OUTLINE DOCUMENT FOR THE SEWER SYSTEM MANAGEMENT PLAN BY GARDEN GROVE SANITARY DISTRICT

Volume I

Prepared by:



Garden Grove Sanitary District 13802 Newhope Street Garden Grove, CA 92843

TABLE OF CONTENTS

PROHIBITIONS AND PROVISIONS	ABBRI	EVIATIONS / ACRONYMS	I
2. PROVISIONS 4 CHAPTER 1 - GOALS 8 1.1 PURPOSE 8 1.2 GOALS 8 1.3 ABOUT THIS DOCUMENT 8 CHAPTER 2 - ORGANIZATION 9 2.1 COMPLIANCE DOCUMENTS 9 CHAPTER 3 - LEGAL AUTHORITY 10 3.1 COMPLIANCE DOCUMENTS 10 CHAPTER 4 - OPERATION AND MAINTENANCE PROGRAM 11 4.1.1 Compliance Summary 11 4.1.2 Compliance Documents 11 CHAPTER 5 - DESIGN AND PERFORMANCE PROVISIONS 13 5.1 COMPLIANCE SUMMARY 13 5.2 COMPLIANCE DOCUMENTS 13 CHAPTER 6 - OVERFLOW EMERGENCY RESPONSE PLAN 14 6.1 COMPLIANCE SUMMARY 14 6.2 COMPLIANCE DOCUMENTS 14 6.1 COMPLIANCE SUMMARY 14 6.2 COMPLIANCE DOCUMENTS 16 7.1 COMPLIANCE SUMMARY 16 8.1 COMPLIANCE SUMMARY 16 8.2 COMPLIANCE DOCUMENTS 17 CHAPTER 8 - SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN 19 8.1 COMPLIANCE SUMMARY 15 8.2 COMPLIANCE DOCUMENTS 20 <th>EXECU</th> <th>UTIVE SUMMARY</th> <th>1</th>	EXECU	UTIVE SUMMARY	1
1. PROHIBITIONS 4 2. PROVISIONS 4 CHAPTER 1 – GOALS 8 1.1 PURPOSE 8 1.2 GOALS 8 1.3 ABOUT THIS DOCUMENT 8 CHAPTER 2 - ORGANIZATION 9 2.1 COMPLIANCE DOCUMENTS 9 CHAPTER 3 - LEGAL AUTHORITY 10 3.1 COMPLIANCE DOCUMENTS 10 CHAPTER 4 - OPERATION AND MAINTENANCE PROGRAM 11 4.1.1 Compliance Summary 11 4.1.2 Compliance Documents 11 CHAPTER 5 - DESIGN AND PERFORMANCE PROVISIONS 13 5.1 COMPLIANCE SUMMARY 13 5.2 COMPLIANCE DOCUMENTS 13 CHAPTER 6 - OVERFLOW EMERGENCY RESPONSE PLAN 14 6.1 COMPLIANCE DOCUMENTS 14 6.2 COMPLIANCE DOCUMENTS 14 6.1 COMPLIANCE SUMMARY 14 7.1 COMPLIANCE SUMMARY 16 8.1 COMPLIANCE SUMMARY 16 8.2 COMPLIANCE DOCUMENTS 17 CHAPTER 8 - SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN 19 8.1 COMPLIANCE DOCUMENTS 20 CHAPTER 9 - MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS	GARD]	EN GROVE SANITARY DISTRICT SEWER SYSTEM MANAGEMENT PLA	AN 3
1. PROHIBITIONS 4 2. PROVISIONS 4 CHAPTER 1 – GOALS 8 1.1 PURPOSE 8 1.2 GOALS 8 1.3 ABOUT THIS DOCUMENT 8 CHAPTER 2 - ORGANIZATION 9 2.1 COMPLIANCE DOCUMENTS 9 CHAPTER 3 - LEGAL AUTHORITY 10 3.1 COMPLIANCE DOCUMENTS 10 CHAPTER 4 - OPERATION AND MAINTENANCE PROGRAM 11 4.1.1 Compliance Summary 11 4.1.2 Compliance Documents 11 CHAPTER 5 - DESIGN AND PERFORMANCE PROVISIONS 13 5.1 COMPLIANCE SUMMARY 13 5.2 COMPLIANCE DOCUMENTS 13 CHAPTER 6 - OVERFLOW EMERGENCY RESPONSE PLAN 14 6.1 COMPLIANCE DOCUMENTS 14 6.2 COMPLIANCE DOCUMENTS 14 6.1 COMPLIANCE SUMMARY 14 7.1 COMPLIANCE SUMMARY 16 8.1 COMPLIANCE SUMMARY 16 8.2 COMPLIANCE DOCUMENTS 17 CHAPTER 8 - SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN 19 8.1 COMPLIANCE DOCUMENTS 20 CHAPTER 9 - MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS	PROH	IBITIONS AND PROVISIONS	4
CHAPTER 1 - GOALS	1.	Prohibitions	4
1.1 PURPOSE 8 1.2 GOALS 8 1.3 ABOUT THIS DOCUMENT 8 CHAPTER 2 - ORGANIZATION 9 2.1 COMPLIANCE DOCUMENTS 9 CHAPTER 3 - LEGAL AUTHORITY 10 3.1 COMPLIANCE DOCUMENTS 10 CHAPTER 4 - OPERATION AND MAINTENANCE PROGRAM 11 4.1.1 Compliance Summary 11 4.1.2 Compliance Documents 11 CHAPTER 5 - DESIGN AND PERFORMANCE PROVISIONS 13 5.1 COMPLIANCE SUMMARY 13 5.2 COMPLIANCE DOCUMENTS 13 CHAPTER 6 - OVERFLOW EMERGENCY RESPONSE PLAN 14 6.1 COMPLIANCE SUMMARY 14 6.2 COMPLIANCE DOCUMENTS 14 CHAPTER 7 - FATS, OILS, AND GREASE CONTROL PROGRAM 16 7.1 COMPLIANCE SUMMARY 16 7.2 COMPLIANCE DOCUMENTS 17 CHAPTER 8 - SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN 15 8.1 COMPLIANCE SUMMARY 19 8.2 COMPLIANCE DOCUMENTS 20 CHAPTER 9 -			
1.2 GOALS 1.3 ABOUT THIS DOCUMENT 8 1.3 ABOUT THIS DOCUMENT 8 CHAPTER 2 - ORGANIZATION 2.1 COMPLIANCE DOCUMENTS 9 CHAPTER 3 - LEGAL AUTHORITY 3.1 COMPLIANCE DOCUMENTS 10 CHAPTER 4 - OPERATION AND MAINTENANCE PROGRAM 11 4.1.1 Compliance Summary 4.1.2 Compliance Documents 11 CHAPTER 5 - DESIGN AND PERFORMANCE PROVISIONS 13 5.1 COMPLIANCE SUMMARY 5.2 COMPLIANCE DOCUMENTS 13 CHAPTER 6 - OVERFLOW EMERGENCY RESPONSE PLAN 6.1 COMPLIANCE SUMMARY 6.2 COMPLIANCE DOCUMENTS 14 6.1 COMPLIANCE SUMMARY 6.2 COMPLIANCE DOCUMENTS 14 CHAPTER 7 - FATS, OILS, AND GREASE CONTROL PROGRAM 7.1 COMPLIANCE SUMMARY 7.2 COMPLIANCE DOCUMENTS 16 7.1 COMPLIANCE SUMMARY 16 7.2 COMPLIANCE SUMMARY 17 CHAPTER 8 - SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN 19 8.1 COMPLIANCE SUMMARY 19 8.2 COMPLIANCE DOCUMENTS 21 CHAPTER 9 - MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS 21 9.1 COMPLIANCE SUMMARY 21	CHAP		
1.3 ABOUT THIS DOCUMENT		PURPOSE	8 8
2.1 COMPLIANCE DOCUMENTS		ABOUT THIS DOCUMENT	8
2.1 COMPLIANCE DOCUMENTS	СНАР	TER 2 - ORGANIZATION	9
3.1 COMPLIANCE DOCUMENTS	2.1	COMPLIANCE DOCUMENTS	9
CHAPTER 4 - OPERATION AND MAINTENANCE PROGRAM 11 4.1.1	CHAP	TER 3 – LEGAL AUTHORITY	10
4.1.1 Compliance Summary	3.1	COMPLIANCE DOCUMENTS	10
4.1.2 Compliance Documents 11 CHAPTER 5 – DESIGN AND PERFORMANCE PROVISIONS 13 5.1 COMPLIANCE SUMMARY 13 5.2 COMPLIANCE DOCUMENTS 13 CHAPTER 6 – OVERFLOW EMERGENCY RESPONSE PLAN 14 6.1 COMPLIANCE SUMMARY 14 6.2 COMPLIANCE DOCUMENTS 14 CHAPTER 7 – FATS, OILS, AND GREASE CONTROL PROGRAM 16 7.1 COMPLIANCE SUMMARY 16 7.2 COMPLIANCE DOCUMENTS 17 CHAPTER 8 – SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN 19 8.1 COMPLIANCE SUMMARY 19 8.2 COMPLIANCE DOCUMENTS 20 CHAPTER 9 – MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS 21 9.1 COMPLIANCE SUMMARY 21	СНАР		
5.1 COMPLIANCE SUMMARY		1.1 Compliance Summary	11 11
5.1 COMPLIANCE SUMMARY	CHAP'	TER 5 – DESIGN AND PERFORMANCE PROVISIONS	13
5.2 COMPLIANCE DOCUMENTS 13 CHAPTER 6 – OVERFLOW EMERGENCY RESPONSE PLAN 14 6.1 COMPLIANCE SUMMARY 14 6.2 COMPLIANCE DOCUMENTS 14 CHAPTER 7 – FATS, OILS, AND GREASE CONTROL PROGRAM 16 7.1 COMPLIANCE SUMMARY 16 7.2 COMPLIANCE DOCUMENTS 17 CHAPTER 8 – SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN 19 8.1 COMPLIANCE SUMMARY 19 8.2 COMPLIANCE DOCUMENTS 20 CHAPTER 9 – MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS 21 9.1 COMPLIANCE SUMMARY 21 9.1 COMPLIANCE SUMMARY 21		COMPLIANCE SUMMARY	13
6.1 COMPLIANCE SUMMARY 14 6.2 COMPLIANCE DOCUMENTS 14 CHAPTER 7 – FATS, OILS, AND GREASE CONTROL PROGRAM 16 7.1 COMPLIANCE SUMMARY 16 7.2 COMPLIANCE DOCUMENTS 17 CHAPTER 8 – SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN 19 8.1 COMPLIANCE SUMMARY 19 8.2 COMPLIANCE DOCUMENTS 20 CHAPTER 9 – MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS 9.1 COMPLIANCE SUMMARY 21		COMPLIANCE DOCUMENTS	13
CHAPTER 7 – FATS, OILS, AND GREASE CONTROL PROGRAM	CHAP'		
CHAPTER 7 – FATS, OILS, AND GREASE CONTROL PROGRAM		COMPLIANCE SUMMARY	14
7.1 COMPLIANCE SUMMARY			
7.2 COMPLIANCE DOCUMENTS			
8.1 COMPLIANCE SUMMARY		COMPLIANCE DOCUMENTS	10 17
8.1 COMPLIANCE SUMMARY			
8.2 COMPLIANCE DOCUMENTS			
9.1 COMPLIANCE SUMMARY		COMPLIANCE DOCUMENTS	20
9.1 COMPLIANCE SUMMARY21	CHAP	TER 9 – MONITORING, MEASUREMENT, AND PROGRAM MODIFICAT	TIONS
9.1 COMPLIANCE SUMMARY	•••••		
9,2 COMPLIANCE DOCUMENTS21		COMPLIANCE SUMMARY	21 21
CHAPTER 10 - SSMP PROGRAM AUDITS			

TABLE OF CONTENTS (continued)

OOKMARK NOT DEFINED.	COMPLIANCE SUMMARYERROI	10.1
	COMPLIANCE DOCUMENTS	
23	TER 11 – COMMUNICATION PROGRAM	СНАРТ
23	COMPLIANCE SUMMARY	111
23	COMPLIANCE DOCUMENTS	11.2
24	R COMPLIANCE INFORMATION	OTHER
	COMPLIANCE SUMMARY	
24	COMPLIANCE DOCUMENTS	C.2

ABBREVIATIONS / ACRONYMS

AB Assembly Bill

BAT Best Available Technology

BC Brown and Caldwell

BMP Best Management Practice
CCTV Closed-Circuit Television
CFR Code of Federal Regulations
CIP Capital Improvement Program

CWEA California Water Environment Association

ERP Emergency Response Plan FOG Fats, Oils, and Grease

GGSD Garden Grove Sanitary District

I/I Inflow/Infiltration

MRP Monitoring and Reporting Program

O&M Operation and Maintenance

OCHCA Orange County Health Care Agency
OCSD Orange County Sanitation District
OES Office of Emergency Services

ORDER Statewide General Waste Discharge Requirements Order No. 2006-0003-

DWQ. Issue date 05/02/06

PMP Preventative Maintenance Program
R&R Rehabilitation and Replacement
RWQCB Regional Water Quality Control Board

SOP Standard Operating Procedure

SSO Sanitary Sewer Overflow and any sewer spill or overflow of sewage

SSMP Sewer System Management Plan
SWRCB State Water Resources Control Board

WDR Waste Discharge Requirements
WWTP Wastewater Treatment Plant

EXECUTIVE SUMMARY

This Sewer System Management Plan (SSMP) addresses the prevention and cleanup of sanitary sewer overflows (SSOs). All sanitary sewer systems are required to comply with the State Water Resources Control Board (SWRCB) Order No. 2006-0003 (Order) on General Waste Discharge Requirements. The purpose of the Order is to prevent SSOs, and to provide a plan and schedule for measures to be implemented to prevent SSOs, as well as measures to effectively clean up and report the spills.

The Order requires that sanitary sewer systems properly fund, manage, operate, and maintain the sanitary sewer system for which they are responsible. Sanitary sewer systems must use trained staff (and/or contractors) possessing adequate knowledge, skills, and abilities to complete necessary collection system work. Sanitary sewer systems also must demonstrate preparation of these staff through a validated program.

The essence of this Order is as follows:

- Sanitary sewer systems must proactively manage the systems they operate in a way that prevents spills.
- In the event of a spill, lack of funds, failure to acquire information that could have been collected, failure to apply the latest in technology, poorly trained staff, or ignorance are no defense.
- Sanitary sewer systems must fully comply with this Order, and failures could bring about SWRCB action, regardless of whether or not a spill has occurred.

This SSMP report is organized to correspond to the sections of the Order. The report consists of 11 chapters. In general, each chapter begins with a summary of 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 their locations.
- Roles and Responsibilities A listing of relevant staff roles and responsibilities.

The Garden Grove Sanitary District (GGSD or District) was formed in 1924 for the purpose of providing sewer service to the then unincorporated Orange County area known as Garden Grove. As properties near GGSD's service area developed from rural agricultural to primarily residential, they annexed to the District for sewer service. The Garden Grove Sanitary District's service area expanded to cover most of the areas within the corporate boundaries of the City of Garden Grove; as well as portions of the Cities of Stanton, Anaheim, Orange, Santa Ana, Westminster, and several unincorporated Orange County areas covering approximately 10,500 acres. The Midway City Sanitary District provided sewer service to the remaining areas within the corporate boundaries of the City of Garden Grove.

The areas within the cities of Anaheim, Orange, and Santa Ana were detached from the GGSD by 1993. In order to provide more efficient sewer service to its residents and business community, the City of Garden Grove initiated the dissolution of the Garden Grove Sanitary District in 1993. The Orange County Local Agency Formation Commission (LAFCO revised that the boundaries of GGSD, and that the City be named the successor to the GGSD to provide sewer and refuse collection services within the Garden Grove boundaries. On May 31, 1997, Orange County LAFCO amended this application and reorganized the GGSD as a subsidiary district of the City of Garden Grove.

As part of this reorganization, Garden Grove Sanitary District annexed the three areas that were previously served by the Midway City Sanitary District. Additionally, the Garden Grove Sanitary District annexed three unincorporated areas: one east of Dale Street between Chapman Avenue and Lampson Avenue, one west of Fairview Street south of Trask Avenue, and one east of Ward Street south of Ballast Avenue. It detached three areas that are within the corporate boundaries of the City of Westminster for service by the Midway City Sanitary District.

The current service area of the GGSD consists of all lands within the corporate boundaries of the City of Garden Grove (11,584 acres); several unincorporated Orange County areas contiguous with the City boundaries (451 acres); and one 70 acre Fountain Valley and unincorporated Orange County area between Harbor Boulevard and Santa Ana River South of Calendula Avenue. The GGSD provides wastewater collection service to approximately 37,000 customers.

The GGSD owns 320 miles (1,689,584 feet) of gravity sewer pipes varying in size from 6-inch to 24-inch diameter. The gravity sewer pipes collect the wastewater from the service area, and convey it to the Orange County Sanitation District's (OCSD) trunk sewers. The trunk sewers further convey the wastewater to OCSD's treatment facilities in Fountain Valley and Huntington Beach.

The GGSD owns three (3) sewer pump stations that provide service to the lower parts of the District. Two of these, Tiffany Pump Station and Belgrave Pump Station, are located in the westerly portion of the District. In 2010, the District constructed a gravity sewer line on Harbor, west on Heil and ties into an OCSD line on Newhope. This new line eliminates the need for the pump station. In 2009, during the widening of the 22 freeway, a storm channel

was re-designed and interfered with a gravity sewer line that ran under the freeway. This action required a lift station to be built on Partridge north of the 22 freeway.

GARDEN GROVE SANITARY DISTRICT SEWER SYSTEM MANAGEMENT PLAN

Certification

I certify under penalty of law that this document and all attachments were prepared under my direct supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Director of Public Works	Date

PROHIBITIONS AND PROVISIONS

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

1. Prohibitions

Pursuant to California Water Code Section 13263, the Enrollees, their agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted there under, are required to comply with the following prohibitions:

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

2. Provisions

The Enrollee must meet the following thirteen provisions:

- 1. The Enrollee 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. It is the intent of the State Water Board that sanitary sewer systems be regulated in a manner consistent with the general Wars. 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 federal requirement in an existing permit, regulation, or administrative/judicial order or Consent Decree;
 - (ii) Interpreted or applied to authorize an SSO that is illegal under either the Clean Water Act, an applicable Basin Plan prohibition or water quality standard, or the California Water Code;
 - (iii) Interpreted or applied to prohibit a Regional Water Board from issuing an individual NPDES permit or WDR, suspending 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. The Enrollee shall take all feasible steps to eliminate SSOs. In the event that an SSO does occur, the Enrollee shall take all feasible steps to contain and mitigate the impacts of an SSO.
- 4. In the event of an SSO, the Enrollee shall take all feasible steps to prevent untreated or partially treated wastewater from discharging from storm drains into flood control channels or water of the United States by blocking the storm drainage system and by removing the wastewater from the storm drains.
- 5. All SSOs must be reported in accordance with Section G of the general WDR.
- 6. In any enforcement action, the State and/or Regional Water Boards will consider the appropriate factors under the duly adopted State Water Board Enforcement Policy. And, consistent with the Enforcement Policy, the State and/or Regional Water Boards must consider the Enrollee's efforts to contain, control, and mitigate SSOs when considering the California Water Code Section 13327 factors. In assessing these factors, the State and/or Regional Water Boards will also consider whether:
 - (i) The Enrollee has complied with the requirements of this Order, including requirements for reporting and developing and implementing a SSMP;
 - (ii) The Enrollee can identify the cause or likely cause of the discharge event;
 - (iii) There were no feasible alternatives to the discharge, such as temporary storage or retention of untreated wastewater, reduction of inflow and infiltration, use of adequate backup equipment, collecting and hauling of untreated wastewater to a treatment facility, or an increase in the capacity of the system as necessary to contain the design storm event identified in the SSMP. It is inappropriate to consider the lack of feasible alternatives. If the Enrollee does not implement a periodic or continuing process to identify and correct problems;
 - (iv) The discharge was exceptional, unintentional, temporary, and caused by factors beyond the reasonable control of the Enrollee;
 - (v) The discharge could have been prevented by the exercise of reasonable control described in a certified SSMP for:
 - Proper management, operation and maintenance;
 - Adequate treatment facilities, sanitary sewer system facilities, and/or components with an appropriate design capacity, to reasonably prevent SSOs (e.g., adequately enlarging treatment or collection facilities to accommodate growth, infiltration and inflow (I/I), etc.);
 - Preventive maintenance (including cleaning and fats, oils, and grease (FOG) control);
 - Installation of adequate backup equipment; and

- Inflow and infiltration prevention and control to the extent practicable.
- (vi) The sanitary sewer system design capacity is appropriate to reasonably prevent SSOs.
- (vii) The Enrollee took all reasonable steps to stop and mitigate the impact of the discharge as soon as possible.
- 7. When a sanitary sewer overflow occurs, the Enrollee shall take all feasible steps and necessary remedial actions to 1) control or limit the volume of untreated or partially treated wastewater discharged, 2) terminate the discharge, and 3) recover as much of the wastewater discharged as possible for proper disposal, including any wash down water.

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

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

- 11. The Enrollee shall develop and implement a written Sewer System Management Plan (SSMP) and make it available to the State and/or Regional Water Board upon request. A copy of this document must be publicly available at the Enrollee's office and/or available on the Internet. This SSMP must be approved by the Enrollee's governing board at a public meeting.
- 12. In accordance with the California Business and Professions Code sections 6735, 7835, and 7835.1, all engineering and geologic evaluations and judgments shall be performed by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities. Specific elements of the SSMP that require professional evaluation and judgments shall be prepared by or under the direction of appropriately qualified professionals, and shall bear the professional(s)' signature and stamp.
- 13. The mandatory elements of the SSMP are specified below. However, if the Enrollee believes that any element of this section is not appropriate or applicable to the Enrollee's sanitary sewer system, the SSMP program does not need to address that element. The Enrollee must justify why that element is not applicable. The SSMP must be approved by the deadlines listed in the SSMP Time Schedule.
 - Goals
 - Organization
 - Legal Authority
 - Operation and Maintenance Program
 - Design and Performance Provisions
 - Overflow Emergency Response Plan
 - Fats, Oils, and Grease (FOG) Control Program
 - System Evaluation and Capacity Assurance Plan
 - Monitoring, Measurement, and Program Modifications

In addition, this report also includes the following three chapters:

- SSMP Program Audits
- Communication Program
- Other Compliance Information

CHAPTER 1 - GOALS

Under the Order, 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.

1.1 Purpose

The purpose of the Order is to prevent sanitary sewer overflows (SSOs). GGSD is required to prepare and maintain the SSMP to support this purpose.

The Enrollee shall properly fund, manage, operate and maintain, with adequately trained staff and/or contractors possessing adequate knowledge skills and abilities as demonstrated through a validated program at all times, all parts of the sanitary sewer system owned and/or operated by the Enrollee.

1.2 Goals

The goals of the SSMP are to prevent SSOs, and to provide a plan and schedule for measures to be implemented to prevent SSOs, as well as measures to effectively clean up and report the spills.

As required by the SWRCB, copies of this SSMP are maintained at the following locations: 1) Municipal Service Center, located at 13802 Newhope St. Garden Grove, CA 92843, and 2) City Clerk's Office, located at 11222 Acacia Parkway, Garden Grove, CA 92840. These copies are available to sanitary sewer system operating and maintenance personnel at all times. A copy of the Order is included as **Appendix 1** in Volume II of this SSMP. The Enrollee shall comply with the Monitoring and Reporting Program No. 2006-0003 and future revisions thereto, as specified by the Executive Director.

1.3 About This Document

GGSD has prepared this SSMP to ensure compliance with the Order. Volume I of the SSMP provides a general description of how we comply with the various provisions of the Order and provides references to supporting documents. Volume II of the SSMP contains specific information and support documents. Some support materials, such as large format drawings, relational databases, and voluminous documents may not be physically included in the SSMP. In these cases, a reference shall be provided within the SSMP that indicates the type, and location of these support materials.

As the above data is reviewed for accuracy, elements within our existing SSMP may change to reflect the most up-to-date and accurate information available.

Our goal is to ensure that we have user-friendly documents for staff and GGSD Board information and use, and public review as required by the WDR Order.

CHAPTER 2 - ORGANIZATION

Under the Order, the SSMP must identify:

- The name of the responsible or authorized representative as described in Section J of this Order.
- 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
- 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)).

2.1 Compliance Documents

- GGSD Organization Chart, included as Appendix 2 in Volume II of this SSMP.
- GGSD Chain of Communication, included as **Appendix 2** in Volume II of this SSMP.
- GGSD Roles & Responsibilities, included as **Appendix 2** in Volume II of this SSMP.

CHAPTER 3 – LEGAL AUTHORITY

Under the Order, 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:

- Prevent illicit discharges into its sanitary sewer system (examples may include I/I, stormwater, chemical dumping, unauthorized debris and cut roots, etc.);
- Require that sewers and connections be properly designed and constructed;
- Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the Public Agency;
- Limit the discharge of fats, oils, and grease and other debris that may cause blockages, and
- Enforce any violation of its sewer ordinances.

3.1 Compliance Documents

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

- GGSD Storm Water Quality Ordinance, included as **Appendix 3** in Volume II of this SSMP.
- GGSD FOG Control Ordinance, included as **Appendix 3** in Volume II of this SSMP.
- GGSD Code of Regulations, included as **Appendix 3** in Volume II of this SSMP.
- GGSD Design Criteria for Sewer Facilities, available at the Municipal Service Center located at 13802 Newhope Street, Garden Grove.
- Standards Specifications for Public Works Construction (Green Book), available at the Municipal Service Center located at 13802 Newhope Street, Garden Grove.

CHAPTER 4 - OPERATION AND MAINTENANCE PROGRAM

Under the Order, the SSMP must include those elements listed below that are appropriate and applicable to the Enrollee's system:

- 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;
- 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;
- Develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short- and long-term plans plus a schedule for developing the funds needed for the capital improvement plan;
- Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be appropriately trained; and
- Provide equipment and replacement part inventories, including identification of critical replacement parts.

4.1.1 Compliance Summary

GGSD has an on-going preventative maintenance plan, which has been revised to reflect the most up-to-date changes, that includes procurement procedures and inventories for critical equipment under various scenarios. Our current reliability shows that the availability and stock levels of spare parts have been adequate.

4.1.2 Compliance Documents

The document supporting compliance with the requirements for Operation and Maintenance Program is as follows:

- Preventative Maintenance Plan, included as **Appendix 4** in Volume II of this SSMP.
- GIS Map of Sanitary Sewer System, available at the Municipal Service Center located at 13802 Newhope Street, Garden Grove.

Rehabilitation and Replacement Plan, available at the Municipal Service Center located at 13802 Newhope Street, Garden Grove.

CCTV and Roving Checks (Visual Inspection) Program, included as Appendix 4 in

Volume II of this SSMP.

GGSD's staff currently participates in the CWEA certification program for collection workers, Grades I through IV. GGSD also provides on-going in-house technical, job and safety training, training from outside vendors, other GGSD/City staff and from attending seminars. Outside contractors are provided a GGSD SSO ERP and site-specific response plan.

GGSD is required to provide training on a regular basis for staff in sanitary sewer system operations, maintenance, and monitoring, and determine if contractors' staffs are appropriately trained.

Tailgate Meeting Records, available at the Municipal Service Center located at 13802 Newhope Street, Garden Grove.

Individual Employee Training Files, available at the Municipal Service Center located

at 13802 Newhope Street, Garden Grove.

CHAPTER 5 - DESIGN AND PERFORMANCE PROVISIONS

Under the Order, this chapter references the:

- 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
- Procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

5.1 Compliance Summary

These procedures exist and are available for review at the Municipal Service Center located at 13802 Newhope Street, Garden Grove. GGSD has a program for updating standards and specifications on an as needed basis. All past and current work has been guided by these various standards and specifications that are on file now and subject to change as needed.

5.2 Compliance Documents

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

- GGSD Design Criteria for Sewer Facilities
- Sewer Standard Plans
- Standards Specifications for Public Works Construction (Green Book)
- All plans reviewed by AKM (GGSD Engineer)

The above-mentioned documents are available at the Municipal Service Center located at 13802 Newhope Street, Garden Grove.

CHAPTER 6 - OVERFLOW EMERGENCY RESPONSE PLAN

Under the Order, each Enrollee shall develop and implement a SSO Emergency Response Plan (ERP) that identifies measures to protect public health and the environment. At a minimum, this plan shall include the following:

- Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner.
- A Program to ensure appropriate response to all overflows.
- 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 WDR or NPDES permit requirements. The SSMP should identify the officials who will receive immediate notification.
- Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Plan and are appropriately trained.
- Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities.
- 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 o 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.

6.1 Compliance Summary

GGSD has developed an SSO Emergency Response Plan (ERP). The ERP includes notification procedures and internal procedures for category I, category II and private spills. Staff training on the procedures is conducted periodically throughout the year at tailgate meetings.

6.2 Compliance Documents

The compliance documents are as follows:

- SSO Emergency Response Plan, included as **Appendix 6** in Volume II of this SSMP.
- SSO In-Channel Response Procedures, included as **Appendix 6** in Volume II of this SSMP.
- Field Report, included as **Appendix 6** in Volume II of this SSMP.

OCSD Excel/Categories 1 and 2, included as **Appendix 6** in Volume II of this SSMP.

CHAPTER 7 - FATS, OILS, AND GREASE CONTROL PROGRAM

Under the Order, GGSD is responsible for preparing and implementing Fats, Oils, and Grease (FOG) source control program to reduce the amount of these substances discharged to the sanitary sewer system. The FOG Control Program is an element of the GGSD's SSMP.

The key requirements of the FOG Program shall include the following as appropriate:

- An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG.
- A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area.
- The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG.
- 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.
- Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the FOG ordinance.
- An identification of sanitary sewer system sections subject to FOG blockages and establish a cleaning maintenance schedule for each section.
- Development and implementation of source control measures for all sources of FOG discharged to the sanitary sewer system for each section identified in the previous bullet point.

7.1 Compliance Summary

The GGSD Board of Directors approved the GGSD FOG Control Program on October 26, 2004. GGSD conducted a FOG Characterization of all the Food Service Establishments (FSEs) in the District. This included inspections of approximately 600+ FSEs to create a database containing baseline information that will be utilized by the Garden Grove Environmental Services Specialists for FSE inspections. GGSD has identified sections of the sewer system subject to grease blockages and including these sections in its Enhanced Cleaning program. In addition, GGSD has an ongoing FOG Public Education Outreach Program. GGSD staff will continue to provide public outreach and education materials to the general public, schools and other interested parties.

7.2 Compliance Documents

FOG Control Program implementation is documented under the following ordinances, reports, and studies:

- FOG Disposal Alternatives Report, available at the Municipal Service Center located at 13802 Newhope Street, Garden Grove.
- FOG Control Study available at the Municipal Service Center located at 13802 Newhope Street, Garden Grove.
- GGSD FOG Characterization Study, available at the Municipal Service Center located at 13802 Newhope Street, Garden Grove.
- Legal authority is maintained through the Garden Grove Storm Water Quality Ordinance, FOG Ordinance and GGSG Code of Regulations.

FOG Control Program activities are conducted in the following ways:

- During TI plan review, plans including FSE's are routed to the Water Department and are flagged for GCD installation. ECD inspects the site to verify if there is a GCD or not. If there is not a GCD, then it is added as a condition of approval. Plans, proper sizing and installation of the GCD performed by the Building Department per plumbing code requirements.
- All FOG producing FSE's are provided with a FOG packet explaining FOG program BMPs in 4 languages (English, Spanish, Vietnamese and Korean). Included in the packet are log sheets for documenting lateral maintenance, yellow grease disposal, brown grease disposal and employee training. All documents are reviewed during annual FSE FOG inspections.
- All new restaurants fill out a Commercial and Industrial business form as part of the business license process. A copy of the form is sent to ECD to ensure all new FSE's are tracked and inspected in order to inform FSE's of the FOG program.
- All FSE's have a FOG inspection performed annually. The list of FSE's is maintained in a Commercial and Industrial business database, which is linked to the workorder system and hosts all inspection and enforcement work orders for all FSE's, including photos.
- All FOG ordinance violations are enforced through a template letter. There is standard language used, with immediate and long-term corrective action requirements.
- As mandated in the FOG Ordinance all FSE GCD's must be serviced every 6 months per the FOG ordinance.
- A list of registered liquid waste haulers through Orange County was compiled and is provided to those in need of a yellow and/or brown grease disposal company.

FOG Public Education Outreach

- A water utility bill insert for residents was created explaining what items could be disposed of at a HHW collection facility, and FOG is included in that.
- A FOG control brochure was created in English and Spanish for residents and FSEs.

A FOG water utility bill insert was created for residents explaining the problem with FOG in the sewer system, how to dispose of it properly and its potential impact on the environment if spills occur.

Residents that have a FOG induced sewer spill are provided with grease lids and

language specific information.

FOG control and sewer spill prevention is discussed at school outreach events and municipal events. These annual events include Public Works Open House, Public Works Equipment Show, Children's Water Education Festival, Garden Grove Pride and other various events.

As an outreach tool, GGSD has a sewer saver display indicating the effect of tree roots, solids and FOG on the sewer system. Additionally, ECD created the "Knock the grease goblin out of the sewer" beanbag game as a public education tool.

Outreach media, including rulers, note pads, bracelets, pens and pencils have been used with "Contain it, Don't Drain it" and contact phone number displayed on it.

GGSD and ECD have FOG and sewer spill prevention information on their websites.

CHAPTER 8 - SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

Under the Order, 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:

- 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;
- Design Criteria: Where design criteria do not exist or are deficient, undertake the evaluation identified in (a) above to establish appropriate design criteria; and
- 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.
- 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.

8.1 Compliance Summary

GGSD submitted a System Evaluation and Capacity Assurance Plan to the RWQCB on July 28, 2005. GGSD has design standards and guidelines to ensure adequate capacity. GGSD's CIP assures that older facilities are upgraded as needed to ensure adequate capacity through the system. The System Evaluation and Capacity Assurance Plan will be updated as additional information is developed.

Following the completion of its System Evaluation and Capacity Assurance Plan, and Sewer System Rehabilitation Plan, the Garden Grove Sanitary District developed a long term Capital Improvement Plan. The CIP proposed required the expenditure of approximately \$5 million annually for improving the system capacity, and implementing rehabilitation and replacement projects.

The District noticed its customers of its intent to revise the rate structure, and conducted a public hearing on August 23, 2005. After considering public comment, the proposed rate structure was modified, and adopted on September 13, 2005. The revised rate structure will allow implementation

of the CIP as recommended at approximately \$5 million annually (2005 dollars). The rate ordinance has built in escalation for annual adjustments for increases in construction costs.

8.2 Compliance Documents

The document used for system evaluation and capacity assurance is as follows:

System Evaluation and Capacity Assurance Plan, available at the Municipal Service Center located at 13802 Newhope Street, Garden Grove.

CHAPTER 9 – MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS

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

- Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities.
- Monitor the implementation and, where appropriate, 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.
- Identify and illustrate SSO trends, including frequency, location, and volume.

9.1 Compliance Summary

GGSD will monitor the effectiveness of its program continuously in order to minimize the possibility of SSO's. Where appropriate, the GGSD may:

- Adjust their Hot Spot cleaning program
- Revise their criteria
- Expand the scope of the FOG Program
- Modify the design and construction standards
- Revise the Capital Improvement Program (CIP)
- Adjust the rate structure

9.2 Compliance Documents

The compliance documents used for monitoring, measurement, and program modifications are as follows:

- GGSD Internal Database
- Monthly Spill Reports
- GGSD GIS Entry Field Reports

The above-mentioned documents are available at the Municipal Service Center located at 13802 Newhope Street, Garden Grove.

CHAPTER 10 – 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.

10.1 Compliance Documents

A copy of the 2009 SSMP Audit Report and future copies of this document will be included as **Appendix 10** in Volume II of this SSMP.

CHAPTER 11 - COMMUNICATION PROGRAM

Under the Order, 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.

11.1 Compliance Summary

GGSD shall communicate on a regular basis with interested parties on the implementation and performance of this SSMP. The communication program allows interested parties to provide input as the program is developed and implemented

11.2 Compliance Documents

GGSD's on-going public education/outreach program is comprised of informational brochures, door hanger information, grease lids, etc. GGSD dissipates this and more information during public events, such as the Public Works Open House and the Coast Keeper Outreach Program.

OTHER COMPLIANCE INFORMATION

Under the Order, GGSD shall maintain copies of the SSMP available at the Municipal Service Center located at 13802 Newhope St. Garden Grove, CA 92843 and at the Garden Grove City Clerk's Office located at 11222 Acacia Parkway, Garden Grove, CA 92840.

C.1 Compliance Summary

On September 13, 2005, the GGSD Board of Directors adopted an ordinance revising sewer user fees for sewer services within the GGSD service area.

C.2 Compliance Documents

The document used for this section is as follows:

GGSD Revised Sewer Fee Ordinance, included as **Appendix 11** in Volume II of this SSMP.