintenance staff. A SSO Response Binder is also provided to staff and a copy is also in each vehicle. Staff have been trained in Standard Operating Procedures (SOPs) for various activities; SOPs are also developed to ensure consistency in sewer system maintenance and operations and repairs. SOP development and training are ongoing. A list of current SOPs is available for inspection at EOCWD's office at any time.

5.4.2 Compliance Documents. Training records for all EOCWD staff are centralized and maintained. All records and documentation are available for review through the General Manager. The Operations Manager maintains SOPs for staff.

5.4.3 Roles and Responsibilities. The General Manager through the assistance of the Administrative Assistant is responsible for ensuring that employee training records are maintained. Contractors and Consultants are required to maintain their training records for review by EOCWD at any time.

5.5 Providing Equipment and Replacement Parts Inventories

5.1.1 Compliance Summary. The EOCWD Collection System is a gravity sewer system, having no pump or lift stations. We have an inventory of spare manholes frames and covers in the various sizes needed. Pipe sections and other pipe repair materials are commercially available off the shelf or in a just-in-time basis through suppliers and contractors in the region. Some spare parts such as tools (sledgehammers, bars, grease guns, crowbars), hose, nozzles, tigertails, poles and downhole equipment for mobile equipment and safety (PPE) equipment are in inventory at EOCWD. Other

minor spare parts are commercially available off the shelf or in a just in time basis through numerous suppliers and parts houses in the region. Numerous service firms are also in the region that can service EOCWD's equipment as needed.

5.1.2 Compliance Documents. The documents including parts inventory lists supporting compliance with the requirements for equipment and replacement parts inventories are on file and available for review at EOCWD's office.

5.2.3 Roles and Responsibilities. The Operations Manager, with the assistance of the Wastewater Supervisor, is responsible for developing lists of replacement parts inventories and recommending needs to the General Manager for approval and also Board approval as needed.

CHAPTER 6 – DESIGN AND PERFORMANCE PROVISIONS

This chapter describes the EOCWD organization and chain of communication as required in Section D.13.(v). of the Order.

Section D.13.(v)

DESIGN AND PERFORMANCE PROVISIONS:

- (A) DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS FOR THE INSTALLATION OF NEW SANITARY SEWER SYSTEMS, PUMP STATIONS AND OTHER APPURTENANCES; AND FOR THE REHABILITATION AND REPAIR OF EXISTING SANITARY SEWER SYSTEMS; AND
- (B) PROCEDURES AND STANDARDS FOR INSPECTING AND TESTING THE INSTALLATION OF NEW SEWERS, PUMPS, AND OTHER APPURTENANCES AND FOR REHABILITATION AND REPAIR PROJECTS.

6.1 Compliance Summary

Requirements for design, construction, and commissioning of new and rehabilitated facilities are included in the Standard Specifications (**Appendix M**) which are also available for viewing and downloading from the EOCWD website. The standards are updated per EOCWD's program to ensure standards are kept current by the District Engineer who acts as the Standards Custodian. The program requires the standards to be updated on an on-going basis as lessons are learned, and best practices and/or technology changes are incorporated based on a broad spectrum of projects.

6.2 Compliance Documents

Documents used for design and performance evaluations include the following:

- Inspection reports, test reports, and contractor certifications;
- EOCWD's Design and Construction for Sanitary Sewers (**Appendix M**);
- Standard Specifications for Public Works Construction (Greenbook);
- American Society of Testing and Materials Specifications (ASTM)

6.3 Roles and Responsibilities

The General Manager, Operations Superintendent and contract District Engineer meet semi-annually to review our Design and Construction Requirements for Sanitary Sewers. Any EOCWD employee may propose a change. Also, "lessons learned" at the end of each project are considered for inclusion in our Design and Construction Requirements for Sanitary Sewers.

Standards documents are ultimately the responsibility of EOCWD's General Manager.

CHAPTER 7 – OVERFLOW EMERGENCY RESPONSE PLAN

This chapter describes the EOCWD overflow emergency response plan as required in Section D.13.(vi). of the Order.

Section D.13.(vi)

OVERFLOW EMERGENCY RESPONSE PLAN - EACH ENROLLEE SHALL DEVELOP AND IMPLEMENT AN OVERFLOW EMERGENCY RESPONSE PLAN THAT IDENTIFIES MEASURES TO PROTECT PUBLIC HEALTH AND THE ENVIRONMENT. AT A MINIMUM, THIS PLAN MUST INCLUDE THE FOLLOWING:

- (A) PROPER NOTIFICATION PROCEDURES SO THAT THE PRIMARY RESPONDERS AND REGULATORY AGENCIES ARE INFORMED OF ALL SSOS IN A TIMELY MANNER;
- (B) A PROGRAM TO ENSURE AN APPROPRIATE RESPONSE TO ALL OVERFLOWS;
- (C) PROCEDURES TO ENSURE PROMPT NOTIFICATION TO APPROPRIATE REGULATORY AGENCIES AND OTHER POTENTIALLY AFFECTED ENTITIES (E.G. HEALTH AGENCIES, REGIONAL WATER BOARDS, WATER SUPPLIERS, ETC.) OF ALL SSOS THAT POTENTIALLY AFFECT PUBLIC HEALTH OR REACH THE WATERS OF THE STATE IN ACCORDANCE WITH THE MRP. ALL SSOS SHALL BE REPORTED IN ACCORDANCE WITH THIS MRP, THE CALIFORNIA WATER CODE, OTHER STATE LAW, AND OTHER APPLICABLE REGIONAL WATER BOARD WDRS OR NPDES PERMIT REQUIREMENTS. THE SSMP SHOULD IDENTIFY THE OFFICIALS WHO WILL RECEIVE IMMEDIATE NOTIFICATION;
- (D) PROCEDURES TO ENSURE THAT APPROPRIATE STAFF AND CONTRACTOR PERSONNEL ARE AWARE OF AND FOLLOW THE EMERGENCY RESPONSE PLAN AND ARE APPROPRIATELY TRAINED;
- (E) PROCEDURES TO ADDRESS EMERGENCY OPERATIONS, SUCH AS TRAFFIC AND CROWD CONTROL AND OTHER NECESSARY RESPONSE ACTIVITIES; AND
- (F) A PROGRAM TO ENSURE THAT ALL REASONABLE STEPS ARE TAKEN TO CONTAIN AND PREVENT THE DISCHARGE OF UNTREATED AND PARTIALLY TREATED WASTEWATER TO WATERS OF THE UNITED STATES AND TO MINIMIZE OR CORRECT ANY ADVERSE IMPACT ON THE ENVIRONMENT RESULTING FROM THE SSOS, INCLUDING SUCH ACCELERATED OR ADDITIONAL MONITORING AS MAY BE NECESSARY TO DETERMINE THE NATURE AND IMPACT OF THE DISCHARGE.

EOCWD has developed an Overflow Emergency Response Plan that identifies measures and activities to protect public health and the environment. In addition EOCWD is a participant in the County of Orange's Countywide Area Spill Control (CASC) Program. This Program will provide additional or multi-day support for containment and cleanup in the flood control channels. EOCWD is also part of the Water Emergency Response Organization of Orange County (WEROC), a 36-member organization that provides coordinated emergency response to major disasters, which include major sewer spills.

7.1 Compliance Summary

EOCWD's SSO ERP can be updated as needed by the Operations Manager and is then reviewed and approved by the General Manager. Our SSO Response Flow Chart is an important element; the Flow Chart shows our internal and external notification steps. Our SSO ERP includes, but is not limited to the following items:

- (a) A binder with the relevant data; awareness training is provided for each designated staff person and is in each vehicle. This helps ensure that the response, initial containment, and notifications are made in a coordinated manner. Management and the regulatory agencies are informed of all EOCWD SSO's and also private property SSOs that we are made aware of or respond to.
- (b) A continuous program to help ensure appropriate responses to future overflows based on the lessons learned from prior responses;
- (c) Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g., health agencies, regional water boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the waters of the State. All SSOs are reported in accordance with the WDR Order's MRP, the California Water Code, other State Law, and other applicable Regional Water Board WDR or NPDES permit requirements;
- (d) Procedures and contract requirements to ensure that appropriate staff and contractor personnel are aware of and follow our ERP and that they are appropriately trained;
- (e) Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and
- (f) A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to storm drainage and then waters of the United States and to minimize or correct any adverse impact on the environment resulting from the SSOs.
- (g) For Capital Improvement Projects a requirement for our contractors to develop a Spill Prevention, Control and Countermeasure Plan, which includes spill notification and response protocols as required by EOCWD.

Note: SSO sampling, if conducted, is performed by the OCHCA. In some instances, OCHCA may request that EOCWD conduct sampling. EOCWD's first responders carry equipment to collect samples if directed.

EOCWD conducts SSO response and containment training for our staff. **Appendix R** of Volume II of the SSMP contains guidance for calculating SSO volume estimates. Ongoing training (first responders and shop tailgate meetings) occur on at least a quarterly basis. Staff also participates in regional training at OCSD or at other locations when events or workshops are available. This also includes those hosted by CWEA and ACWA JPIA.

7.2 Compliance Documents

The compliance documents are as follows:

- EOCWD's SSO Response Flow Chart with Notification activities (**Appendix N**);
- SSO Response Plan Binder (**Appendix O**);
- Sewer Spill Estimation Guide (**Appendix R**)
- CASC Agreement on file at EOCWD office
- WEROC Agreement on file at EOCWD office
- WARN Agreement on file at EOCWD office
- EOCWD Emergency Response Plan (**Appendix P**)

7.3 Roles and Responsibilities

Information on the positions, roles, and responsibilities is included in the documents listed above and are also in **Appendix C**.

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

This chapter describes the EOCWD FOG control program as required in Section D.13.(vi). of the Order.

Section D.13.(vi)

FOG CONTROL PROGRAM: EACH ENROLLEE SHALL EVALUATE ITS SERVICE AREA TO DETERMINE WHETHER A FOG CONTROL PROGRAM IS NEEDED. IF AN ENROLLEE DETERMINES THAT A FOG PROGRAM IS NOT NEEDED, THE ENROLLEE MUST PROVIDE JUSTIFICATION FOR WHY IT IS NOT NEEDED. IF FOG IS FOUND TO BE A PROBLEM, THE ENROLLEE MUST PREPARE AND IMPLEMENT A FOG SOURCE CONTROL PROGRAM TO REDUCE THE AMOUNT OF THESE SUBSTANCES DISCHARGED TO THE SANITARY SEWER SYSTEM. THIS PLAN SHALL INCLUDE THE FOLLOWING AS APPROPRIATE:

- (A) AN IMPLEMENTATION PLAN AND SCHEDULE FOR A PUBLIC EDUCATION OUTREACH PROGRAM THAT PROMOTES PROPER DISPOSAL OF FOG;
- (B) A PLAN AND SCHEDULE FOR THE DISPOSAL OF FOG GENERATED WITHIN THE SANITARY SEWER SYSTEM SERVICE AREA. THIS MAY INCLUDE A LIST OF ACCEPTABLE DISPOSAL FACILITIES AND/OR ADDITIONAL FACILITIES NEEDED TO ADEQUATELY DISPOSE OF FOG GENERATED WITHIN A SANITARY SEWER SYSTEM SERVICE AREA;
- (C) THE LEGAL AUTHORITY TO PROHIBIT DISCHARGES TO THE SYSTEM AND IDENTIFY MEASURES TO PREVENT SSOS AND BLOCKAGES CAUSED BY FOG;
- (D) REQUIREMENTS TO INSTALL GREASE REMOVAL DEVICES (SUCH AS TRAPS OR INTERCEPTORS), DESIGN STANDARDS FOR THE REMOVAL DEVICES, MAINTENANCE REQUIREMENTS, BMP REQUIREMENTS, RECORD KEEPING AND REPORTING REQUIREMENTS;
- (E) AUTHORITY TO INSPECT GREASE PRODUCING FACILITIES, ENFORCEMENT AUTHORITIES, AND WHETHER THE ENROLLEE HAS SUFFICIENT STAFF TO INSPECT AND ENFORCE THE FOG ORDINANCE;
- (F) AN IDENTIFICATION OF SANITARY SEWER SYSTEM SECTIONS SUBJECT TO FOG BLOCKAGES AND ESTABLISHMENT OF A CLEANING MAINTENANCE SCHEDULE FOR EACH SECTION; AND
- (G) DEVELOPMENT AND IMPLEMENTATION OF SOURCE CONTROL MEASURES FOR ALL SOURCES OF FOG DISCHARGED TO THE SANITARY SEWER SYSTEM FOR EACH SECTION IDENTIFIED IN (F) ABOVE.

In order to limit the discharge of FOG and other debris that causes increased maintenance and pipe blockages that can cause SSOs, EOCWD has prepared and is implementing the following elements into our FOG Control Program effort:

- (a) EOCWD's Sewer Use Ordinance 16-1 was adopted on September 15, 2016 containing the necessary Legal Authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG (**Appendix E**);
- (b) Adopted the FOG Ordinance 16-02 providing the authority to inspect FOG producing facilities 1, and providing enforcement powers to ensure compliance as needed (**Appendix D**) .
- (c) Developed and implemented a FOG training and FSE inspection program for Collection Systems staff through contractor EEC Environmental;
- (d) Developed materials and began implementation of a public education outreach program, also using our website and print/social media to promote proper disposal of FOG (**Appendix T**);
- (e) For FSEs, requirements to install Grease Control Devices (GCD's) in facilities (such as traps or interceptors) design standards for the GCDs, maintenance requirements to be performed by the facility owner, BMP requirements, record keeping and reporting requirements (**Appendix D**);
- (f) Developed and implemented source control measures, for all sources of FOG discharged to the sanitary sewer system, for each section identified in (f) above;
- (g) Reviewed hot spot sewer cleaning maintenance schedules for line segments including inverted siphons that are subject to FOG;
- (h) Developed handout materials for each FSE to help educate and ensure compliance. (**Appendix F**)
- (i) Developed a process of corrective measures needed by FSE's and residential facilities if a FOG related SSO does occur (**Appendix F**);
- (j) Developed FOG Reduction Program training for EOCWD staff charged with Program implementation;
- (k) Implemented a risk based FSE and GCD inspection program;
- (l) Developed a process for residential outreach which will target parcels upstream of trouble-spots associated with FOG where upstream FSE's may not be present.

8.1 Compliance Summary

To address the WDR Order, EOCWD adopted FOG Control Regulations Applicable to Food Service Establishments (FSE) (**Appendix D**) to also establish the legal authority to prohibit FSEs from discharging FOG to the sewer system. Our Ordinance Establishing Wastewater Discharge Regulations (**Appendix E**) provides the uniform requirements for users of EOCWD's facilities which are tributary to OCSD's regional treatment and reuse facilities. FOG Program fees were adopted under Resolution 799 at the June 15, 2017 Board Meeting (**Appendix H**).

The Orange County Health Care Agency currently provides assistance in identifying possible FOG non-compliance issues during their Food Safety Inspections. The OCHCA inspection agreement is included in SSMP Volume II, (**Appendix I**). EOCWD staff is also trained to do facility inspections. A local specialized consulting firm has been retained to assist EOCWD's staff in performing inspections and also provide ongoing training for our staff.

8.2 Compliance Documents

- FOG Control Regulations Applicable to Food Service Establishments (FSE) (**Appendix D**)
- Ordinance Establishing Wastewater Discharge Regulations (**Appendix E**)
- EOCWD's Local Sanitary Sewer Service Charges (**Appendix H**)
- FOG Management Program (**Appendix F**)
- FOG Binder with information for FSEs (**Appendix G**)
- Agreement for Provision of Environmental Health Services Between County of Orange and Orange County Sanitation District. Includes EOCWD as a subscribing agency (**Appendix I**)

8.3 Roles and Responsibilities

EOCWD's Operations Manager, working with and through consultant EEC Environmental and EOCWD's Collections System staff, has a program to identify sections of the collection system subject to blockages, and a schedule for trouble-spot cleaning as part of the preventive maintenance program. The review of existing FOG trouble-spot conditions is a continuous process conducted as part of the cleaning program. New trouble-spots that can be attributed to FOG that are discovered by staff or contractors, are reported to Operations Manager for investigation and mitigation. Based on the as-found conditions at the scheduled time of cleaning, a recommended change in the maintenance frequency of an existing site will be reviewed and discussed and made if warranted.

EOCWD's Operations Manager is responsible for reviewing and recommending updates to the FOG Program for the General Manager's review and approval before a Program change affecting this SSMP can be made. An SSMP Chapter or Appendix revision will then be made.

CHAPTER 9 – SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

This chapter describes the EOCWD system evaluation and capacity assurance plan as required in Section D.13(viii) of the Order.

Section D.13.(viii)

SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN: THE ENROLLEE SHALL PREPARE AND IMPLEMENT A CAPITAL IMPROVEMENT PLAN (CIP) THAT WILL PROVIDE HYDRAULIC CAPACITY OF KEY SANITARY SEWER SYSTEM ELEMENTS FOR DRY WEATHER PEAK FLOW CONDITIONS, AS WELL AS THE APPROPRIATE DESIGN STORM OR WET WEATHER EVENT. AT A MINIMUM, THE PLAN MUST INCLUDE:

- (A) EVALUATION: ACTIONS NEEDED TO EVALUATE THOSE PORTIONS OF THE SANITARY SEWER SYSTEM THAT ARE EXPERIENCING OR CONTRIBUTING TO AN SSO DISCHARGE CAUSED BY HYDRAULIC DEFICIENCY. THE EVALUATION MUST PROVIDE ESTIMATES OF PEAK FLOWS (INCLUDING FLOWS FROM SSOS THAT ESCAPE FROM THE SYSTEM) ASSOCIATED WITH CONDITIONS SIMILAR TO THOSE CAUSING OVERFLOW EVENTS, ESTIMATES OF THE CAPACITY OF KEY SYSTEM COMPONENTS, HYDRAULIC DEFICIENCIES (INCLUDING COMPONENTS OF THE SYSTEM WITH LIMITING CAPACITY) AND THE MAJOR SOURCES THAT CONTRIBUTE TO THE PEAK FLOWS ASSOCIATED WITH OVERFLOW EVENTS;
- (B) DESIGN CRITERIA: WHERE DESIGN CRITERIA DO NOT EXIST OR ARE DEFICIENT, UNDERTAKE THE EVALUATION IDENTIFIED IN (A) ABOVE TO ESTABLISH APPROPRIATE DESIGN CRITERIA; AND
- (C) CAPACITY ENHANCEMENT MEASURES: THE STEPS NEEDED TO ESTABLISH A SHORT- AND LONG-TERM CIP TO ADDRESS IDENTIFIED HYDRAULIC DEFICIENCIES, INCLUDING PRIORITIZATION, ALTERNATIVES ANALYSIS, AND SCHEDULES. THE CIP MAY INCLUDE INCREASES IN PIPE SIZE, I/I REDUCTION PROGRAMS, INCREASES AND REDUNDANCY IN PUMPING CAPACITY, AND STORAGE FACILITIES. THE CIP SHALL INCLUDE AN IMPLEMENTATION SCHEDULE AND SHALL IDENTIFY SOURCES OF FUNDING.
- (D) SCHEDULE: THE ENROLLEE SHALL DEVELOP A SCHEDULE OF COMPLETION DATES FOR ALL PORTIONS OF THE CAPITAL IMPROVEMENT PROGRAM DEVELOPED IN (A)-(C) ABOVE. THIS SCHEDULE SHALL BE REVIEWED AND UPDATED CONSISTENT WITH THE SSMP REVIEW AND UPDATE REQUIREMENTS AS DESCRIBED IN SECTION D. 14.

EOCWD has completed a Master Plan and Condition Assessment Study that produced a recommended Capital Improvement Program (CIP).. The CIP will ensure adequate hydraulic capacity of key sewer system elements under peak flow conditions, as well as the appropriate design for storm or wet weather events. The CIP includes the following:

- (a) **Evaluation:** The portions of the collection system that could experience or contribute to an SSO discharge caused by hydraulic deficiency were identified by the Master Plan and Condition Assessment Study. Included in the evaluation were estimates of peak flows, estimates of the capacity of system components, hydraulic deficiencies (including components of the system with limiting capacity), and the possible sources that contribute to the peak flows with potential to cause an overflow event.
- (b) **Design Criteria:** EOCWD's Design & Construction Requirements for Sanitary Sewers
- (c) **Capacity Improvement Measures:** The tasks needed to establish a short- and long-term CIP to address identified hydraulic deficiencies including prioritization, alternatives analysis, and schedules;
- (d) **Schedule:** EOCWD has developed a schedule for implementation of the CIP, along with a recommended funding program. This schedule is reviewed with the Board of Directors and updated consistent with the SSMP's annual review and update schedule.

9.1 Compliance Summary

EOCWD has an established CIP process that includes the following:

- **Plan Updates:** This CIP process is updated annually by the District through the fiscal year budgeting process. The updates will describe any significant changes in proposed actions and/or implementation schedules.

The Master Plan and Condition Assessment, combined with EOCWD's CIP, will ensure that older facilities are upgraded as needed to confirm that adequate capacity exists throughout the system. These programs will be formally addressed and described more extensively on an annual basis through the CIP budgeting process.

Indications of any capacity problems seen by the Operations staff will be brought to the attention of the District Engineer and General Manager for further evaluation.

9.2 Compliance Documents

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

- Sanitary Sewer Master Plan
- Monthly SEDARU System Management Reports

- Periodic CCTV recordings of sewer pipes by Operations staff
- GIS based Sewer Management System, “SEDARU”, which contains record drawings for the sewer system, video inspections and reports, cleaning and other maintenance management records, spill records, FOG program records, repair and improvement records and pipe and manhole attributes for each element of the sewer system.

9.3 Roles and Responsibilities

The CIP development, including capacity assurance, implementation, and update, are the responsibility of EOCWD’s General Manager, District Engineer and Operations Manager.

CHAPTER 10- MONITORING, MEASUREMENT AND PROGRAM MODIFICATIONS

This chapter describes the EOCWD system monitoring, measurement and program modifications as required in Section D.13(ix) of the Order.

MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS: THE ENROLLEE SHALL:

- (A) MAINTAIN RELEVANT INFORMATION THAT CAN BE USED TO ESTABLISH AND PRIORITIZE APPROPRIATE SSMP ACTIVITIES;
- (B) MONITOR THE IMPLEMENTATION AND, WHERE APPROPRIATE, MEASURE THE EFFECTIVENESS OF EACH ELEMENT OF THE SSMP;
- (C) ASSESS THE SUCCESS OF THE PREVENTATIVE MAINTENANCE PROGRAM;
- (D) UPDATE PROGRAM ELEMENTS, AS APPROPRIATE, BASED ON MONITORING OR PERFORMANCE EVALUATIONS; AND
- (E) IDENTIFY AND ILLUSTRATE SSO TRENDS, INCLUDING: FREQUENCY, LOCATION, AND VOLUME.

10.1 Compliance Summary

Prior to EOCWD taking ownership of the collection system on August 1, 2016, OCSD had been reporting and keeping statistics on all SSOs for over a decade; these statistics have been incorporated into EOCWD's operations and maintenance program and FOG control program.

EOCWD documents and tracks all SSO's from EOCWD's system as well as private property SSO's we are aware of. We report all SSOs to CIWQS. The tracking information collected includes number of spills, cause and location, volume of SSO, response time to spill, and corrective action taken. Ultimately, EOCWD will develop an SSO trending metric for inclusion in the District's Strategic Plan by August 2018.

If the root cause of an SSO has been identified as a non-operation/non-maintenance issue, such as structural problems or capacity, projects will then be developed to repair, rehabilitate, replace or upsize system components.

The District's SEDARU program also tracks several performance measures through data collection and reporting, hydraulic data and asset management data; this information is reviewed on a monthly (or more frequent basis), so that SSO's can be avoided.

During the acquisition process, the District committed to the area ratepayers that we would clean the entire system at the minimum rate of one time every 12 months; hot spots are cleaned even more frequently (between 4 and 26 weeks).

CHAPTER 10- MONITORING, MEASUREMENT AND PROGRAM MODIFICATIONS 10-1

EOCWD staff will propose that as part of its Board-adopted Strategic Plan that the following desired sewer spill related levels of service be set:

- < 2.1 Sanitary sewer spills per 100 miles;
- Contain sanitary sewer spills within 3 hours;
- Respond to collection system spills within 20 minutes

EOCWD monitors the implementation effectiveness of the SSMP elements through review at monthly internal stakeholder meetings, as well as at the semi-annual programmatic review.

10.2 Compliance Documents

The documents used for monitoring, measurement, and program modification requirements are as follows:

- EOCWD 2017 Strategic Plan
- SEDARU database reports showing all O&M/ repair/ replacements/ rehabs/ improvements that are planned, completed by staff and contractors and findings (**Appendix L**);
- EOCWD GIS in SEDARU.
- Monthly SSO Reports;
- EOCWD Asset Management Plan (**Appendix J**);
- Master Plan and Condition Assessment Study
- Flow and depth of flow data from observations and also capacity studies when conducted;

10.3 Roles and Responsibilities

The Operations Manager is responsible for achieving compliance, including delegating required tasks to staff and assigned contractors and consultants. The Operations Manager will keep the General Manager informed of system activities as they relate to the Compliance Documents and overall SSMP compliance. Other EOWD staff will assist as delegated by the General Manager; the General Manager will be responsible for keeping the Board informed.

CHAPTER 11 – PROGRAM AUDITS

This chapter describes the EOCWD audit process as required in Section D.13(x) of the Order.

SSMP PROGRAM AUDITS - AS PART OF THE SSMP, THE ENROLLEE SHALL CONDUCT PERIODIC INTERNAL AUDITS, APPROPRIATE TO THE SIZE OF THE SYSTEM AND THE NUMBER OF SSOS. AT A MINIMUM, THESE AUDITS MUST OCCUR EVERY TWO YEARS AND A REPORT MUST BE PREPARED AND KEPT ON FILE. THIS AUDIT SHALL FOCUS ON EVALUATING THE EFFECTIVENESS OF THE SSMP AND THE ENROLLEE'S COMPLIANCE WITH THE SSMP REQUIREMENTS IDENTIFIED IN THIS SUBSECTION (D.13), INCLUDING IDENTIFICATION OF ANY DEFICIENCIES IN THE SSMP AND STEPS TO CORRECT THEM.

As part of our SSMP, EOCWD shall conduct periodic internal audits, appropriate to the size of the system and the number of SSOs. At a minimum, these audits will occur every two years and an audit report will be prepared and kept on file. This audit shall focus on evaluating the effectiveness of our SSMP and our compliance with the SSMP requirements identified in this subsection (D.13), including identification of any deficiencies in the SSMP and steps to correct them. A log will be created to document and track progress on recommended program improvements.

Further clarification by the State Water Board about audit frequency includes:

“The SSMP requires that each enrollee conduct an internal audit of their SSMP every two years due by the anniversary date that the enrollee’s governing body approved the SSMP. It is permissible for an enrollee to conduct their internal audit earlier than their anniversary date. If an audit is conducted early the date that the audit is due is still based upon the anniversary date and not the date the last audit was completed. Although the internal audit does not have to be submitted to the state it is recommended that it be placed in the enrollee’s SSMP and may be requested by the SWRCB or the Regional Board at any time. In fact, the SWRCB is routinely requesting a copy of the internal audit to assist them in selecting possible enrollees for inspection and audit.”

11.1 Compliance Summary

EOCWD has an internal audit program that covers the WDR Order and its elements. EOCWD’s General Manager may retain a third-party auditor to conduct the WDR audit. The audits include the following:

- Review of progress made on development of SSMP elements
- Review of monitoring and measurement tracking under Element 9
- Identification of successes in implementing the SSMP elements and needed improvements
- Description of system improvements during the past two years

- Description of system improvements planned for the upcoming two years, with an estimated schedule for implementation.

Strategies to correct deficiencies, if identified, will be developed by the responsible EOCWD auditor with assistance from the General Manager and other staff and/or consultants.

EOCWD staff also meets with other cities and agencies, through the OCSD WDR Group meetings, to discuss collaborative auditing approaches, audit training, and lessons-learned.

11.2 Compliance Documents

The documents used for audit evaluations include the following:

- EOCWD's Environmental Auditing Program Procedures Manual (**Appendix U**)
- EOCWD's Internal Audit Finding Forms (**Appendix V**)

11.3 Roles and Responsibilities

The positions, roles, and responsibilities of the audit staff are as follows:

EOCWD's internal audits are conducted following guidelines established in the "Environmental Auditing Program Procedures Manual." Audits are conducted by a certified environmental auditor.

The General Manager has the responsibility for hiring a third-party environmental auditor to conduct the audits. Deficiencies identified as a result of the audit are brought to the attention of each responsible EOCWD stakeholder. Deficiencies and suggested corrective actions are identified, verified, and documented by the third-party auditor using EOCWD's Audit Finding Form. The General Manager is responsible for following up with EOCWD stakeholders to close-out the findings and document for Board and public awareness.

CHAPTER 12 – COMMUNICATION PROGRAM

This chapter describes the EOCWD communications process as required in Section D.13(xi) of the Order.

COMMUNICATION PROGRAM – THE ENROLLEE SHALL COMMUNICATE ON A REGULAR BASIS WITH THE PUBLIC ON THE DEVELOPMENT, IMPLEMENTATION, AND PERFORMANCE OF ITS SSMP. THE COMMUNICATION SYSTEM SHALL PROVIDE THE PUBLIC THE OPPORTUNITY TO PROVIDE INPUT TO THE ENROLLEE AS THE PROGRAM IS DEVELOPED AND IMPLEMENTED. THE ENROLLEE SHALL ALSO CREATE A PLAN OF COMMUNICATION WITH SYSTEMS THAT ARE TRIBUTARY AND/OR SATELLITE TO THE ENROLLEE'S SANITARY SEWER SYSTEM.

12.1 Compliance Summary and Activities

The District will communicate on a regular basis using our website www.EOCWD.com, mailers, print media, the internet and also following up on customer requests for information (RFI).

The EOCWD Board of Directors will also be kept informed regarding the program and its activities, needs and results through the monthly General Manager's Report in the monthly Board agendas as well as semi-annual briefings provided through the Strategic Plan reporting process. EOCWD staff will also internally review the program on a semi-annual basis through a dedicated meeting with the General Manager and the Operations and District Engineer.

In addition, as a satellite discharger to OCSD's regional sanitary sewer transport, treatment and reclamation systems, EOCWD will also participate in OCSD hosted meetings and events with its other satellite dischargers. EOCWD will also work directly with OCSD as needed on WDR/SSMP items affecting both agencies.

EOCWD has retained an outreach consultant, Communications LAB, to perform specific sewer outreach tasks including the development of educational website content, and print/social media marketing content.

12.2 Compliance Documents

The District will communicate through the use of:

- Posting the SSMP on our website
- Hard copy of SSMP available in office for public review
- FOG Program outreach (**Appendix T**)
- Public and educational outreach (**Appendix T**)

- District newsletters
- Overflow Emergency Response Plan (contained in Chapter 7)
- District Board Meetings (public comment periods, agenda items and minutes)
- Social Media (Facebook, Twitter)

12.3 Roles and Responsibilities

The General Manager has the overall responsibility and will delegate tasks to staff and contractors as needed to comply with this Chapter.