

**Sections numbers are based on State Water Resources Control Board Order No. 2006-0003-DWQ, General Waste Discharge Requirements (GWDR) for Wastewater Collection Agencies, dated May 2, 2006**

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# **SEWER SYSTEM MANAGEMENT PLAN (SSMP)**

## **Introduction**

In May of 2006, the State Water Resources Control Board (SWRCB) adopted a General Waste Discharge Requirement (GWDR) for all publicly owned sanitary sewer collection systems in California with more than one mile of sewer pipe. The goal of the GWDR is to provide a consistent statewide approach for reducing the number and impact of Sanitary Sewer Overflows (SSOs). The SSMP is a planning document that describes the activities that the Pauma Valley Community Services District (District) uses to meet GWDR requirements and manage the wastewater collection system effectively.

The District, in its efforts to comply with the GWDR, participate in the program and implement an SSMP, utilized expertise developed by the California Association of Sanitation Agencies. Additionally, the District now utilizes online reporting document to inform the SWRCB of any District SSOs.

## **Overview**

The Pauma Valley Community Services District was formed in 1962 and was managed by Utah Mining Company. The first ordinance written setting forth the rules and regulations for the operation, maintenance and use of facilities for the collection, treatment and disposal of sewage and waste was signed in approving the installation and use of sewer lines in August 1969. The District currently has 8.2 miles of public sewer, approximately 400 service connections and 144 manholes. There are also 3 lift stations in the District, two of which have

standby generators that serve the lift station during power failures. The remaining lift station IS served by trailer mounted generators equipped with quick connect couplers.

The average age of the collection system is 43 years old. The District has predominantly four types of pipes; they are poured-in-place concrete, clay, and plastic. The majority of the pipelines in the District range in size from 4 inch to 10 inch. Approximately 60% of the District lines were installed between the 1960's and 1980's, prior to the introduction of modern pipe joints such as compression gaskets, which were not available in the 1960's. The District has performed video inspection of approximately 1/3 of these historic pipelines which indicate that the pipelines are still in serviceable condition.

The District has had an active sewer system management program since the mid-1980 and has experienced a relatively low number of blockages. Stoppages and overflows have been non-existent since the District focused its efforts on aggressive line cleaning, continuous video inspection and dedicating funds to repair or replace line defects which could result in service interruption.

A new treatment plant facility was completed in February of 2008 and brought the District into the 21st Century with modern, state-of-the-art technology for sewage treatment. With an operating permit for 150,000 gallons of flow per day, the treatment plant facility more than meets the current needs of the District's population.

## **Definitions, Acronyms and Abbreviations**

### **American Water Works Association (AWWA)**

### **Best management practices (BMP)**

Refers to procedures employed in commercial kitchens to minimize the quantity of grease that is discharged to the sanitary sewer system. Examples include scraping food scraps into garbage cans and dry wiping dishes and utensils prior to washing.

### **California Integrated Water Quality System (CIWQS)**

Refers to the State Water Resources Control Board online electronic reporting system that is used to report SSOs, certify completion of the SSMP and provide information on sanitary sewer systems. The electronic reporting requirement became effective on August 1, 2007.

### **Capital Improvement Plan (CIP)**

Refers to the documents that support and identify future capital improvements to the District's sanitary sewer system.

### **Chief Plant Operator (CPO)**

Refers to the person responsible for operation and maintenance of the District's wastewater collection and treatment facilities under a signed contract agreement between PVCSD and Water Quality Specialists of San Diego.

**Department of Environmental Health (DEH)**

Refers to the California State Department of environmental health

**District**

Refers to the residences and businesses within the Pauma Valley Community Services District boundaries.

**Fat, Oil, Grease (FOG)**

Refers to fats, oil and grease typically associated with food preparation and cooking activities that can cause blockages in the sanitary sewer system.

**Food Service Establishment (FSE)**

Refers to commercial or industrial facilities where food is handled/prepared/served that discharges to the sanitary sewer system.

**General Waste Discharge Requirement (GWDR)**

Refers to the State Water Resources Control Board Order No. 2006-0003, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, dated 5/2/06.

**Office of Emergency Services (OES)**

Refers to the California State Governor's Office of Emergency Services

**Operation and Maintenance (O&M)**

**Overflow Emergency Response Plan (OERP)**

For the purpose of the SSMP, this plan will be referred to as the Pauma Valley Community Services District Wastewater Overflow Response Plan or as the Sanitary Sewer Overflow Response Plan (SSORP)

**Pauma Valley Community Services District (PVCSD)**

**Preventative Maintenance (PM)**

Refers to maintenance activities intended to prevent failures of the sanitary sewer system facilities (e.g., cleaning, repairs)

**Regional Water Quality Control Board (RWQCB)**

Refers to San Diego Regional Water Quality Control Board

**Sanitary Sewer Overflows (SSOs)**

Refers to the overflow or discharge of any quantity of partially treated or untreated wastewater from the sanitary sewer system at any point upstream of the wastewater treatment plant. SSOs are typically caused by blockages, pipe failure, pump station failure or capacity limitation.



**Sewer System Management Plan (SSMP)**

**State Water Resources Control Board (SWRCB)**

Refers to the California Environmental Protection Agency (EPA) State Water Resources Control Board and staff responsible for protecting the State's water resources.

**System Evaluation and Capacity Assurance Plan (SECAP)**

**Vitrified Clay Pipe (VCP)**

**Wastewater Treatment Plant (WWTP)**

## **SECTION I: GOALS**

### **Introduction**

The PVCSD operates a wastewater collection, treatment, and disposal system serving a portion of the Pauma Valley community. The PVCSD collection system contains approximately 36,000 feet of sewers ranging in size from 4 to 10 inches in diameter. The service area currently includes 403 connections consisting of residential, commercial and school facilities. With 340 residential connections, contribution from the commercial and school facilities is less than 16% of the wastewater flow.

### **Regulatory Requirement for Goals Section**

The summarized requirement for the Goals section of the SSMP are:

### **GWDR Requirement**

The collection system agency must develop goals to properly manage, operate and maintain all parts of its wastewater collection system in order to provide adequate capacity to convey peak flows, reduce and prevent SSOs, as well as to mitigate any SSOs that occur.

### **SSMP Goals**

The goals established in this Section will be used to guide the District throughout the SSMP development process. Once the SSMP is complete, the goals will be a part of the SSMP as implemented by PVCSD.

The PVCSD goals for the development and implementation of their SSMP are as follows:

1. To properly manage, operate and maintain all portions of the Agency's wastewater collection system.
2. To provide adequate capacity to convey the peak wastewater flows.
3. To minimize the frequency of SSOs.
4. To mitigate the impacts that are associated with any SSO that may occur.
5. To reduce the amount of grease entering the District's WWTP.
6. To meet all applicable regulatory notification and reporting requirements.

## **SECTION II: ORGANIZATION**

### **Introduction**

The Pauma Valley Community Services District is a special district formed under California Special District law, Government Code Section 61000 et seq., providing wastewater services for the residences and businesses within the boundaries of the District.

### **Regulatory Requirement for Organization Section**

The summarized requirement for the Organization section of the SSMP are:

### **GWDR Requirement**

The collection system agency's SSMP must identify:

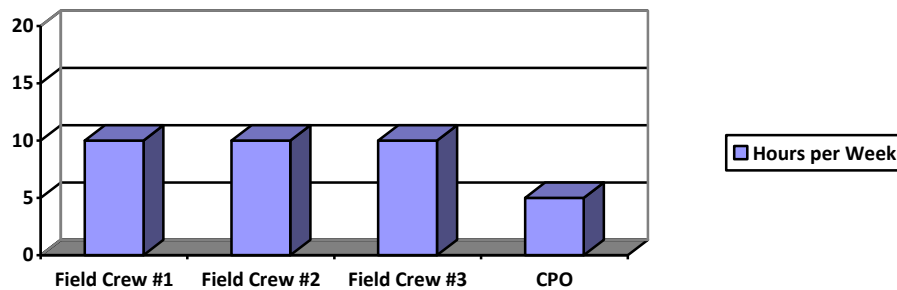
- a) The name of the responsible or authorized representative;
- b) The names and telephone numbers for management, administrative and maintenance positions responsible for implementing specific measures in the SSMP program. Include lines of authority as shown in the organization chart or similar document with a narrative explanation; and
- c) The chain of communication for reporting SSOs; from receipt of 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, and/or State Office of Emergency Services (OES)).

### **PVCSD Wastewater Collection System Organization**

The District's wastewater collection system staff consists of field crew and a contract Chief Plant Operator. A summary of the District's staff time dedicated to the operation, maintenance and improvement of the wastewater collection system is shown in Figure 1. There are three field crew members operating five days per week (eight hour days). On average, the three crew members dedicate a quarter of their time (10 hours per week) to the collection system and the wastewater lift station. The remainder of the time these crew members are working at the PVCSD Wastewater Treatment Plant, the Rancho Pauma Mutual Water Company (RPMWC) potable water system or conducting storm drain system maintenance. The collection system crew is responsible for sewer, pump station and storm water maintenance. There is one supervisory position, Chief Plant Operator, which on average dedicates 5 hours per week to the collection system and is contracted to manage, operate and maintain the wastewater collection system. The system is monitored twenty-four hours per day either by staff during regular hours or by a combination of District security

personnel working with the operator on duty and the Chief Plant Operator during evenings, nights, and weekends using cellular phones for communication purposes.

**Figure 1: PVCSD Staff Dedicated to Collection System Operation, Maintenance and Improvements**

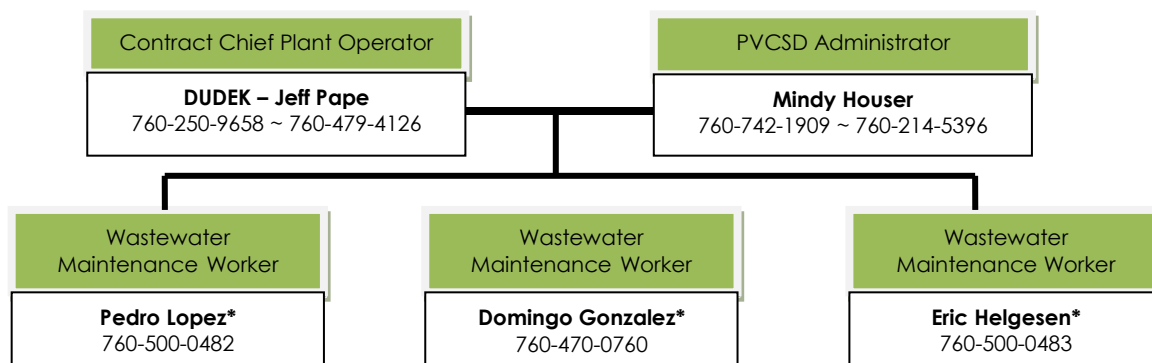


The District relies on outsourcing its engineering needs required by the wastewater collection system. Based on an initial review of system performance, the District has the proper organizational staff in place for proper maintenance and response to collection system problems as evidenced by the lack of overflow occurrences over the past 10 years. An in-depth analysis will be conducted in future sections of the SSMP to determine if the existing management and maintenance staff is adequate.

**Implementing, Managing and Updating the Sanitary Sewer Maintenance Plan**

The District's formal organizational chart showing staff responsibility for implementing, managing and updating the SSMP is shown in Figure 2, PVCSD Organizational Chart for Implementing, Managing and Updating the SSMP.

**Figure 2: PVCSD Organizational Chart for Implementing, Managing and Updating SSMP**



\* Field Crew Member

The collection system staff responsible for implementing, managing and updating the SSMP includes: The Contract Chief Plant Operator, the Administrator, the Maintenance Workers and Field Crew Members. Responsibilities of the wastewater collection system staff are:

Contract Chief Plant Operator - Plan, coordinate and manage public works construction, alteration and installation projects; plan, organize and direct the laboratory, operations and activities related to the maintenance and repair of the District's wastewater and storm water systems, treatment plant, facilities, and related equipment; coordinate and manage the development and implementation of District guidelines and procedures to assure compliance with established local, State and federal laws, codes and regulations; train, provide work direction and evaluate the performance of assigned personnel.

Administrator - Work in conjunction with CPO to plan, organize and direct laboratory functions, coordinate and manage the development of District guidelines and procedures to assure compliance with established local, State and federal laws, codes and regulations; provide adequate scheduling, supplies and equipment to assure smooth and efficient system operations; ensure that all necessary records, readings and reports are complete, organized and up to date.

Wastewater Maintenance Worker - Under the direction of the CPO, organize and direct the maintenance and repair activities for the treatment plant; perform skilled work in the maintenance and repair of wastewater, and storm water facilities; troubleshoot and repair wastewater and storm water facilities, including motor, pumps and blowers; plan, organize and complete assigned work in the maintenance and repair of the treatment plant and sewer collection and storm water pumping systems; ensure that all work performed is done in compliance with proper procedures; ensure that all necessary records, readings and reports are complete, organized and up to date.

Utility Mechanic - Under the direction of the CPO, perform skilled work in the maintenance and repair of wastewater and storm water facilities;

### **SSO Response and Reporting**

Figure 3 represents the District's SSO Response Field and Reporting Procedures Flowchart which illustrates the organizational chart for SSO response and reporting.

The District has developed an SSP Plan, which has been updated, to include this current Notification List below. This Notification List aids PVCSD personnel when reporting for SSOs and ensures that the concerned agencies can be easily notified as legally required.

PVCSD Sanitary Sewer Overflow (SSO) Notification List:

1. When a major or minor SSO does not reach open storm drains (e.g. canals, drainage channels, etc) or surface water, and get contained and cleaned up, notify the RWQCB

by written report. Office of Emergency Services (OES) notification is not required. Follow plan for written reporting per SSO Response Plan.

2. If major or minor SSO reaches open storm drains or surface water, notify OEL and RWQCB by fax or phone initially within two (2) hours after becoming aware of the SSO. Follow directions from the OES and/or RWQCB on additional agencies that may need to be contacted. Document direction issued by OES and RWQCB. As soon as possible, but no later than twenty-four (24) hours after becoming aware of a discharge to a drainage channel or surface water, PVCSD will submit to the RWQCB a certification that the State Office of Emergency Services and the local health officer of director of environmental health with jurisdiction over the affected water bodies have been notified of the discharge. Follow plan for written reporting per SSO Response Plan.

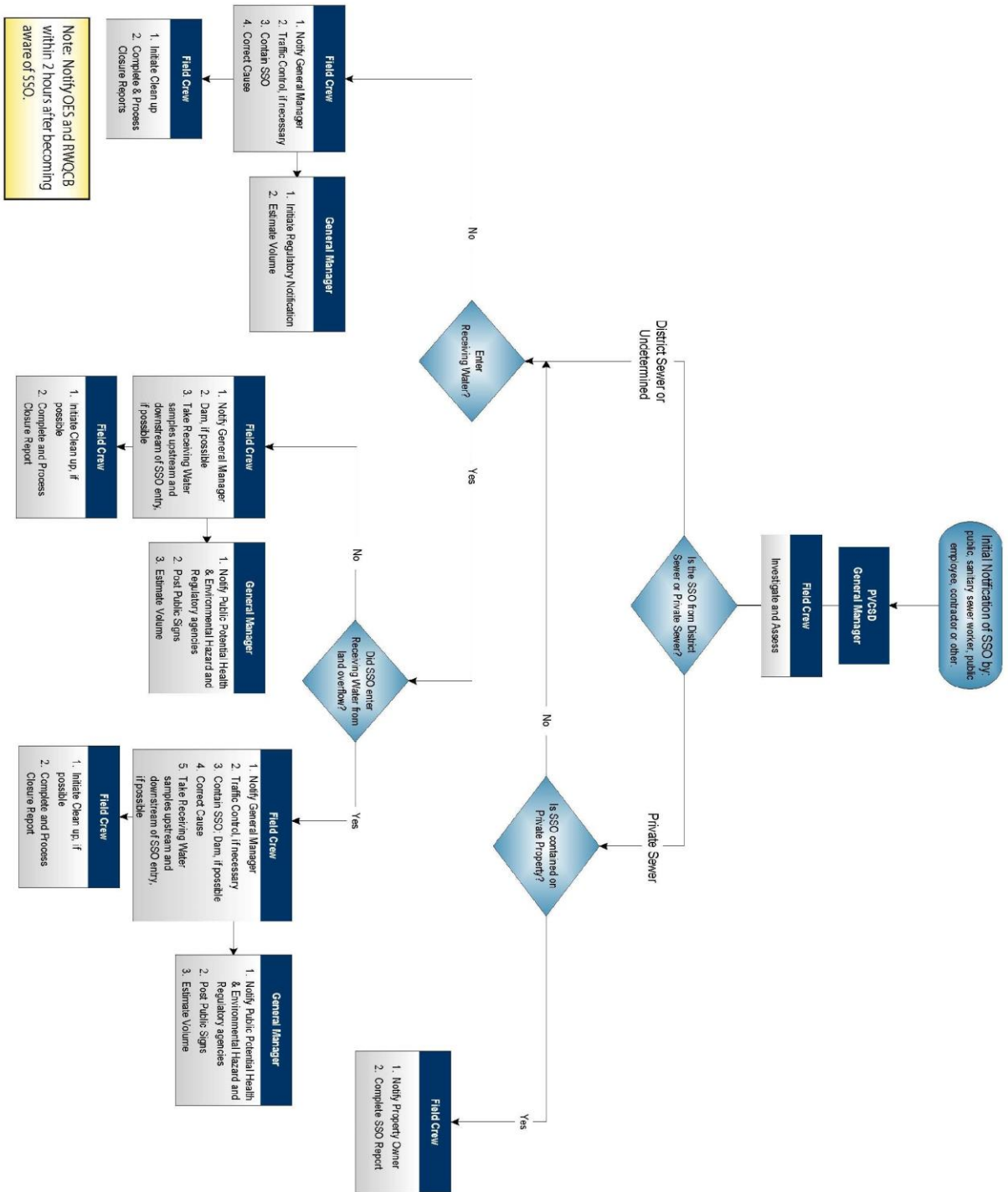
3. Reporting Contact Phone Numbers

- Regional Water Quality Control Board (RWQCB) 858-492-1785
- Office of Emergency Services 800-852-7550
- California Department of Public Health (DWR) 619-525-4493
- San Diego County Department of Environmental Health 858-495-5572
- California Highway Patrol (CHP) 760-742-1492

4. Include the following information:

- Date, time and location
- Nature of problem
- Corrective actions taken
- Preventative action taken
- Current status of the problem (ongoing, stopped, solved, etc.)
- Document direction issued by agency contacted

**Figure 3: PVCSD SANITARY SEWER OVERFLOW RESPONSE FIELD AND REPORTING PROCEDURES FLOWCHART**



**SECTION III. LEGAL AUTHORITY**

**Introduction**

The District was formed in 1965 in conformance with the California Community Services District Law (California Government Code Section 61000 et seq). The District's legal authority addresses the mandatory SSMP provisions outlined in Section D, 13 (iii) Legal Authority of SWRCB Order NO. 2006-003 through its Ordinance and Resolutions as listed below.

**Regulatory Requirements for Legal Authority Section**

The summarized requirements for the Legal Authority section of the SSMP are:

**GWDR Requirement**

The wastewater collection system agency must demonstrate, through collection system use ordinances, service agreements or other legal binding procedures, that it possesses the necessary legal authority to:

- (a) Prevent illicit discharges into its wastewater collection system;
- (b) Require that sewers and connections be properly designed and constructed;
- (c) Ensure access for maintenance, inspection or repairs for portions of the lateral owned or maintained by the Public Agency;
- (d) Enforce any violation of its sewer ordinances:

Figure 4 identifies the District Ordinances or Resolutions that support the GWDR requirements.

**Figure 4.**

Requirement	Rules & Regulations # and Title	Meets GWDR Requirement?
Prevent illicit discharges into the wastewater collection system	PVCSD Ordinance No. 7 - Adopted August 8, 1972; regulating and prohibiting the discharge of certain solutions into the sewer system of the District	YES
Require that sewers and connections be properly designed and constructed	PVCSD Ordinance No. 50 - Adopted June 19, 2008; consolidating and restating rules and regulations of the District relating to the operation, maintenance and use of District facilities for the collection and treatment of sewage and waste	YES



Pauma Valley Community Services District

	of the District and its inhabitants; and the conditions upon which the District will allow a connection to and use of said facilities	
Ensure access for maintenance, inspection or repairs for portions of the lateral owned or maintained by the Public Agency	PVCSD Ordinance No. 50 - Adopted June 19, 2008; consolidating and restating rules and regulations of the District relating to the operation, maintenance and use of District facilities for the collection and treatment of sewage and waste of the District and its inhabitants; and the conditions upon which the District will allow a connection to and use of said facilities	YES
Limit discharge of fats, oils and grease and other debris that may cause blockages, and	PVCSD Ordinance No. 7 - Adopted August 8, 1972; regulating and prohibiting the discharge of certain solutions into the sewer system of the District PVCSD Resolution No. 46 - adopted	YES
Enforce any violation of its sewer ordinances	PVCSD Resolution No. 46 - Adopted August 9, 1988; declaring penalties for misuse or abuse of the District's sewer distribution grid	YES

California Government Code, Sections §61000 grant the PVCSD the authority to regulate and/or prohibit, by adoption of an ordinance, and by issuance of control mechanisms, the discharge of any waste, directly or indirectly, to the District sewerage facilities. This authority includes the right to establish limits, conditions, and prohibitions; to establish flow rates or prohibit flows discharged to the District sewerage facilities; to require the development of compliance schedules for the installation of equipment systems and materials by all users; and to take all actions necessary to enforce its authority, whether within or outside the District boundaries, including those users that are tributary to the District or within areas for which the District has contracted to provide sewerage services.

## **SECTION IV. OPERATIONS AND MAINTENANCE PROGRAM**

### **Introduction**

The collection system serves approximately 800 customers. The system collects waste from residential and commercial users, delivering the collected waste to the Wastewater Reclamation Plant. The system includes over 8.2 miles of sewer, 2 lift stations and more than 144 manholes. Average wastewater flow in 2009 was 62,000 gallons per day.

### **Regulatory Requirements for O&M Program Section**

The requirements for the Operations and Maintenance Program section of the SSMP are:

#### **GWDR Requirements**

- a) Maintain an up-to-date map of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable storm water conveyance facilities;
- b) Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventative Maintenance Program (PMP) should have a system to document scheduled and conducted activities;
- c) Develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and 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-term and long-term plans plus a schedule for developing the funds needed for the capital improvement plan;
- d) Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be appropriately trained; and
- e) Provide equipment and replacement part inventories, including identification of critical replacement parts.

This Operation and Maintenance Plan is divided into five parts. These parts follow the prescribed elements listed in Waste Discharge Requirement 2006-003.

## **PART 1 - MAPPING**

The District maintains up-to-date mapping of the District's sanitary sewer collection system on plat sheets at the District office. The plat sheets are organized in quarter sections of land, showing the collection system components, including lateral locations, pipeline sizes, and manholes with rim elevation, lift stations and air-vacs. The plat sheets also include references to the record drawings of the facilities. The plat sheets are available in printed, hard copy format, printed at 1"=200' or 1"=400' scale.

## **PART 2 - PREVENTATIVE OPERATION AND MAINTENANCE**

This District has developed plans for routine preventive maintenance both by District forces and by outside contractors. This plan was developed by the Utility Department and records are maintained within the Utility Department showing that the work of the preventive maintenance plan has been accomplished.

### **Sewer Pipeline Cleaning Program**

The Sewer Line Cleaning Program consists of two (2) components:

#### Routine Cleaning

- Clean all sewer pipelines every 10 years
- This requires a cleaning rate of 0.82 miles per year
- This is achieved through a yearly contracting sewer line cleaning program and an outside contractor

#### Targeted Cleaning

- Clean a list of known problem sewer lines that has been created from previous problem records and video inspections
- This list is scheduled in six-month and yearly schedule cleaning

### **Manhole Maintenance Program**

This Operation and Maintenance program consists of a working group that repair and maintain our 144 existing manholes. All maintenance work is performed on an as-needed basis.

- Replacement of worn-out frame and cover assemblies
- Replacement of concrete collars
- Locate and raise to grade after street improvements
- Inspection of interior of manholes

### **Force Main/Valve Maintenance/Air Vacuum Units Maintenance Program**

The District operates approximately one mile of force mains that convey sewage to the wastewater treatment plant. These force mains vary in size from 2" to 6"

Operation and maintenance work of this Force Main System consists of the following:

- Visual Inspection of all force mains once per day
- Cleaning, flushing and making all necessary repairs to all appurtenance as needed.
- Locate, mark and exercise all valves on all force mains once a year

### **Lift Stations Maintenance and Operation Plan**

The District currently operates and maintains two sewer lift station in the collection system.

Operations and maintenance performed by the Utility Department personnel include:

- Manually remove grease daily
- Clean wet wells utilizing vacor trucks as needed to rid of all grease build-up that can cause pump failures or odor problems
- Install and maintain emergency by-pass set-ups for gasoline driven portable pumps
- Utilize degreasers or other chemicals to eliminate grease build-up on locations where vacor trucks cannot be used to clean wet wells
- Routine inspection of mechanical equipment
- Pump and Motor preventive maintenance
- Electric and electronic controls, establish set points for automated equipment at lift station

### **System Inspection / Video Inspection Maintenance and Operation Plan**

Our current system inspection program consists of two (2) different types of inspections which are performed regularly.

Visual Inspection:

- Visually inspect known problem areas and report any necessary work needed
- Open manholes and visually inspect flow levels, condition of manholes and all other system operating problems detected

Video Inspection:

The District contracts video inspection with a fully trained operating crew.

- Video inspect sewer areas following any stoppage to locate and identify problem
- Video inspect areas that were contracted for cleaning to evaluate

- quality of work by contractor as needed
- Video inspect newly acquired sewer systems to evaluate conditions and as-builts

### **Part 3 - Rehabilitation and Replacement**

The District produces an updated five year Capital Improvement Budget (CIB) each year. The CIB includes both capital improvement projects and capital replacement projects.

Capital improvement projects are for those facilities which are constructed to meet increased demands on the District's collection system resulting from increases in the customer base. The District charges a Sewer Connection Fee on a per unit basis for new development to fund capacity increases in the collections and treatment facilities.

Capital replacement projects are for the replacement of existing facilities that have reached the end of their efficient useful life. Capital replacement projects are funded through the monthly sewer service fees. Not all capital replacement projects are constructed through the CIB process. Many items, such as lift station motor replacement, for example, will be done entirely through the District's Operating Budget.

### **Part 4 - Training**

The District assures that all utility personnel receive continual, proper training for wastewater treatment operations in order to maintain their current certifications and prepare for advancement to higher certifications.

Employees are reimbursed for all expenses associated with education through the local secondary school system and through organizations such as the CWEA, AWWA, CRWA, OCT Academy and the Hach Company.

### **Part 5 – EQUIPMENT AND REPLACEMENT PARTS INVENTORIES**

The District maintains the equipment, i.e., backhoe, air compressor, generator, hand tools and safety equipment, necessary to make repairs on the collection and treatment facilities.

The District also keeps an inventory of parts such as repair clamps, pipe joints, etc.

Contractors with readily available parts and supplies are:

Pacific Pipeline Supply	760-471-7473
Hidden Valley Pump	760-749-2209
A-1 Irrigation	760-749-1213
HDS Supply	760-744-5600

Contractors available for emergency services are:

Stanek Constructors	760-871-0102
Bay City Electric	619-938-8200
Cummins Cal Pacific	619-219-5002

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

### **Introduction**

The District's design and construction standards are supplied by consulting engineers and/or developers at the start of a design process or proposed development.

### **Regulatory Requirements for the Design and Performance Provisions Section**

The regulatory requirements for the Design and Performance sections are:

### **GWDR Requirements**

- a) Design and construction standards and specifications for the installation of new sewer systems, pump stations, and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer systems; and
- b) Procedures and standards for inspecting and testing the installation of new sewers, pump stations, and other appurtenances and for rehabilitation and repair projects.

### **DESIGN CRITERIA**

The District's design criteria for new and rehabilitation sewers are specified by outside engineering consultants.

### **CONSTRUCTION STANDARDS**

The District's construction standards are specified by outside engineering consultants. All construction standards and specifications for the installation of new sanitary sewer system pump stations and other appurtenances, and for the rehabilitation and repair of the existing sanitary sewer system are maintained by outside engineering consultants.

## **SECTION VI. OVERFLOW RESPONSE PROCEDURE**

### **Introduction**

The Overflow Response Procedure presents a strategy for the Pauma Valley Community Services District to mobilize labor, materials, tools and equipment to correct or repair any condition, which may cause or contribute to an unpermitted discharge. The plan considers a wide range of potential system failures that could create an overflow to surface waters, land or buildings.

### **Regulatory Requirements for the Sanitary Sewer Overflow Response Plan**

The requirements for the Sanitary Sewer Overflow Response Plan (SSORP) section are:

#### **GWDR Requirements**

The collection system agency shall develop and implement an overflow emergency response plan that identifies measures to protect public health and the environment. At a minimum, the plan must include:

- a) Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;
- b) A program to ensure an appropriate response to all overflows;
- c) Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, regional water boards, water supplies, etc.) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the Monitoring and Reporting Program (MRP). All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board Waste Discharge Requirements or National Pollutant Discharge Elimination System (NPDES) permit requirements. The SSMP should identify the officials who will receive immediate attention.
- d) Discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.

## **SSO RESPONSE PROCEDURE**

### **Receipt of Information Regarding an SSO**

An overflow may be detected by District employees or by others. The Pauma Valley Community Services District is responsible to act based on received phone calls or



reports on possible sewage overflow from the wastewater disposal system, and to provide immediate response to investigate and/or correct reported sewer overflow.

During business hours of Monday through Friday, 8:00 a.m. to 4 p.m., office personnel will receive the call at the main office. Other than during business hours, the call will be received by the Pauma Valley Community Services District dispatch at the numbers noted in Appendix D.

1. The person receiving the call will obtain all relevant information available regarding the overflow including:
  - a. time and date the call was received;
  - b. specific location;
  - c. description of problem;
  - d. time possible overflow was noticed by the caller;
  - e. caller's name and phone number;
  - f. observations of the caller; and
  - g. other pertinent information that will enable the Utility Department to quickly locate, assess and stop the overflow.

The person receiving the call will record initial information in the Sewage Overflow Report (ref. Appendix A) and notify the Utility Department immediately. Until verified, the report of a possible spill will not be referred to as a "sewer overflow".

2. The Pauma Valley Community Services District completes the Sewage Overflow Report (ref. Appendix A) within 24 hours of the sewer overflow confirmation and provides the information orally to the RWQCB.

If the overflow will affect bathing areas during the bathing season, or public drinking water intakes, the District shall notify the RWQCB contact person and the DEH contact person orally, within two hours of becoming aware of the discharge.

If the overflow results in a fish kill, the District shall notify the RWQCB contact person within two hours of becoming aware of the discharge. The Pauma Valley Community Services District Chief Plant Operator is responsible for reviewing, updating and signing the final Sewage Overflow Report. Sewage overflow response tracking protocol is summarized in Appendix C.

#### **Dispatch of Sewer Maintenance Personnel to Site of Sewer Overflow**

Failure of any element within the wastewater disposal system that threatens to cause or causes a SSO must trigger an immediate response to isolate and correct the problem. Personnel and equipment must be available to respond to any SSO

locations. Additional maintenance personnel shall be "on call" in the event extra manpower is needed. Summary of Sewer Overflow Action Plan is included in Appendix C.

1. Dispatching Maintenance Personnel

- When the Pauma Valley Community Services District receives notification of a potential sewer overflow outlined in Section A, Pauma Valley Community Services District dispatches maintenance personnel with appropriate resources as required.

2. Maintenance Personnel Instructions

- Dispatch maintenance personnel by telephone or radio. Assign and appropriate personnel, materials, supplies and equipment needed.
- The person receiving the initial call must verify that the entire message has been received and acknowledged by the maintenance by the utility personnel who are dispatched. All personnel being dispatched to the site of an SSO proceed immediately to the site of the overflow. Report any delays or conflicts in assignments immediately for resolution.
- In all cases, response utility personnel report their findings, including possible damage to private and public property, to the Chief Plant Operator immediately upon making their investigation.

3. Additional Resources

The Chief Plant Operator receives and conveys to appropriate parties requests for additional personnel, material, supplies, and equipment for maintenance personnel working at the site of the sewer overflow.

4. Preliminary Assessment of Damage to Private and Public Property

The District utility personnel shall use discretion in their actions as reasonably as they can. They must be aware that the Pauma Valley Community Services District could face increased liability for any further damages inflicted to private property during such assistance. The District utility personnel shall not enter private property for purposes of assessing damage unless authorized by the Chief Plant Operator. The District utility personnel shall take appropriate still photographs and/or video footage, if possible, of the sewer overflow impacted area in order to thoroughly document the nature and extent of impacts. Retain photographs for

- filing with the Overflow Report.
5. Field Supervision and Inspection
    - The Chief Plant Operator visits the site of the sewer overflow to ensure that provisions of this Overflow Response Plan and other directives are met.
    - The Chief Plant Operator is responsible for verbally notifying RWQCB and DEH within the specified time and submitting the Overflow Report to RWQCB.
  6. Coordination with Hazardous Material Response
    - Upon arrival at the scene of a sewer overflow, should a suspicious substance (e.g., oil sheen, foamy residue) be found on the ground surface, or should a suspicious odor (e.g., gasoline) not common to the sewer system be detected, the District sewer maintenance crew shall immediately contact the Chief Plant Operator for guidance before taking further action.
    - Should the Chief Plant Operator determine the need to alert the hazardous material response team, the utility personnel awaits the contracted hazardous waste team response.
    - Contact the RWQCB 24-hour Spill Hotline at (800) 852-7550.
    - Upon arrival of the hazardous material response team, the District sewer utility personnel will take direction from the person with the lead authority of that team. Only when that authority determines it is safe and appropriate for the District sewer utility personnel to proceed under the SORP with the containment, clean-up activities and correction.

#### **OVERFLOW CORRECTION, CONTAINMENT and CLEANUP**

This section describes specific actions to be performed by the District sewer utility personnel during a SSO. The objectives of these actions are:

- To protect public health, environment and property from sewage overflows and restore surrounding area back to normal as soon as possible;

- To establish perimeters and control zones with appropriate traffic cones and barricades, vehicles or use of natural topography (e.g., hills, berms);
- To promptly notify the regulatory agency with preliminary overflow information and potential impacts;
- To contain the sewer overflow to the maximum extent possible including preventing the discharge of sewage into surface waters; and
- To minimize the Pauma Valley Community Service District's exposure to any regulatory agency penalties and fines.

Under most circumstances, the District can handle all response actions with its own maintenance forces. They have the skills and experience to respond rapidly and in the most appropriate manner. An important issue with respect to an emergency response is to ensure that the temporary actions necessary to divert flows and repair the problem do not produce a problem elsewhere in the system.

Circumstances may arise when the District could benefit from the support of private-sector construction assistance. This may be true in the case of large diameter pipes buried to depths requiring sheet piling and dewatering should excavation be required. The district may also choose to use private contractors for open excavation operations that might exceed one day to complete.

1. Responsibilities of District Sewer Utility Personnel upon Arrival  
It is the responsibility of the first personnel who arrive at the site of a sewer overflow to protect the health and safety of the public by mitigating the impact of the overflow to the maximum extent possible. Should the overflow not be the responsibility of the Pauma Valley Community Services District but there is imminent danger to public health, public or private property, or to the quality of waters of the state, then the Chief Plant Operator takes prudent emergency action until the responsible party assumes responsibility and provides actions.

Upon arrival at a SSO, the District sewer utility personnel perform the following: Determines the cause of the overflow, e.g. sewer line blockage, pump station mechanical or electrical failure, sewer line break, etc.; Identifies and requests assistance or additional resources

to correct the overflow or to assist in determination of its cause;

- Determines the cause of the overflow, e.g., sewer line blockage, pump station mechanical or electrical failure, sewer line break, etc.;
- Identifies and requests assistance or additional resources to correct the overflow or to assist in determination of its cause;
- Takes immediate steps to stop the overflow, e.g. relieves pipeline blockage, manually operated pump station controls, repairs pipe, etc. Extraordinary steps may be considered where overflows from private property threaten public health and safety (e.g., an overflow running off of private property into the public right-of-way); and
- Requests additional personnel, materials, supplies, or equipment that will expedite and minimize the impact of the overflow.

2. Initial Measures for Containment

Initiate measures to contain the overflowing sewage and recover, where possible, sewage which has already been discharged, minimizing impact to public health or the environment.

- Determine the immediate destination of the overflow, e.g., storm drain, street curb gutter, body of water, stream bed, etc.;
- Identify and request the necessary materials and equipment to contain or isolate the overflow, if not readily available; and
- Take immediate steps to contain the overflow, e.g., block or bag storm drains, recover through vacuum truck, divert into downstream manhole, etc.

3. Additional Measures under Potentially Prolonged Overflow Conditions

In the event of a prolonged sewer line blockage or a sewer line collapse, set up a portable by-pass pumping operation around the obstruction.

- Take appropriate measures to determine the proper size and number of pumps required to effectively handle the sewage flow.
- Implement continuous or periodic monitoring of the by-pass pumping operation as required.
- Address regulatory agency issues in conjunction with emergency repairs.

4. Cleanup

Clean sewer overflow sites thoroughly after an overflow. No readily identified residue (e.g., sewage solids, papers, rags, plastic, and rubber products) is to remain.

- Whenever possible, digital photos should be taken of the area before and after cleanup.
- Where practical, thoroughly flush the area and clear of any sewage or wash down water. Solids and debris are to be flushed, swept, raked, picked-up and transported for proper disposal.
- Secure the overflow area to prevent contact by members of the public until the site has been thoroughly cleaned.
- Where appropriate, disinfect and deodorize the overflow site.
- Where sewage has resulted in ponding, pump the pond dry and dispose of the residue in accordance with applicable regulations and policies.
- If a ponded area contains sewage, which cannot be pumped dry, it may be treated with bleach. If sewage has discharged into a body of water that may contain fish or other aquatic life, do not use bleach. Contact the RWQCB for specific instructions.

**SEWAGE OVERFLOW REPORT**

The Sewer Overflow Report in Appendix A contains information which is required to be reported to RWQCB and possibly to the DEH depending upon the nature of the spill.

If the overflow will affect bathing areas during the bathing season, or public drinking water intakes, the District shall notify the RWQCB contact person and the DEH contact person orally, within two hours of becoming aware of the discharge.

If the overflow results in a fish kill, the District shall notify the RWQCB contact person within two hours of becoming aware of the discharge.

The Chief Plant Operator completes a Sewer Overflow Report (ref. Appendix A). The Chief Plant Operator promptly notifies the District Office and RWQCB when the overflow is eliminated. Information regarding the sewer overflow includes the following:

- Determination if the sewage overflow had reached surface waters, i.e., all overflows where sewage was observed running to surface waters, or there was obvious indication (e.g., sewage residue) that sewage flowed to surface waters; and
- Determination that the sewage overflow had not reached surface waters by describing conditions at the sewage overflow, which support this determination;
- Determination of the start time of the sewage overflow by one of the following methods:
  - a. Date and time information received and/or reported to have begun and later substantiated by District sewer utility personnel;
  - b. Visual observation;
- Determination of the stop time of the sewer overflow by one of the following methods:
  - a. When the blockage is cleared or flow is controlled or contained; or
  - b. The arrival time of the District sewer utility personnel, if the overflow stopped between the time it was reported and the time of arrival.
- Visual observations

An estimation of the rate of sewer overflow in gallons per minute (GPM) by one of the following criteria:

- a. Direct observations of the overflow; or
  - b. Measurement of actual overflow rate from the sewer main.
- 
- Determination of the volume of the sewer overflow.
  - Photographs of the event, when possible.
  - Assessment of any damage to the exterior areas of public/private property. District sewer utility personnel shall not enter private property for purposes of estimating damage to structures, floor and wall coverings, and other personal property without authorization from the Chief Plant Operator.

## **PUBLIC ADVISORY PROCEDURE**

This section describes the actions the Pauma Valley Community Services District will take, in cooperation with the RWQCB and/or DEH, to limit public access to areas potentially impacted by unpermitted discharges of pollutants to surface water bodies from the wastewater collection system.

### **A. Temporary Signage**

The District has primary responsibility for determining when to post notices of polluted surface water bodies or ground surfaces that result from uncontrolled wastewater discharges from its facilities. The postings do not necessarily prohibit use of recreational areas, unless posted otherwise, but provide a warning of potential public health risks due to sewage contamination.

The Chief Plant Operator will determine if posting of a confirmed overflow is necessary.

### **B. Other Public Notification**

Should the posting of surface water bodies or ground surfaces subjected to a sewer overflow be deemed necessary by the Pauma Valley Community Services District, the Chief Plant Operator will determine the need for further public notification.

## **REGULATORY AGENCY NOTIFICATION PLAN**

The Regulatory Agency Notification Plan established procedures, which the Pauma Valley Community Services District follows to provide formal notice to the RWQCB as necessary in the event of a SSO.

Agency notifications will be performed in parallel with other internal notifications. Internal notification and mobilization of District sewer utility personnel are established in Section III - Overflow Response Procedure.

Using data supplied during the verification process and updates from the utility personnel, the Chief Plant Operator prepares initial and final Overflow Reports. Initial report will be provided orally to the RWQCB and, if necessary, to the local health department within either two (2) hours or 24 hours from the time the District became aware of the SSO. If the overflow will affect bathing areas during the bathing season, or public drinking water intakes, the District shall notify the RWQCB contact person and the DEH contact person orally, within two hours of becoming



aware of the discharge. If the overflow results in a fish kill, the District shall notify the RWQCB contact person within two hours of becoming aware of the discharge.

Prepare and provide final report to the regulatory agency within five (5) days after the District becomes aware of the overflow. Submit by mail. The Chief Plant Operator is responsible for meeting the notification requirement. The Chief Plant Operator prepares written notification to the appropriate regulatory agency of any confirmed overflows. The Chief Plant Operator signs these notifications. The RWQCB contact person may waive the written report requirement on a case-by-case basis if the oral report was received with the required time frame. Regardless of other notifications, a Report of Non-Compliance is required to be submitted with the monthly Discharge Monitoring Report.

**A. Immediate Notification**

If the overflow will affect bathing areas during the bathing season, or public drinking water intakes, the District shall notify the RWQCB contact person and the DEH contact person orally, within two hours of becoming aware of the discharge.

If the overflow results in a fish kill, the District shall notify the RWQCB contact person within two hours of becoming aware of the discharge.

Fax the initial and any updated Sewer Overflow Report to:

- **RWQCB**  
**Attn : Fisayo Osibodu**  
**Telephone: (858) 637-5594**  
**Fax: (858) 571-6972**

**B. Secondary Notification**

District Chief Plant Operator may contact other agencies, as necessary, as well as other interested and possibly impacted parties.

**CUSTOMER RELATIONS**

It is important for District employees to communicate effectively with its customers, especially in an SSO situation. How we communicate is how we are perceived and good communication installs a greater confidence in District's employees. A sewer

backup is a stressful event and even a reasonable customer can become upset if he/she feels an employee is being indifferent, uncaring, unresponsive or incompetent.

A few communication tips to remember are:

- Give the customer ample time to explain the situation. Show interest in what is being said, no matter how many times it is repeated
- As soon as possible, let the customer know you will determine the cause of the backup and correct if possible
- Express regret for any inconveniences caused by the incident, but do not admit fault
- Keep the customer informed on what is being done and will be done to correct the problem
- Keep focus on the incident. Do not get involved with too much unnecessary small talk with the customer
- Don't find fault or lay blame on anyone
- Before you leave, make sure the customer has the name and telephone number of the District office and contact person who will handle any calls that arise

The District's Chief Plant Operator follows up in person or by telephone with the entity who reported the overflow. The cause of the overflow and its resolution will be disclosed.

## **MAINTENANCE OF SORP**

The SORP will be reviewed on an annual basis. Possible amendments can include:

- Change in procedures
- Change in contact personnel
- Changes due to regulatory requirements

**APPENDICES**

Appendix A - Sanitary Sewer Overflow Report Form

Appendix B - Sewer Overflow Notice Plan Flow Chart

Appendix C - Sewer Overflow Response Tracking Protocol

Appendix D - List of Public Offices to Report Overflow

Appendix E - Suggested Criteria for Demonstrating How a Sewer  
Overflow was Unavoidable

Appendix F - Measures to Avoid Sewer Overflow

Appendix G - Overflow Descriptions and Required Notifications

Appendix H - Grease Trap/Interceptor Installation Conditional Variance

**APPENDIX A**

**SANITARY SEWER OVERFLOW REPORT FORM**

**PAUMA VALLEY COMMUNITY SERVICES DISTRICT WASTEWATER DISPOSAL SYSTEM**

**1. General Information**

- a. PVCSD #: \_\_\_\_\_
- b. Name of collection system: \_\_\_\_\_
- c. Authorized representative filing this form:  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Email Address: \_\_\_\_\_
- d. Type of filing report:
  - o Initial
  - o Final
- e. Date of filing report:
  - o Initial \_\_\_\_/\_\_\_\_/\_\_\_\_
  - o Final \_\_\_\_/\_\_\_\_/\_\_\_\_

**2. Oral Reporting of Overflow, Bypass or Upset**

All releases of untreated or partially treated sewage require 24-hour oral notification except those that require 2-hour oral notification.

- a. Overflow requiring 2-hour notification
  - o Impact or closure of bathing area
  - o Results in fish kills
  - o Other \_\_\_\_\_
- b. Overflow requiring 24-hour notification
  - o Gravity sewer manhole
  - o Pump Station
  - o Treatment plant bypass

- o Other

c. Oral report to DEH contact person

Name: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Email Address: \_\_\_\_\_

DEC Office: \_\_\_\_\_

Date of Phone Notification: \_\_\_\_/\_\_\_\_/\_\_\_\_

d. Oral report to local Health Department contact person.

Name: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Email Address: \_\_\_\_\_

Health Department Office: \_\_\_\_\_

Date of Phone Notification: \_\_\_\_/\_\_\_\_/\_\_\_\_

3. **Overflow Location and Description**

a. Location

City / Town / Village: \_\_\_\_\_

Address or Landmark: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

b. Discharge Location:

- o Directly to receiving ground water
- o Ground
- o Receiving water via storm drain
- o Building

c. Type of overflow

- Gravity sewer manhole
- Pump station
- Bypass at treatment plan
- Other \_\_\_\_\_  
\_\_\_\_\_

**4. Time of Overflow / Bypass Incident**

- When did the incident begin? Date: \_\_\_\_/\_\_\_\_/\_\_\_\_
- Was the overflow / bypass event ongoing at the time of report?  
 Yes     No

If Yes, how long is the incident expected to continue?  
\_\_\_\_\_

If No, when did event end? Date: \_\_\_\_/\_\_\_\_/\_\_\_\_ Time: \_\_\_\_\_

**5. General Information about Overflow at this Location**

a. Estimated volume of overflow released at time of report:  
\_\_\_\_\_

b. Method of estimating volume:  
\_\_\_\_\_

c. Estimated total volume of overflow released at end of incident:  
\_\_\_\_\_

d. Were digital photos taken:     Yes     No

e. Corrective measures taken:

- No action
- Removed blockage
- Repair pump station
- Other \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

f. Cause of overflow / bypass (select all those that apply):

- Rain
- Snow melt
- High ground water
- Other excessive flow
- Sewer system blockage or collapse
- Pump / lift station failure
- Other \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

g. Additional comment: \_\_\_\_\_

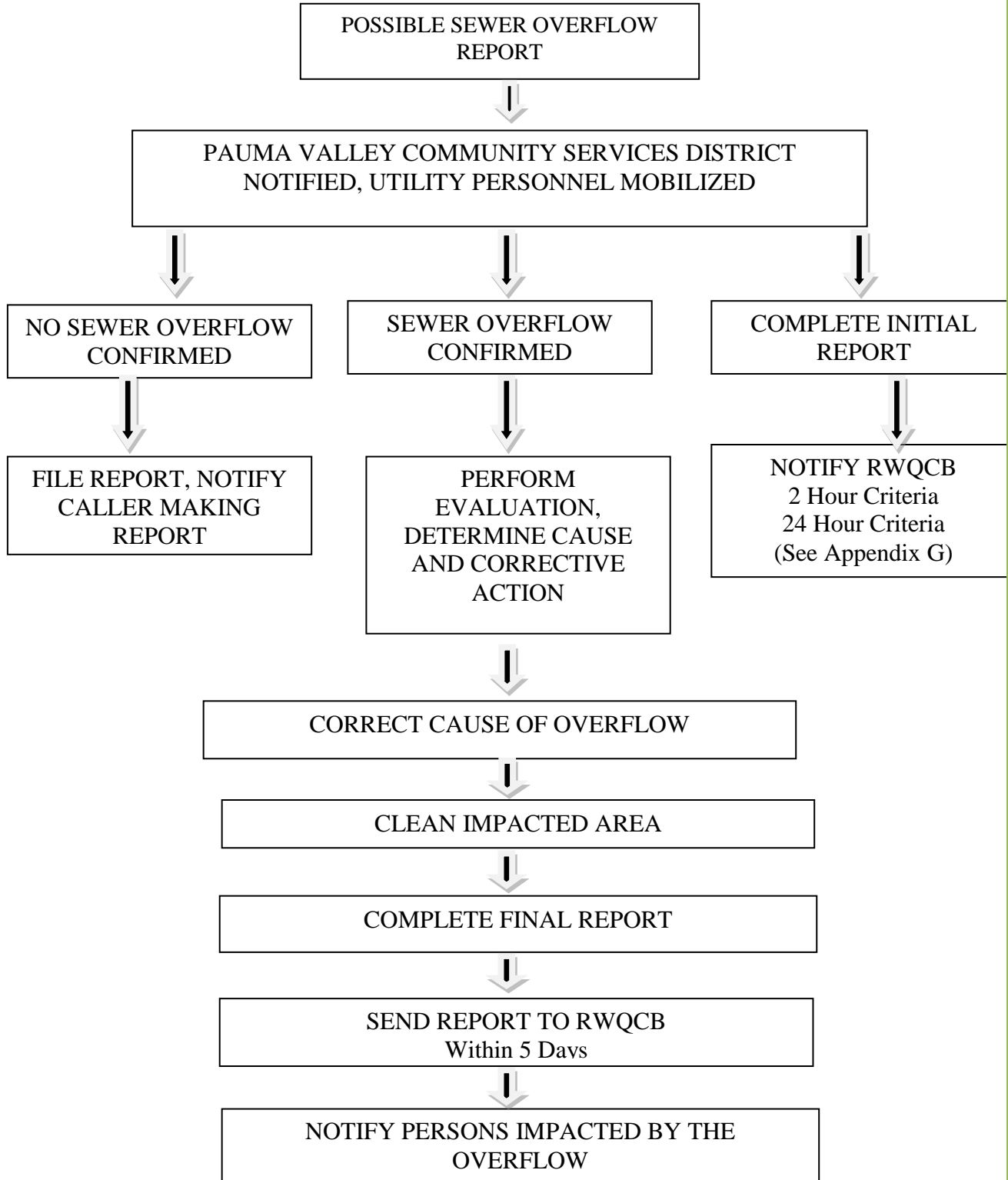
\_\_\_\_\_  
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**APPENDIX B**

**SEWER OVERFLOW NOTICE PLAN FLOW CHART  
PAUMA VALLEY COMMUNITY SERVICES DISTRICT WASTEWATER DISPOSAL SYSTEM**



**APPENDIX C**

**SEWER OVERFLOW (SSO) RESPONSE TRACKING PROTOCOL  
PAUMA VALLEY COMMUNITY SERVICES DISTRICT WASTEWATER DISPOSAL SYSTEM**

STEP	EVENT
1	Report of possible SSO received by a District personnel
2	District personnel enters received information into Sewer Overflow Report
3	District personnel contacts District Utility Department which then deploys utility personnel to confirm reported SSO.
4	Utility personnel reports back to the Chief Plant Operator, reporting significance of the overflow.
5	Chief Plant Operator completes initial Overflow Report. If the overflow will affect bathing areas during the bathing season, or public drinking water intakes, the District shall notify the RWQCB contact person and the DEH contact person orally, within two hours of becoming aware of the discharge. If the overflow results in a fish kill, the District shall notify the RWQCB contact person within two hours of becoming aware of the discharge.
6	Within 5 days, the Chief Plant Operator prepares final Overflow Report. Report is mailed to RWQCB.
7	Data from Overflow Report are entered into a permanent record on file at the Pauma Valley Community Services District.
8	Attach Report of Noncompliance to Discharge Monitoring Report.

**APPENDIX D**

**LIST OF PUBLIC OFFICES TO REPORT OVERFLOW  
PAUMA VALLEY COMMUNITY SERVICES DISTRICT WASTEWATER DISPOSAL SYSTEM**

<b>Contact Name</b>	<b>Telephone</b>
District Office / Administrator District Dispatch	760-742-1909 / 760-214-5396 760-742-3112
Chief Plant Operator	760-250-9658 or 760-479-4126
District Utility Supervisor	760-500-0482
Fire Department	760-751-7600
Police / Sheriff	760-749-1303 858-565-5200 (24 hour dispatch)
RWQCB	858-636-3155 (Eric Becker)
DEH	800-253-9933 619-338-2211 (Mark McPherson)
DWR	619-525-4493 (Tuba Ertas)

**APPENDIX E**

**SUGGESTED CRITERIA FOR DEMONSTRATING HOW A SEWER OVERFLOW WAS UNAVOIDABLE  
PAUMA VALLEY COMMUNITY SERVICES DISTRICT WASTEWATER DISPOSAL SYSTEM**

SSO's can be demonstrated as unavoidable by showing the discharge meets each of the criteria 1 through 5:

1. The discharge resulted from a temporary, exceptional incident that was either:
  - A. Necessary to prevent loss of life, personal injury, or severe property damage
  - B. Beyond the reasonable control of the operator. Incidents beyond the reasonable control of the operator would include:
    - Exceptional acts of nature;
    - Third party actions that could not be reasonably prevented, including vandalism that could not be avoided by reasonable measures;
    - Blockages that could not be avoided by reasonable measures;
    - Unforeseeable sudden structural, mechanical or electrical failure that could not be avoided by reasonable measures.
2. The discharge had no feasible alternative.
3. The discharge was not caused by any of the following:
  - A. Operational error;
  - B. Improperly designed or constructed collection system facilities;
  - C. Inadequate collection system facilities or components;
  - D. The lack of appropriate preventive maintenance; or
  - E. Careless or improper oversight.
4. Steps to stop the discharge, address the source of the problem, and mitigate potential impacts from the discharge were taken as soon as possible after becoming aware of the release.

**APPENDIX F**

**MEASURES TO AVOID SEWER OVERFLOW  
PAUMA VALLEY COMMUNITY SERVICES DISTRICT WASTEWATER DISPOSAL SYSTEM**

**A. Proper Collection System Maintenance and Operations Program**

- Cleaning of pipes (grease, roots deposits)
- Sealing or maintenance for deteriorating sewers
- Remediation of poor/substandard construction (short term)
- Sewer replacement or rehabilitation program (long term)
- Proper maintenance and operations of pump stations
- Inspection of private laterals

**B. New Wastewater Disposal System Construction**

- Use latest technology and standards in constructing new wastewater Disposal system improvements
- Perform proper construction inspection/quality assurance procedures

**APPENDIX G**

**OVERFLOW DESCRIPTIONS AND REQUIRED NOTIFICATION**

**PAUMA VALLEY COMMUNITY SERVICES DISTRICT WASTEWATER DISPOSAL SYSTEM**

**Overflows requiring 2-Hour Verbal Notification**

- Impact or closure of bathing area during bathing season (RWQCB and DEH)
- Impact of closure of public drinking water intake (RWQCB and DEH)
- Results in a fish kill (RWQCB)

**Overflows requiring 24-Hour Notification - (RWQCB only)**

- Gravity sewer manhole
- Pump station
- Sewer siphon
- Treatment plant bypass

**RWQCB**

San Diego Region  
Fisayo Osibodu

Phone: 858-637-5594

Fax:

Email: [osibodu@waterboards.ca.gov](mailto:osibodu@waterboards.ca.gov)

**DEH**

San Diego Region  
Mark McPherson

Phone: 858-495-5572

Fax:

**APPENDIX H**

**Pauma Valley Community Services District  
 33129 Cole Grade Road, Pauma Valley, CA 92061  
 Phone: 760-742-1909 Fax: 760-742-1588**

**GREASE TRAP/INTERCEPTOR INSTALLATION CONDITIONAL VARIANCE**

I, \_\_\_\_\_ **Representing,** \_\_\_\_\_  
 (Business Representative's Printed Name and Title) (Business Printed Name)

Do hereby certify that at no time shall any fats, oil or grease be discharged to the Pauma Valley Community Services District's (PVCSD) community sewer collection system. I agree to contact PVCSD if operational changes occur that could result in the discharge of fats, oil or grease into the community sewer collection system at the business named above. If at any time the business listed above is found by the PVCSD or other agency to be allowing the discharge of fats, oil or grease in quantities that may impair wastewater flow, I understand that I must install, within ninety (90) days of receipt of notification from PVCSD, a grease trap or interceptor of sufficient size and design acceptable to PVCSD and the County of San Diego Department of Environmental Health.

I certify under penalty of law that this document and all attachments were prepared under my direction or 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 information, the information submitted 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 for knowing violations.

**This grease trap/interceptor installation conditional variance is not transferable.**

By signing this document, I warrant that I have or have obtained the necessary consent and authority to execute this variance and to make this variance binding upon myself and the business listed above.

SIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_

Contact Name and Title:	Contact Phone:	Contact Email:
Business Name:	Business Location:	

Applicant Please Do Not Write Below This Line

APPROVAL: \_\_\_\_\_ DATE: \_\_\_\_\_

REASON FOR APPROVAL: \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_

## **SECTION VII. FOG CONTROL PROGRAM**

### **Introduction**

The District has minimal problems with respect to fats, oil and grease (FOG). There have been no reported SSOs from buildup of fats, oils or grease since the WDR was executed; therefore, an extensive FOG Control Program is not necessary.

### **Regulatory Requirements for FOG Control Section**

The requirements for the FOG Control Program of the SSMP are:

### **GWDR Requirements**

The collection system agency shall evaluate its service area to determine whether a FOG Control Program is needed. If the collection system agency determines that a FOG Control Program is not needed, the collections system agency must provide justification for why it is not needed and must maintain a signed Grease Trap/ Interceptor Installation Conditional Variance for each Food Service Establishment within the District. If FOG is found to be a problem, the collection system agency must prepare and implement a FOG source control program to reduce the amount of these substances discharged to the sanitary sewer system. The plan shall include the following as appropriate:

- a) An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;
- b) A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area;
- c) The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;
- d) Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements;
- e) Authority to inspect grease producing facilities, enforcement authorities, and whether the District has sufficient staff to inspect and enforce the FOG ordinance;
- f) An identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section; and
- g) Development and implementation of source control measures for all sources of FOG discharged to the sanitary sewer system for each section identified in (f) above.



### **Best Management Practices (BMPs)**

All food service establishments must implement kitchen BMPs in an effort to minimize the discharge of FOG to the sewer system. FSEs will be required, at a minimum, to comply with the following BMPs, when applicable:

- Drain screens must be installed on all drainage pipes in food preparation areas.
- All waste cooking oil must be collected and stored properly in recycling receptacles such as barrels or drums. Such recycling receptacles must be maintained properly to ensure that they do not leak. Licensed waste haulers or an approved recycling facility must be used to dispose of waste cooking oil.
- All food waste must be disposed of directly into the trash or garbage, and not in sinks.
- Employees of the food service establishments must be trained on the following subjects:
  - How to “dry wipe” pots, pans, dishware and work areas before washing to remove grease.
  - How to properly dispose of food waste and solids in enclosed plastic bags prior to disposal in trash bins or containers to prevent leaking and odors.
  - The location and use of absorption products to clean under fryer baskets and other locations where grease may be spilled or dripped.
  - How to properly dispose of grease or oils from cooking equipment into a grease receptacle such as a barrel or drum without spilling.
- Kitchen exhaust filters must be cleaned as frequently as necessary to be maintained in good operating condition. The wastewater generated from cleaning the exhaust filter must be disposed properly.
- Best management and waste minimization practices must be posted conspicuously in the food preparation and dishwashing areas at all times.

### **Prohibitions**

The following prohibitions apply to all FSEs:

- Introduction of any additives into an FSE's wastewater system for the purpose of emulsifying FOG is prohibited.

- Disposal of waste cooking oil into drainage pipes is prohibited. All waste cooking oils must be collected and stored properly in receptacles such as barrels or drums for recycling by the FSE.
- Discharge of wastewater from dishwashers to any grease trap or grease interceptor is prohibited.
- Discharge of wastewater with temperatures in excess of 140 degrees to any FOG control device, including grease traps and grease interceptors, is prohibited.
- The use of biological additives for grease remediation or as a supplement to interceptor maintenance is prohibited.
- Discharge of wastes from toilets, urinals, washbasins, and other fixtures containing fecal materials to piping which flows to a grease interceptor is prohibited.
- Discharge of any waste including FOG and solid materials removed from the FOG control device to the sewer system is prohibited. Materials removed from grease interceptors must be hauled periodically as part of the operation and maintenance requirements.

### **Nature and Extent of FOG Control Program**

The District has only three commercial or industrial sources of grease discharging to its collection system. Two are food service establishments (Pauma Valley Country Club and El Rey Restaurant) and the industrial grease generator is the local school.

Over the years, the District has experienced no SSOs with any blockages being discovered and corrected before any spillage occurs. Of the District's line blockages, approximately 80% are grease related.

The low incidences of FOG related SSOs in the service area indicates that the District's historical management of the FOG dischargers, combined with the District's sewer system preventative maintenance program, has been effective.

The District's preventative maintenance program includes the cleaning of a defined section of sewer line every six months with additional inspection and cleaning on noted high-potential blockage areas.

## **SECTION VIII. SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN**

### **Introduction**

This section of the SSMP outlines the District's programs and activities to provide adequate capacity.

### **Regulatory Requirement for System Evaluation and Capacity Assurance Plan Section**

The requirements for the System Evaluation and Capacity Assurance Plan (SECAP) section of the SSMP are:

#### **GWDR 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 must include:

- a) Evaluation: Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs that escape from the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to the peak flows associated with overflow events;
- b) Design Criteria: Where design criteria do not exist or are deficient, undertake the evaluation identified in (a) above to establish appropriate design criteria; and
- c) Capacity Enhancement Measures: The steps needed to establish a short- and long- term CIP to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding.
- d) Schedule: The District 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

### **Evaluation**

As part of its plan to ensure adequate infrastructure capacity to support a population increase due to residential development, PVCSD has completed an infrastructure assessment (Kennedy/Jenks Consultants, Inc.) which focused on observations of existing conditions, estimations of future loads, and proposed capital improvements necessary for the sanitary sewer system to meet future loads.

### **Design Criteria**

The District's design criteria is established by consulting engineers and/or developers at the start of a design process or proposed development.

### **Capacity Studies**

Flow data is retained, recorded and evaluated to determine the average daily flow for assurance that it falls within our plant capacity.

### **Schedule**

The District's capacity assurance efforts rely on its 2008 Master Plan and its internal collection system long-term rehabilitation plan. Point repairs are made soon after discovery and are frequently re-prioritized to ensure uninterrupted sewer service. Sewer repairs are part of the District's annual repair budget. The District also funds major structure or trunk sewer replacements in its capital budget.

## **SECTION IX. MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS**

### **Introduction**

This section of the SSMP outlines the process that the District will follow to evaluate the effectiveness of the SSMP and to identify updates that may be needed for a more effective program.

### **Regulatory Requirements for Monitoring, Measurement and Program Modification Section**

The requirement for the Monitoring, Measurement and Program Modification (MMPM) section of the SSMP are:

### **GWDR Requirements**

The District shall:

- a) Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;
- b) Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;
- c) Assess the success of the preventative maintenance program;
- d) Update program elements, as appropriate, based on monitoring or performance evaluations; and
- e) Identify and illustrate SSO trends, including frequency, location and volume.

### **Performance Measures**

The District will maintain records, monitor and assess the effectiveness of the program and update as necessary. The indicators the District will use to measure the performance of its wastewater collection system and the effectiveness of its SSMP are:

- total number of SSOs;
- number of SSOs by each cause (roots, grease, debris, pipe failure, capacity, pump station failure, and other);
- portion of sewage contained compared to total volume spilled;
- volume of spilled sewage discharged to surface water; and

The District will evaluate the performance of its wastewater collection system at least annually using the performance measures identified above and will update the data and analysis at the completion of evaluation.

## **SECTION X. PROGRAM AUDITS**

### **Introduction**

This section of the SSMP outlines the process that the District will follow to evaluate the effectiveness of the SSMP and to identify updates that may be needed for a more effective program.

### **Regulatory Requirements for the Program Audits Section**

The requirements for the Program Audits section of the SSMP are:

#### **GWDR 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 identified in this subsection (D.13), including identification of any deficiencies in the SSMP and steps to correct them.

#### **Audits**

The District will assess the effectiveness of the SSMP by conducting periodic internal audits at least every two years. The scope of the audit will cover each of the major sections of the SSMP and will utilize the Audit Checklist in Figure 6 which is based on the requirement of the GWDR. Through this review, the District will be able to determine any deficiencies and recommend steps to correct.

**Figure 6: SSMP Audit Checklist**

Section	Title	Requirement	SSMP Current Date	Implemented Date
I	Goals	Reduce, prevent and mitigate SSOs		
II	Organization	Designate CPO		
		Names and phone numbers for key administrative personnel		
		Names and phone numbers for key Maintenance personnel		
		Chain of communication for reporting SSOs		
III	Legal Authority	Prevent illicit discharges to sanitary sewer system		
		Require sewers and connections be properly designed and constructed		
		Ensure access for maintenance, inspection or repairs by Public Agency		
		Limit discharge of FOG and debris that may cause blockages		
		Ability to inspect FOG producing facilities		
		Enforce violations of District's sewer ordinances		
IV	O & M Program	Maintain up-to-date maps of sewer system		
		Describe routine preventative maintenance program		
		Document completed preventative maintenance Trained in SSORP procedures		

Section	Title	Requirement	SSMP Current Date	Implemented Date
		Develop rehabilitation and replacement plan that identifies and prioritizes sewer system defects		
		Provide regular technical training for sewer system employees		
		Require contractors who work in the system to be appropriately trained		
		Maintain equipment and replacement parts inventory		
V	Design & Performance Provisions	Maintain design and construction standards and specifications for new sewer system facilities		
		Design and construction standards for rehabilitation and repair of existing sewer system facilities		
		Procedures for inspection and acceptance of new sewer system facilities		
		Procedures for inspection and acceptance of rehabilitated and repaired sewer system facilities		
VI	O/E Response Plan	Procedures for notifications of primary responders		
		Procedures for notification of regulatory agencies		
		Program to ensure proper response to all SSOs		
		Procedure to ensure District staff are trained in SSORP procedures		



Section	Title	Requirement	SSMP Current Date	Implemented Date
		Procedures to address emergency operations such as traffic and crowd control		
		Program to prevent discharge of sewage to surface waters		
		Program to minimize or correct the impact of any SSOs that occur		
		Program of accelerated monitoring to determine the impact of any SSOs that occur		
VII	FOG Control Program	Outreach program that educates the public on proper disposal of FOG		
		Plan and schedule for disposal of FOG generated in the District's service area		
		Demonstrate the District has allocated adequate resources for FOG control		
		Authority to inspect grease producing facilities and enforcement authorities		
		Identification of sewer system sections subject to blockages		
VIII	System Evaluation and Capacity Assurance Plan	Identification of elements of the sewer system that experience or contribute to SSOs caused by hydraulic deficiencies		
		Establish design criteria that provide adequate capacity		

Section	Title	Requirement	SSMP Current Date	Implemented Date
		Establish short-term CIP that address known hydraulic deficiencies		
		Establish long-term CIP that address known hydraulic deficiencies		
		Identify sources of funding for CIP		
		Develop a schedule of completion dates for all CIP		
IX	Monitoring, Measurement and Program Modifications	Maintain relevant information to establish, evaluate and prioritize SSMP activities		
		Monitor implementation of the SSMP		
		Measure the effectiveness of each element of the SSMP, where appropriate		
		Assess the success of the preventative maintenance program		
		Update SSMP program elements based on monitoring or performance		
X	Program Audits	Conduct periodic internal audits, minimum every 2 years		
		Record results of the audit for review		
		Record changes or corrective actions taken based on audit		
XI	Communication Program	Communicate with the public on the development, implementation and performance of its SSMP		

Section	Title	Requirement	SSMP Current Date	Implemented Date
		Communicate with tributary or satellite sewer systems		
XII	Finalization and Certification	Present to District's governing board for approval at a public meeting		
		Complete certification process in Online SSO Database Questionnaire		
		Print, sign and mail automated form to SWRCB with required update every 5 years		

## **SECTION XI. COMMUNICATION PROGRAM**

### **Introduction**

This section of the SSMP outlines the process involved in communicating with interested members of the public regarding the development, implementation and performance of this plan.

### **Regulatory Requirement of the Communication Program Section**

The requirements for the Communication Program section of the SSMP are:

### **GDR 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.

### **Communicating Sanitary System Performance to the Public**

**Written Communication:** The District will make information available to the public on the development, implementation and performance of its SSMP through a quarterly newsletter provided to the community.

**Online Communication:** Eventually, through the District's website which is in the development stage, the performance information will include the Performance indicators listed in Section IX of the SSMP; Monitoring, Measurement and Program Modifications and will be compiled annually. Notice that the performance information is available for review will be posted on the District's future website.

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

[//www.waterboards.ca.gov/publicreports.html](http://www.waterboards.ca.gov/publicreports.html)

The District will direct interested parties to the CIWQS public access website.

The District will report the performance of its sanitary sewer system to the District Board of Directors annually at a regular scheduled meeting and the performance information will be included in the minutes of that public meeting. The performance information will include the Performance indicators listed in Section IX of the SSMP; Monitoring, Measurement and Program Modifications and will be compiled annually.

## **FINALIZATION AND CERTIFICATION**

### **Introduction**

Prior to implementing the SSMP, the District must be certified to be in compliance with the requirements set forth in State Water Resources Control Board Order No. 2006-0003-DWQ, dated May 2, 2006.

### **Certification**

The SSMP must be presented to the District's governing board for approval at a public meeting. In order to complete the certification, the District's authorized representative must complete the certification portion in the Online SSO Database Questionnaire by checking the appropriate milestone box, printing and signing the automated form, and sending the form to:

State Water Resources Control Board  
Division of Water Quality  
Attn: SSO Program Manager  
P. O. Box 100  
Sacramento, CA 95812

### **Updating Requirements**

The SSMP must be updated every five (5) years and must include any significant program changes. Re-certification by the governing board of the District is required when significant updates to the SSMP are made. To complete the re-certification process, the District shall enter the data in the Online SSO Database and mail the form to the State Water Board as described above.