TO:

BOARD OF DIRECTORS

FROM:

MICHAEL LEBRUN

DATE:

APRIL 7, 2010

AGENDA ITEM E-3 APRIL 14, 2010

### APPROVE ELEMENTS OF TOWN AND BLACKLAKE SEWER SYSTEM MANAGEMENT PLAN

#### ITEM

APPROVE FINAL ELEMENTS OF TOWN AND BLACKLAKE SEWER SYSTEM MANAGEMENT PLAN [ADOPT RESOLUTION].

#### BACKGROUND

The California State Water Resources Control Board adopted Order No. 2006-003, Statewide General Waste Discharge Requirements (WDR) for Wastewater Collection Agencies, on May 2, 2006. The WDR requires development of a Sewer System Management Plan (SSMP) and specifies monitoring, reporting and SSMP implementation requirements. Development of the SSMP is phased with compliance dates based on population. The District maintains two separate sewer systems – the Town system and the Blacklake system.

The District's SSMP Development Plan and Schedule was adopted by the Board on January 9, 2008. The SSMP Development Plan and Schedule as well as the completed SSMP must be approved by the Board of Directors. The first SSMP elements that needed to be completed were the Goals and Organization elements. The compliance date for these elements was May 1, 2008. The second set of elements that needed to be completed were the Legal Authority, Operations & Maintenance (O&M) Program, Overflow Emergency Response Plan (OERP), and Fats, Oils, and Grease (FOG) Control Program. The compliance date for these elements was November 1, 2009.

The final set of elements that needs to be completed by May 1, 2010 includes Design and Performance, System Evaluation and Capacity Assurance, Monitoring, Measurement and Program Modifications, Program Audits, and Communication Program Elements. The attached version of the SSMP includes all of the required elements of a complete SSMP.

#### **FISCAL IMPACT**

Preparation of the final SSMP elements involved the use of budgeted staff time. SSMP implementation costs related to O&M and FOG are budgeted separately in the FY 2009-2010 budget.

#### RECOMMENDATION

Staff recommends that your Honorable Board adopt Resolution 2010-XXXX approving the SSMP Final Elements.

#### ATTACHMENT

Resolution 2010-XXXX Approving SSMP Final Elements

T:\BOARD MATTERS\BOARD MEETINGS\BOARD LETTER\2010\100414 SSMP Final Elements.doc

### NIPOMO COMMUNITY SERVICES DISTRICT RESOLUTION NO. 2010-XXXX

## A RESOLUTION OF THE BOARD OF DIRECTORS OF THE NIPOMO COMMUNITY SERVICES DISTRICT APPROVING FINAL TOWN AND BLACKLAKE SEWER SYSTEM MANAGEMENT PLAN (SSMP) ELEMENTS

WHEREAS, the California State Water Resources Control Board adopted Order No. 2006-003, Statewide General Waste Discharge Requirements (WDR) for Wastewater Collection Agencies; and

WHEREAS, the WDR requires the Nipomo Community Services District (District) to develop a Sewer System Management Plan (SSMP) for the Town and Blacklake sewer systems that is phased with compliance dates based on population; and

WHEREAS, the SSMP Goals and Organization Elements were approved by the District's Board of Directors on April 9, 2008; and

WHEREAS, the SSMP Legal, Operations and Maintenance, Overflow Emergency Response Plan and Fats, Oils and Grease Program Elements were approved by the District's Board of Directors on September 30, 2009; and

WHEREAS, the SSMP Design and Performance, System Evaluation and Capacity Assurance, Monitoring, Measurement and Program Modifications, Program Audits, and Communication Program Elements must be completed by May 1, 2010 and approved by the District's Board of Directors.

NOW, THEREFORE, BE IT RESOLVED, DETERMINED AND ORDERED by the Board of Directors of the Nipomo Community Services District, as follows:

Upon motion by Director seconded by Director and on the

The Town and Blacklake Sewer System Management Plan attached hereto as Exhibit "A" is hereby adopted and supersedes the SSMP adopted by the District Board of Directors on September 30, 2009.

following roll call vote, to wit:	
AYES: NOES: ABSENT: ABSTAIN:	
the foregoing resolution is hereby pa	assed and adopted this 14 <sup>th</sup> day of April, 2010.
	JAMES HARRISON President of the Board of Directors
ATTEST:	APPROVED:
DONNA K. JOHNSON Secretary to the Board	JON S. SEITZ District Legal Counsel



# TOWN AND BLACKLAKE SANITARY SEWER SYSTEM MANAGEMENT PLAN

### **Nipomo Community Services District**

**DRAFT APRIL 14, 2010** 

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### List of Acronyms and Abbreviations

BMP Best Management Practice

Cal-EMA California Emergency Management Agency (replaced State OES)

CCTV Closed Circuit Television

CDFG California Department of Fish and Game

CIP Capital Improvement Plan

CIWQS California Integrated Water Quality System CWEA California Water Environment Association

EH Environmental Health FOG Fats, Oil and Grease

FSE Food Service Establishment
GIS Geographic Information System

HMA High Maintenance Area I&I Inflow and Infiltration

LRO Legally Responsible Official

OERP Overflow Emergency Response Plan
OES Office of Emergency Services (County)
RWQCB Regional Water Quality Control Board

SHECAP Sewer Hydraulic Evaluation and Capacity Assurance Plan

SORR Sewer Overflow Response Report SSMP Sewer System Management Plan

SSO Sanitary Sewer Overflow

SWRCB State Water Resource Control Board

WDR Waste Discharge Requirement

#### INTRODUCTION

The California State Water Resources Control Board adopted Order No. 2006-003, Statewide General Waste Discharge Requirements (WDR) for Wastewater Collection Agencies, on May 2, 2006. The WDR affects all sewer agencies in the state and regulates the discharge of sanitary sewer overflows to receiving waters. The WDR requires the electronic reporting of all sanitary sewer overflows as well as the development of a Sewer System Management Plan (SSMP) and specifies monitoring, reporting and SSMP implementation requirements. The District began electronic reporting on May 2, 2007.

Development of the SSMP is phased with compliance dates based on population. As required by the WDR, the NCSD SSMP Development Plan and Schedule was approved by the Board of Directors on January 9, 2008. The SSMP will apply to both sewer systems operated by the District – the Town system and the Blacklake system.

The purpose of the SSMP is to:

- Properly manage, operate, and maintain all portions of the District's wastewater collection system
- Provide adequate wastewater collection system capacity to convey peak wastewater flows
- Minimize frequency of sanitary sewer system overflows
- Mitigate impacts of sanitary sewer overflows that may occur
- Meet all notification and reporting requirements related to sanitary sewer overflows

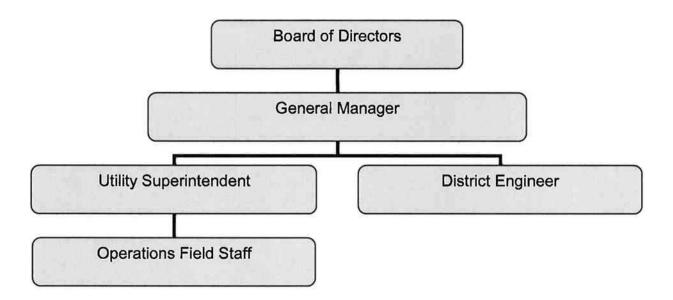
#### **SECTION 1. GOALS**

The District's goals for the wastewater collection system are:

- Minimize the number and the magnitude of spills.
- Respond to emergency sewer calls within 1 hour 95% of the time.
- Conduct appropriate analysis/evaluation of SSOs utilizing historical maintenance records and develop strategies to reduce future risk.
- Clean entire sanitary sewer collection system every 2 years and problem lines on a more frequent basis to limit the occurrence of spills and ensure reliable service.
- Conduct a video condition assessment of each sewer mainline every five years.
- Operate all pump stations at peak efficiency and perform preventative maintenance on equipment at all sanitary sewer pump stations on a regular basis.
- Maintain records of the sanitary sewer system.
- Develop and implement a capital improvement and replacement program directed at maintaining the current sewer system assets, improving system reliability and providing adequate capacity to limit the occurrence of spills.

#### SECTION 2. ORGANIZATION

The organization chart below identifies District staff that is responsible for implementing, managing and updating the SSMP.



**General Manager** – The General Manager is appointed by a five-member Board of Directors and is the chief administrative officer of the District. The General Manager is the District's Legally Responsible Official (LRO) and is responsible for the overall development and implementation of the District's SSMP as well as reporting SSOs to the appropriate agencies. The General Manager is also the District's public information officer.

**District Engineer** - The District Engineer plans, manages, and oversees District-wide systems engineering, project design, construction management, project inspection and contract management. The District Engineer coordinates the development and implementation of the District's SSMP. The District Engineer is also the District's Safety Officer.

**Utility Superintendent** – The Utility Superintendent evaluates, plans, organizes and supervises the work of Operations Field Staff responsible for operation, cleaning, inspection, repair, maintenance and recordkeeping of the District's sewer collection system. The Utility Superintendent leads emergency response and investigates SSOs. The Utility Superintendent is also responsible for ensuring that SSO emergency response and investigations are appropriately documented for reporting purposes.

**Operations Field Staff** – Operations Field Staff operate, clean, inspect, repair and maintain the District's sewer collection system. The Operations Field Staff is responsible for responding to service requests including SSOs. SSOs are investigated and documented by Field Staff.

**SSO Incident Command** – In the event that command personnel are absent, the specific order of command is as follows:

General Manager

Utility Superintendent

Operations Field Staff

Service Request Response – The District office is open Monday through Friday, except for holidays, 8 AM to 4:30 PM. The telephone number is (805) 929-1133. All District personnel can be reached via this telephone number. All service calls are referred directly to the Utility Superintendent. All after-hours calls are routed to the District's answering service who then directly notifies the District's On-Call Field Operations Staff. The On-Call Field Operations Staff person is furnished with a District truck and cell phone to facilitate timely response.

### **SECTION 3. LEGAL AUTHORITY**

The District has comprehensive Sanitary Sewer System Ordinances which are identified as Title 2, Chapter 2.12, Title 4, Chapters 4.03, 4.08, 4.12, 4.16, 4.20, 4.24, and 4.28, and Title 5, Chapter 5.02 of the NCSD District Code. The District's Code is available to the public on the internet at:

#### http://ncsd.ca.gov/cm/Resources/Documents/Water Sewer Codes.html

These ordinances provide the District with the necessary legal authority to construct, operate and maintain the District's two wastewater treatment plants and all District-owned sewer lines within the District. The authority to enforce current building/construction codes and ordinances as they relate to sewer laterals falls to the County of San Luis Obispo.

### 3.1 Regulatory Requirements

The District needs to demonstrate, through its 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 Inflow & Infiltration (I/I), storm water, 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, and
- Limit the discharge of fats, oils, and grease and other debris that may cause blockages.
- Enforce any violation of its sewer ordinances.

### 3.2 Prevent Illicit Discharges Into Sanitary Sewer System

Discharge collected by the District comes to the District from District-owned sewer lines within the District's service area and San Luis Obispo County-owned sewer lines within the County's service area. The District is responsible for maintenance of the publically-owned sewer line system within its service area and to treat the discharge that enters the system and meet proper constituent levels throughout the treatment process. The County is responsible for maintenance of its collection system within its service area that feeds into the District's system in accordance with the Service Agreement between

San Luis Obispo County and Nipomo Community Services District for the Construction, Operation and Maintenance of the Nipomo Sewerage Project as amended from time to time.

Specifically, the District's legal authority to prevent illicit discharges into the sewer system including inflow/infiltration from laterals, storm water, unauthorized debris, etc. can be found in Title 4, Chapter 4.08, Sewer Use Regulations.

#### 3.3 Design and Construction

The District has Standards and Design Specifications to ensure that sewer lines and connections are properly designed and constructed. The purpose of the Standards and Specifications is to provide minimum standards for the design, types and uses of materials, and the preparation of plans for construction, repair, or alteration of District facilities. The Standards were last updated in March 2008.

Specifically, the District's legal authority to adopt design standards is contained in Title 2, Chapter 2.12 and the legal authority to enforce the design standards is contained in Title 5, Chapter 5.02.

### 3.4 Ensure Access for Maintenance, Inspection and Repairs

The District does not maintain private lateral sewer lines. Section 4.08.045, Maintenance of Sewer Laterals, states that the maintenance of sewer laterals is the responsibility of the property owner served by the sewer lateral. District easements are in place where District-owned sewer appurtenances are located on private property to ensure that District staff can perform the necessary maintenance, inspection, and repairs.

### 3.5 Limit Discharge of Fats, Oils, and Grease (FOG) and Other Debris That May Cause Blockages

The authority to inspect, issue permits, require grease removal devices, and limiting the amount of oil and grease that may be discharged into the District's sewer system is stated in Chapter 4.08, Sewer Use Regulations.

- Section 4.08.130: Sets limitations on wastewater constituents including fats, oils and grease.
- Section 4.08.131: Requires that grease traps or interceptors be installed at food facilities and that they shall be sized and installed per the Uniform Plumbing Code.
- Section 4.08.132: Requires that grease traps and interceptors be properly maintained.

### 3.6 Enforcement Violation of Sewer Ordinances

It is essential to protect the District's system from illegal discharges that may interfere with the proper functioning of the wastewater treatment plants or sanitary sewer collection system. The District's current regulatory abilities to enforce violations are found in Title 4, Chapter 4.08, Section 4.08.200. Violations are considered a misdemeanor, punishable by either criminal or civil penalties as determined by the District's Board of Directors, and can result in termination of all District services.

### **SECTION 4. OPERATIONS AND MAINTENANCE**

The District has a variety of preventative maintenance programs in place to reduce the potential of SSOs from the sewer system including area-wide and problem area maintenance cleaning, CCTV, and lift station maintenance. These programs allow for the Operations Staff to continually evaluate the system.

#### 4.1 Regulatory Requirements

The SSMP must include the following elements that are appropriate and applicable to the District's System:

- Maintain up-to-date map of sewer system
- Describe routine preventive operation and maintenance activities
- Develop a rehabilitation and replacement plan
- Provide regular staff training in sanitary sewer system operations
- Provide equipment and replacement part inventories

#### 4.2 Maintain Up-to-Date Map of Sewer System

The District maintains a Geographic Information System (GIS) database that is linked to scanned images of records drawings for the sewer system. The database contains mainline sewer attribute information including ID number, diameter, direction of flow, segment length, material type and date built. The GIS data is available to all field personnel in the form of a map book that is periodically updated. The District also maintains a street directory that is cross referenced to the District's sewer location mapping. Mapping is updated in the GIS system as new tracts are accepted or as necessary map corrections are identified by the Operations Staff.

### 4.3 Routine Preventive Operation and Maintenance Activities

One-fifth of the District's sanitary sewer system is planned to be videoed on an annual basis starting in FY 2009-2010 and one-half of the District's sanitary sewer system is planned to be cleaned each year starting in FY 2009-2010. The video inspection will be performed by a contractor and the cleaning will be performed in-house once the District purchases the necessary equipment and hires the necessary staff as approved by the Board in the FY 2009-2010 Budget.

District Staff performs or assists contractors performing regular maintenance tasks as follows:

- Monitor SCADA system
- · Inspect, clean and maintain 15 lift stations

- Mark underground utilities
- · Trouble-shoot lift station electrical controls and pumps
- Coordinate lift station pump maintenance with vendors
- · Coordinate sewer main maintenance with vendors including, monthly, quarterly,
- · and annual line cleaning
- · Respond to wastewater emergencies
- · Maintain manual records related to service and repair work performed

#### 4.4 Develop a Rehabilitation and Replacement Plan

A Sewer System Master Plan was completed in 2008. The plan addresses the current sanitary sewer system needs and future needs based on data collected during the evaluation of the collection system and provides recommendations for capital improvements based on priorities. The plan was prepared by Cannon with input from District Staff. The evaluation of the collection system included:

- Capacity Analysis: Results from the SewerCad software model of the District sewer system were used to determine improvements required to resolve existing capacity deficiencies and to prepare the collection system facilities for future loading rates.
- Capital Improvement and Maintenance Program: A list was developed of prioritized system improvements to meet existing and future design flows based on analysis as part of the Sewer System Master Plan. Cost estimates for implementation were also developed. One major CIP project is in progress in accordance to the Sewer System Master Plan: the Frontage Road Trunk Sewer Upgrade. Several lift station and other collection system improvements are planned as well.

### 4.5 Provide Regular Staff Training in Sewer Operations

Training is an important aspect and a training budget exists to ensure all Operations Staff is properly trained. New staff receive on-the-job training specific to the collection system and maintenance equipment used. Operations Staff also attends outside workshops whenever possible. Grade Certification in Collection System Maintenance is encouraged as well as self improvement training through online courses. On-the-job cross training is actively pursued to ensure that each staff has proficient working knowledge of each and every specific part of a task.

All staff is trained on new equipment by the contractor or manufacturer. Equipment manuals are reviewed by staff for maintenance and operational parameters.

The District provides much of the required safety training through the Special District Risk Management Authority (SDRMA) and outside training workshops. Staff receives

training in Confined Space Entry, Hazardous Materials Management, and First Aid and CPR. Training includes on-line training, formal classroom training, informal on-the-job and hands-on training.

Operations Staff is also being trained to respond to major emergencies and disasters. The District has an emergency operation center and an Emergency Response Plan is being developed for the District.

Proficiency is required for all job positions and promotions, and training records are maintained to monitor completed classes and schedule employee training.

The Operations Staff will also be trained on the Overflow Emergency Response Plan (OERP) and reporting procedures for Sewer System Overflows once the plan is finalized.

#### 4.6 Provide Equipment and Maintenance Inventories

District Staff is working on compiling inventory lists. The District does not keep parts and supplies in inventory that can be readily accessed from local suppliers due to space constraints. Replacement of underground pipelines, manholes and lift stations is contracted out to licensed contractors who have the equipment, materials and staff to complete the work. Redundancy is provided in all lift station equipment.

The District either has permanent generators or a fleet of portable backup generators for emergency use that are kept in the ready stand-by mode at all times in case of emergency.

#### SECTION 5. DESIGN AND PERFORMANCE PROVISIONS

The District has Standards and Design Specifications to ensure that sanitary sewer lines and connections are properly designed and constructed. The purpose of the Standards and Specifications is to provide minimum standards for the design, types and uses of materials, and the preparation of plans for construction, repair, or alteration of District facilities.

### 5.1 Regulatory Requirements

The SSMP must identify 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.

The SSMP must also identify the procedures and standards for inspection and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

#### 5.2 Design and Construction Standards

Installation of all new sanitary sewer systems, lift stations, and other appurtenances, as well as rehabilitation and repair of existing sanitary sewer systems, must adhere to the latest District Standard Details and Specifications. The standards are available on the District's website at:

http://ncsd.ca.gov/cm/Resources/Documents/Standard Specifications.html

The District Engineer reviews plans for construction of new collection system infrastructure for adherence to the District's standards and specifications.

### 5.3 Inspection Standards

District staff or contract inspectors inspect all new construction, repairs and rehabilitation work. Inspection staff insures that all construction meets District standards and requirements. All new and rehabilitated sewers are cleaned, pressure tested and CCTV inspected before acceptance. Flexible pipe is also mandrel tested to identify deflection defects. The District requires that all new and rehabilitated sewers be warranted for a period of one (1) year. Prior to the expiration of the warranty period, these facilities are visually inspected, CCTV inspected as required, and maintenance records are reviewed to ensure that the facilities are functioning properly.

#### SECTION 6. OVERFLOW EMERGENCY RESPONSE PLAN

This section discusses the District's Overflow Emergency Response Plan (OERP). A pre-existing Sewer Overflow Response Plan is in place and will be modified to meet the new requirements.

### 6.1 Regulatory Requirements

The District will implement an OERP that identifies measures to protect public health and the environment. At a minimum, the plan will include the following:

- Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSO 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 purveyors, etc.) of all SSO that potentially affect public health or reach the waters of the State. All SSO shall be reported in accordance with the California Water Code, other State Laws, and other applicable RWQCB WDR or permit requirements. The SSMP identifies the officials who will receive immediate notification:
- Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the OERP and are appropriately trained;
- Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and
- A program to ensure that all reasonable steps are taken to contain untreated
  wastewater and prevent discharge of untreated wastewater to waters of the State
  and minimize or correct any adverse impact on the environment resulting from
  the SSO, including such accelerated or additional monitoring as may be
  necessary to determine the nature and impact of the discharge.

#### 6.2 Overflow Emergency Response Plan Discussion

The OERP is summarized below. The OERP addresses several issues such as spill notification, response, and detection, mitigation, clean up, investigation, documentation and reporting.

#### 6.3 Sanitary Sewer Overflow Notification

The OERP covers spill detection including the procedures for dispatching the first responder to the site of a potential SSO. The District receives telephone calls at one main telephone number during business hours and the same number connects with an answering service after hours. The District publishes this number in the local directories and on the District website.

When District staff members notice an SSO during the course of their regular activities, they are instructed to call in, notify the main office and begin responding to the situation immediately, if applicable.

The Utility Superintendent and the delegated maintenance staff are on call twenty-four (24) hours per day, seven (7) days per week and are aware of areas that may have the highest risk of overflow. If the event occurs during non-office hours, the answering service will contact the appropriate staff using emergency "on call" phone numbers.

### 6.4 Sanitary Sewer Overflow Response

Operations Staff becomes the SSO first responder and is responsible for mitigation, documentation, initial reporting, and follow-up.

The District's policy is to respond to all spills from its system within the District servicearea boundary and to take all steps possible to prevent the spills from reaching the storm drains, flood control channels, swales or waters of the State.

During regular business hours District Office Staff notifies Operations Staff and Operations Staff is dispatched to respond to a potential SSO. The District response to an SSO during business hours is immediate from receipt of call. During non-business hours, an answering service calls "on call" Operations Staff to respond to potential SSO's. The District's goal for response during non-business hours is 60 minutes.

Section 2 further addresses the organizational structure of the District and details the lines of authority along with the responsibilities of District personnel during an emergency.

In the event of a possible wastewater spill, or when staff is contacted concerning odors, standing water or an overflowing manhole, the following steps shall be taken to verify the report and ensure the safety of the public.

- District staff obtains the location and any description of the problem, name and phone number of the caller for follow-up information.
- Operations Staff proceeds to the location to verify report and the NCSD Sanitary Sewer Overflow Report is initiated.
- Operations Staff shall request appropriate support. Operations Staff will keep administrative staff informed of progress as necessary.
- The Utility Superintendent shall notify District Engineer and/or other District representatives as necessary.

- The Utility Superintendent, or his/her designee, will notify all appropriate public or regulatory agencies as required by the complexity of the spill.
- Upon mitigation, containment and clean-up of the spill, the District Engineer or Utility Superintendent, will use the NCSD Sanitary Overflow Response Report to complete the final spill report(s) to the SWRCB CIWQS database, the RWQCB, CAL-EMA, and the County of San Luis Obispo Environmental Health Department, as needed. The General Manager shall certify all CIWQS spill reports.

### 6.5 Sanitary Sewer Overflow Impact Mitigation

The District takes all reasonable steps to contain sewage and prevent sewage discharges to surface waters and minimize or correct any adverse impact on the environment resulting from the SSO, including such accelerated or additional monitoring, as may be necessary to determine the nature and impact of the discharge.

The Operations Staff will use suitable materials to block catch-basin entrances to storm drains and will also vacuum up spills and provide wash-down water where appropriate. The District may use the storm drain system as a containment device if needed. This is accomplished by using the outlet of the storm drain, blocking the spill and washing the area down with water and then vacuuming the line.

For mitigation purposes, the Environmental Health Department provides District assistance in post-SSO monitoring. In the event of a spill, the Environmental Health Department is notified immediately along with other applicable agencies. The District then utilizes the Environmental Health Department for the service of monitoring water quality post-SSO. The District will also provide any necessary support, equipment, or staff, as requested, to assist in the water quality monitoring.

#### 6.6 Training

Currently, the District does not have staff fully trained to handle a large scale SSO event. This is primarily because the District has not experienced any Category 1 or 2 spills. The District sees the value in proper training of staff for emergency purposes and intends to have staff trained within one year. The District has not established responsibilities for staff members but rather all staff members are trained in all positions to include basic emergency response. All District administrative staff called upon to respond will be required to have been trained to provide administrative support.

The District will develop an OERP field guide that will provide SSO response and operational guidelines. The OERP field guide will include a flow chart, forms and detailed response procedures directed at first responders and/or response crews. These guidelines will include procedures and forms for the response to a sewer backup.

These guidelines will also include flow charts to determine the source of the backup, instructions on filling out appropriate forms, containment procedures, guidelines for estimating spill volume and flow, blockage clearing and area clean up for an SSO. Operations Staff has basic traffic control equipment; this includes safety tape and cones, in the event of an SSO. Operations Staff can also be contacted to conduct crowd control, if necessary.

### 6.7 Sanitary Sewer Overflow Reporting

The District's procedure is to report all spills that occur in the District's service area that originated in the District's system regardless of size and whether or not the spill reaches the waters of the State.

### 6.8 Sanitary Sewer Overflow Chain of Communication

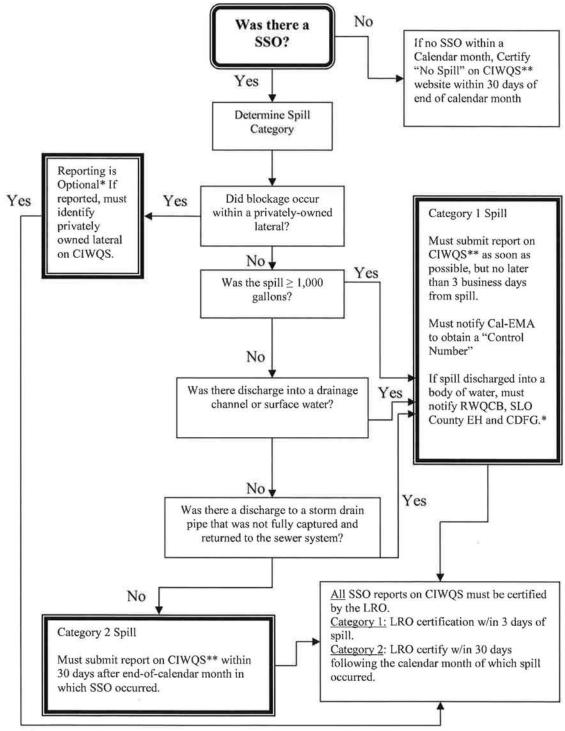
The District's authorized representatives in wastewater collection system matters are the Utilities Superintendent and District Engineer, and Operations Staff. The General Manager is the authorized individual at this time to certify electronic spill reports submitted via the State-wide database, CIWQS.

The Utility Superintendent and District Engineer are authorized to submit SSO reports and to initiate proper regulatory and government agency notifications as required by the nature of the spill. Figure 6-1 shows the chain of communication depending on the nature of the spill.

During business hours, office staff notifies Operations Staff of the overflow and response to the SSO is conducted. The Utility Superintendent is primarily responsible for reporting SSO to the RWQCB, Cal-EMA and other applicable agencies as required. Figure 6-2 shows contact information for the agencies to be notified.

The SSO form documents the time of spill and any corrective actions that took place. The data collected by staff is then entered into the CIWQS system for regulatory compliance.

Figure 6-1: Chain of Communication for Responding to Sanitary Sewer Overflows



<sup>\*</sup> These reporting requirements do not preclude other emergency notification requirements and timeframes mandated by other regulatory agencies (Environmental Health, RWQCB, Cal-EMA, or State law).

Reports on CIWQS can be amended at any time. However, any amended reports will need to be certified by the LRO.

<sup>\*\*</sup> If CIWQS website is not available, you must FAX to RWQCB and reattempt as soon as possible.

Figure 6-2 Chain of Communication - Sanitary Sewer Overflows (Category 1)

Organization	Contact Person	Phone Number
California Regional Water Quality Control Board (Contact within 24 hours with written report within 5 days) Central Coast Region	Sanitary Sewer Overflow Report Sorrell Marks	(805) 549-3695
San Luis Obispo County Health Department (Contact immediately if public contact)	Curt Batson	(805) 781-5544
San Luis Obispo County OES (Contact within 24 hours if spill over 1,000 gallons)	On-Call/Duty OES Coordinator	(805) 781-5011
Sheriff Watch Commander for OES notification	N/A	(805) 784-4553
CAL-EMA Warning Center (Contact within 24 hours if spill over 1,000 gallons)	N/A	1-800-852-7550
CA Department of Fish & Game (Contact within 24 hours if spill affects fish and/or wildlife)	Mike Hill	(805) 489-7355

#### 6.9 Reporting Procedures

The District is registered with the SWRCB CIWQS electronic sewage spill reporting system and is routinely utilizing these procedures. An NCSD Sanitary Sewer Overflow Report is completed for all reportable spills. The information recorded on the NCSD Sanitary Sewer Overflow Report is to be entered into CIWQS in accordance with the mandated reporting timelines. Copies of the NCSD Sanitary Sewer Overflow Report will be located in the District office. The following are the reporting procedures for SSO:

#### CATEGORY 1

Sewage spills equal to or greater than one thousand (1,000) gallons and/or all sewage spills that enter a water body of the State, or occur where public contact is likely, regardless of the size, will be considered a Category 1 spill. Category 1 spills will be reported immediately to the CAL-EMA Warning Center to obtain a Spill Control Number. This Spill Control Number will be included in the spill report forms. Category 1 spills will be reported immediately to the RWQCB, San Luis Obispo County Environmental Health Department and the CDFG. Notifications will be made immediately, upon awareness of spill. CIWQS notifications will be made within 3 business days following the SSO and certified by the Legally Responsible Official (LRO) no later than 3 days following the SSO event.

### CATEGORY 2

A sewage spill that is less than one thousand (1,000) gallons and does not enter a water body or storm drain shall be considered a Category 2 spill. These spills will be reported to CIWQS no later than thirty (30) days following the calendar month in which the spill occurred. The RWQCB Central Coast Region must also be notified in writing within thirty (30) days.

A Sewage Spill Report shall be submitted immediately to the RWQCB electronically or via facsimile and will include the following information:

- Name and address of discharger, and reporting party.
- Date and time of spill. Time spill stopped.
- Location/address of spill/manhole number, if available.
- Volume of spill. Path of spill. Water body affected.
- · Cause of spill, action taken to stop spill.
- Time cleanup began and time cleanup completed.
- Discussion of cleanup and any public notices posted.
- Number of spills in same location over last three years.
- Discussion of measures taken to prevent spills at this location.

List of other public agencies notified.

Potential public notification measures include the temporary signage to indicate pollution of surface water or groundwater due to a SSO and notification through media outlets. The General Manager will be the contact person for media notification.

### 6.10 SSO Reporting Timeframes

 Category 1 SSO – All SSO that meet the above criteria for Category 1 SSO must be reported as soon as: (1) the District has knowledge of the discharge, (2) reporting is possible, and (3) reporting can be provided without substantially impeding cleanup or other emergency measures. Initial reporting of Category 1 SSO must be reported to the Online SSO System as soon as possible but no later than 3 business days after the District is made aware of the SSO. A final certified report must be completed through the CIWQS electronic database, within 3 calendar days of the conclusion of SSO response and remediation. Additional information may be added to the certified report, in the form of an attachment, at any time within the 3 day period.

The above reporting requirements do not preclude other emergency notification requirements and timeframes mandated by other regulatory agencies, County Health Officers, local Director of Environmental Health, RWQCB, Cal-EMA, or State law.

- Category 2 SSO All SSO's that meet the criteria in paragraph 6.9 for a
  Category 2 SSO must be reported to the CIWQS electronic database within 30
  days after the end of the calendar month in which the SSO occurs (e.g. all SSO's
  occurring in the month of March must be entered into the database before May
  1st).
- If there are no SSO's during a calendar month, the District will provide, within 30 days after the end of each calendar month, a statement through the CIWQS database certifying that there were no SSO's for the designated month.
- In the event that the CIWQS database is not available, the District must fax all required information to the appropriate RWQCB offices in accordance with the time schedules identified above. In such event, the District must also enter all required information into the CIWQS electronic database as soon as practical.

#### SECTION VII. FATS, OILS & GREASE CONTROL PROGRAM

The Fats, Oils and Grease (FOG) Control Program Section of the SSMP describes the regulatory requirements being placed upon the District, the implementation process to "roll-out" this program in the most economic and feasible method and to fully understand the expectations that will be placed upon the Food Service Establishments (FSE's) to reach and maintain compliance through current industry and water quality standards. The District will enter its first year of program implementation in the first quarter of 2010.

#### 7.1 Regulatory Requirements

The FOG Source Control Program includes the following, as appropriate:

- An implementation plan and schedule for public education outreach program that promotes proper disposal of FOG;
- An Ordinance establishing the legal authority of the District to prohibit FOG discharges to the system and identify measures to prevent Sanitary Sewer Overflows (SSO's) and blockages caused by FOG;
- Requirements to install grease removal devices (such as traps or interceptors) and the development of design standards for such devices, maintenance requirements, Best Management Practice (BMP) requirements, record keeping and reporting requirements;
- Authority to inspect grease producing facilities, enforcement authorities, and whether the District has sufficient staff to inspect and enforce the FOG ordinance:
- An identification of sewer system sections subject to FOG blockages and establish a cleaning maintenance schedule for identified sections; and
- Development and implementation of source control measures, for all sources of FOG discharged to the sewer system.

### 7.2 FOG Control Program Outreach

The District's FOG Program begins with outreach and will remain a major component throughout the program. The District firmly believes that by having FSE's and its residential community understand the value in reducing the amount of grease in the District's sewer lines, the public can improve collection system efficiency and the costs associated with grease-related issues.

Prior to the inspection program "kick off", the District will hand-out or mail FOG flyers to each FSE that maintains a Public Health Permit. Following flyer release, FSE surveys and personal phone calls to each owner or manager of the facility will commence. This allows each effected facility the opportunity to ask questions and receive any additional information regarding the FOG Program prior to the inspection process.

In addition to flyers, surveys and personal contact with the facility, each facility within the District can obtain the following information or assistance:

- BMP Booklet;
- · Facility training on BMP's;
- · Grease Hauler List; and
- · Cleaning Record Form (English and Spanish).

These forms are available at the District's office and inspectors have them available when an FSE is inspected. Each form and training offered is at no cost to the customer. The District will initially absorb all costs associated with the program. In 2012, the District will re-evaluate program compliance, results and the cost associated. If it is determined that the program is showing significant economic value to the District in maintenance and operations costs, the program will remain at no cost. If results of the analysis indicate the costs exceed the savings, the District may consider adopting a nominal fee to be assessed annually for permit renewals and inspections.

Residential outreach is also an important element for reducing the amount of FOG entering the collection system. While requiring grease traps and interceptors is not possible to the residential community, education is. The District plans to implement a residential outreach program through flyers in homeowners utility bills along with the development of door-hangers to "Stop the FOG" to areas where Operations Staff have identified High Maintenance Area (HMA) prone locations.

Flyers intended for utility bill distribution will involve multiple topics in addition to FOG in order to provide public education in an economically-feasible manner. For example, a flyer may incorporate FOG information in addition to proper disposal methods for pharmaceuticals.

The District currently has developed a flyer that contains multiple topics to include proper disposal of grease. This flyer will be evaluated and modified based upon the needs of the District. The District's flyer development and distribution will occur as an ongoing process, as needed. The goal of the District regarding residential outreach is to distribute "door-hanger" flyers to HMA areas and distribute a general flyer in sewer bills once every 12-24 months or sooner, if needed.

#### 7.3 FOG Control Program Discussion

This FOG Program defines the goals and objectives of the District in reducing the amount of grease that enters the system from its FSE and residential community.

It is the District's goal of the FOG Control Program to inspect all food service establishments, provide education to FSE and reduce maintenance costs directed to

Operations Staff from grease-related problems. Doing so should reduce the probability of SSO's and improve the longevity of the collection system sewer lines.

The District's FOG Control Program meets all the guidelines required by the State and Regional Water Quality Control Board and includes the following:

- Restaurants or any FSE that generate grease are required to obtain a Source Control/FOG Permit.
- FSE's are inspected at a minimum of twice per year. FSE's may be inspected more frequently as determined by District needs and/or as warranted by current stages of program compliance and past history.
- All FSE's are required to use BMP's to reduce grease discharged to the sewer system (e.g. store waste grease in barrels to haul off site, scrape remaining food off plates and into trash receptacle before washing).
- Any FSE planning a remodel is required to include installation of a grease trap/interceptor.
- All new construction of FSE's will require installation of a County Code approved grease trap/interceptor regardless of size or value (type of foods produced may negate the need for trap installation; a variance will be issued in lieu of permit in such cases).
- Exemptions or variances shall be available to FSE's that do not generate grease, do not cause related sewer blockages, and/or have limited space on their property that makes it impossible to install a grease trap/interceptor.
- Garbage grinders will be prohibited in all restaurants except where specifically allowed by the District.
- Several options regarding program fees will be evaluated annually. Program fees are intended to help alleviate the burden of program costs and assist in facilitating a successful FOG Control Program. The District currently is absorbing the program and inspection costs.

### 7.4 Identification of Grease Problem Areas and Sewer Cleaning

One objective of the District's FOG Program is the identification of trouble spots, or HMA, that are likely or prove to have grease accumulation. The District identifies potential grease problem areas by tracking locations and causes of dry weather blockages and SSO's. This is also noted when an area of the sewer system is viewed by Closed Circuit Television (CCTV). The specific locations of the areas with several restaurants or grease-producing facilities in close proximity to the CCTV or cleaned lines are likely considered potential grease problem areas and increased inspections take place. Additionally, the identified locations are noted in the Operation & Maintenance program and will be monitored for changes in cleaning frequency requirements.

The District's Operations Staff maintains a sewer atlas depicting each manhole location. This data is used in conjunction with cleaning logs, for which staff will note the date and time of flushing as well as debris type and severity. Additional information about cleaning and maintenance is included in Section 4: Operations and Maintenance.

### 7.5 Legal Authority

The District's current Ordinance fully meets the requirements set forth by the new Statewide General Order 2006-0003 DWQ.

The current code includes:

- Establishment of enforcement authority Chapter 4.08.200
- Limits on types of wastes discharged to public sewers Chapter 4.08.130
- Requirements on specific design and construction of grease interceptors and/or traps – Chapter 4.08.131
- Requirements for the installation of grease interceptors Chapter 4.08.131
- Requirements on maintenance of grease interceptors Chapter 4.08.132
- Enforcement Chapter 4.08.200
- Right of Entry Chapter 4.08.210

If the District finds that a grease interceptor or gravity-separating device installed prior to the effective date of the current ordinance is incapable of adequately retaining the grease or oil in the wastewater flow, the District shall notify the user, in writing, that an adequate interceptor or gravity-separating device shall be installed within a specific, reasonable time period.

#### 7.6 Identify HMA

The District's Operations Staff continues to identify sections of the sewer collection system subject to grease blockages and establish a cleaning maintenance schedule for each section. The District has compiled a list of 'hot spots', or HMA, within the community. These areas of concern have been put on an increased cleaning schedule and will be monitored annually for any changes in cleaning frequency. The District has very few SSO's so the District plans to help monitor program success with the expectation of decreased cleaning frequency for grease related HMA locations.

### 7.7 FOG Control Measures

The District has implemented FOG control measures for all sources of grease and fats discharged to the sewer system. One of the elements that are provided to FSE or interested parties is the BMP manual. This manual helps to provide guidance and suggestions to FSE's in reducing the amount of FOG discharged. Many of the simple

inexpensive procedures can reduce the amount of FOG discharged by 90%. The BMP's consist of the following:

- Train kitchen staff and other employees about how they can help ensure BMP's are implemented
- Post "No Grease" signs where appropriate (i.e. above sinks and on the front of dishwashers)
- Use water temperatures less than 140° F in all sinks, especially the pre-rinse sink before the mechanical dishwasher
- Recycle waste cooking oil
- "Dry wipe" pots, pans, and dishware prior to dishwashing
- Dispose of food waste by recycling and/or solid waste removal
- Properly maintain grease trap/interceptors
- Witness grease trap or interceptor cleaning/maintenance activities to ensure the device is being properly cleaned and is operating correctly
- Clean under-the-sink grease traps weekly, or more frequently, if needed
- Clean grease interceptors routinely, at least quarterly
- Keep a maintenance log (recordkeeping)
- Cover outdoor grease and oil storage containers
- Locate grease barrels and storage containers away from storm drain catch basins
- Use absorbent pads or other material in the storm-drain catch basins if grease barrels and containers must be located nearby (absorbent pads may be required if the basin is within 20 feet of grease barrels or containers or if there are signs of grease in the catch basin at any distance)
- Routinely clean kitchen exhaust system filters

### 7.8 FOG Program Funding

The FOG Program is funded annually through the Sewer Fund. Program fees will be absorbed by the District in order to help alleviate the cost for an FSE to reach initial compliance. It is expected that maintenance fees will be reduced thus "paying" for the program at no cost to the District. If at some time it is determined that program costs exceed maintenance reductions then the District will evaluate a fee-based program (evaluation will take place after 24 months of program "roll-out"). Program costs are expected to be the highest during the programs first year and continually decrease for the next two, as facilities reach compliance and routine cleaning becomes the norm. Maintenance reductions will also be evaluated throughout this period.

#### 7.9 FOG Characterization

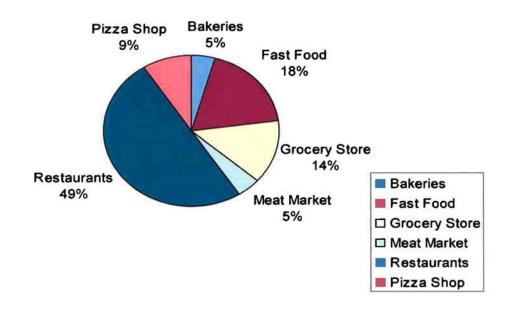
The District inspects all FSE's that are located within its jurisdiction. This may include: fast food facilities, grocery stores, restaurants, diners, retirement/nursing homes and schools. Each is closely evaluated to determine if the FSE is in compliance with the current regulations. On average the District has at any one point in time approximately 30 FSE's. A complete list of the FSE's found operating in the District will be updated throughout the year as new facilities open.

Facilities that contain fats, oils and grease menu items are inspected for properly working grease traps and/or interceptors. Facilities are also required to maintain proper documentation each time the trap or interceptor is cleaned. These records must be maintained on-site and be made available for a minimum of three years to District staff. In some cases where a facility does not currently maintain a grease trap or interceptor one may be required to be installed. This is based upon current Uniform Plumbing Code (UPC) and the County Code. The current UPC is closely followed to determine the type and size of unit that will be required. Justification for trap versus interceptor installation is based upon foods served and prepared, number of drains found within the facility, type of dishwasher (if any), size and history of the establishment. Dye testing may also be conducted when it is necessary to determine specific drainage.

There are two types of permits that will be issued. The first is the standard FOG Permit. This permit is issued to all typical FSE's that discharge FOG into the sewer system in amounts above 50 parts per million. Typically, this includes all facilities that have fryers or facilities that prepare foodstuffs containing moderate to high quantities of creams, soups, meat cutting, cheeses and dairy. Alternatively, a Variance Permit is issued to FSE's that do not discharge large quantities of FOG. These facilities can include coffee houses, small sandwich shops, prepackaged grocery stores, or facilities that due to design make it unfeasible to install a trap or interceptor. Should a varianced facility sell, a new variance will not be issued if the variance was issued due to design. Variances will only be continued if the variance permit was issued due to types of food prepared and not due to design.

The chart below shows the current types of facilities found within the District. An itemized list of the FSE, locations and permits issued will be developed and the itemized list will be updated annually to reflect any facility additions or deletions.

#### Types of Food Service Establishments



When an FSE is found to be out of compliance the facility is reinspected for compliance after a 30 day period. Additionally, when Operations Staff is sent out on an emergency or is conducting regular maintenance and identifies high levels of FOG, notification to the FOG inspectors is made. The FSE of concern is then inspected regardless of last inspection date. The FSE is informed of why the inspection is occurring and any compliance issues are addressed at that time. The inspector may be required to conduct a follow-up visit prior to 30 days at which time, if found to be in compliance, the facility will return to its regular inspection visits.

Facility inspection paperwork is maintained at District office. The District plans to develop an up-to-date map of all FSE within the District during 2010. Due to frequent FSE turnover, the map will be updated annually. Any "hot spots" or HMA that are identified will be highlighted on the GIS map for review. Again, this assists the Operations Staff to be aware of the locations that are problematic and thus serves as a useful tool to monitor program success in areas of concern.

#### SECTION 8. SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

The District has taken steps to ensure adequate capacity for dry and wet weather peak flow conditions. This includes evaluation, design criteria, and capacity enhancement measures that are funded through the District's capital improvement program.

### 8.1 Regulatory Requirements

The District 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 will include the following:

- System Evaluation: 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 above to establish appropriate design criteria.
- 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 District shall develop a schedule of completion dates for all
  portions of the capital improvement program developed. This schedule shall be
  reviewed and updated consistent with the SSMP review and update
  requirements.

#### 8.2 Sewer Master Plan

A Sewer Master Plan Update was completed in 2007. The purpose of the Master Plan Update was to provide the District with a hydraulic evaluation of the sanitary sewer collection system and pumping stations. The plan included flow projections, hydraulic modeling, identification of deficiencies, and recommendations for future projects. The Sewer Master Plan is used as a basis for the District's 5 year CIP budget. Projects are constructed based on priority and available funding.

#### SECTION 9. MONITORING, MEASUREMENT AND PROGRAM MODIFICATIONS

This section outlines the steps the District will take to measure the performance of the sanitary sewer system and the effectiveness of the SSMP.

### 9.1 Regulatory Requirements

The District shall:

- 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.

#### 9.2 Monitoring and Measurement

If an SSO occurs within the District's service areas, the data collected and relevant information will be documented and electronically reported to the SWRCB CIWQS database. The information will further be used to assist in planning activities, programs, and policies that help eliminate future SSOs and their causes. Measures may include the following:

- SSO Rate (SSO's/100 miles of collection system/year)
- Number of SSO's by cause (roots, grease debris, pipe failure, capacity, lift station failure, etc.)
- Average SSO volume (gallons)
- Percentage of SSO's greater than 100 gallons
- Percentage of SSO volume recovered (e.g, with vacuum truck) compared to total volume spilled
- Estimated total SSO's volume to reach surface waters (including SSO's not recovered from storm drains leading directly to surface waters)

#### 9.3 Identifying Trends

The measures will be evaluated annually, in January, for the previous calendar year to identify and illustrate any trends in the above performance measures. This evaluation will be used to make any necessary adjustments to the District's preventive maintenance program.

### 9.4 Program Modifications

The District shall update program elements, as appropriate, based on monitoring or performance evaluations. The SSMP and its elements will be updated in accordance with the results of the monitoring and staff recommendations.

### SECTION 10. SEWER SYSTEM MANAGEMENT PLAN AUDITS

This section outlines the steps the District will take to conduct audits of the SSMP.

### 10.1 Regulatory Requirements

As part of the SSMP, the District shall conduct periodic internal audits, appropriate to the size of the system and 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 District's compliance with the SSMP requirements including identification of any deficiencies in the SSMP and steps to correct them.

### 10.2 SSMP Program Audits

Beginning in January 2012, and every two years thereafter, the Utility Superintendent and District Engineer will audit the effectiveness of all elements of this SSMP. The audit will documents findings and recommend changes to the SSMP in a written report to the General Manager. These audit reports will be kept on file and made available to the public upon request. Minor changes to the SSMP, such as changes to the operation and maintenance element, will be made at the staff level. Significant changes, such as changes to legal authority, must be reviewed and approved by the Board of Directors.

#### **SECTION 11. COMMUNICATION PROGRAM**

This section outlines the steps the District will take to provide multiple opportunities for interested parties to provide the District with input as the SSMP and associated programs are being developed.

### 11.1 Regulatory Requirements

The District shall communicate on a regular basis with the public on the development, implementation, and performance of its SSMP. The communication system shall provide the public the opportunity to provide input to the District as the program is developed and implemented. The District shall also create a plan of communication with systems that are tributary and/or satellite to the District's sanitary sewer system.

### 11.2 Communication Program

The Board of Directors will consider approval of this SSMP during a regularly scheduled meeting in April 2010. The meeting will be publicly noticed and the draft SSMP will be available for public review prior to the meeting. The public will have the opportunity to comment on the SSMP prior to Board approval.

The complete, adopted SSMP will be posted on the District's website. Changes to the adopted SSMP suggested by the public will be incorporated into the SSMP during the program audit process.

The County of San Luis Obispo operates a sewer system that is tributary to the District collection system. The County and the District have a written agreement in which the County agrees to limit wastewater flow and quality and pay its share of wastewater plant operation and maintenance costs. The District will promptly notify the County of any changes to the SSMP that may affect the County's sewer collection system.