### VALLEY SANITARY DISTRICT

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

### Section 1 SSMP GOALS

In compliance with
State Water Resource Control Board
Statewide General Waste Discharge Requirements
Order No. 2006-0003-DWQ

This section outlines the requirements of the Statewide Sanitary Sewer General Waste Discharge Requirements (GWDR) order and describes how Valley Sanitary District (VSD) complies.

1. Goals: The goal of the SSMP is to provide a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer system. This will help reduce and prevent Sanitary Sewer Overflows (SSOs), as well as mitigate any SSOs that occur.

The mission of the Valley Sanitary District is to collect wastewater, treat and reclaim the water for beneficial use in a safe and cost effective manner as prescribed by state and federal law. The District is dedicated to: excellence in service; maintaining a high standard of operation and maintenance; forward thinking in planning for facility and operation needs, and achieving maximum cost efficiency and effectiveness. The District board and staff are dedicated to having the District be a positive asset to the community.

In support of this mission, the District has developed the following goals for the operation and maintenance of its sewer collection system.

- 1. Minimize sanitary sewer overflows.
- 2. Prevent public health hazards.
- 3. Minimize inconveniences by responsibly handling interruption in service.
- 4. Protect the large investment in collection systems by maintaining adequate capacities and extending useful life.
- 5. Prevent unnecessary damage to public and private property.
- 6. Use funds available for sewer operation in the most efficient manner.
- 7. Convey wastewater to the treatment facility with minimum of infiltration, inflow and exfiltration.
- 8. Provide adequate capacity to convey peak flows.
- 9. Perform all operations in a safe manner to avoid personal injury and property damage.

This SSMP supplements and supports the District's existing Operation & Maintenance Program and goals by providing high-level, consolidated guidelines and procedures for all aspects of the District's sewer system management. The SSMP will contribute to the proper management of the collection system and assist the District in minimizing the frequency and impacts of SSO's by providing guidance for appropriate maintenance, capacity management, and emergency response.

### VALLEY SANITARY DISTRICT

### SEWER SYSTEM MANAGEMENT PLAN

### Section 2 ORGANIZATION

In Compliance with
State Water Resource Control Board
Statewide General Waste Discharge Requirements
Order No. 2006-0003-DWQ

This Section outlines the requirements of the Statewide Sanitary Sewer General Waste Discharge Requirements (GWDR) order and describes how Valley Sanitary District Complies.

### 2. Organization: The SSMP must identify:

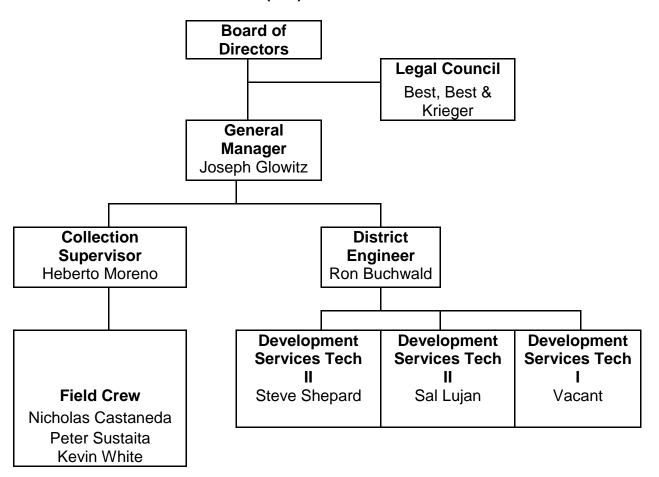
- a. The name of the agency's responsible or authorized representative.
- b. The name and telephone number for management, administrative, and maintenance positions for implementing specific measures in the SSMP program. The SSMP must identify lines of authority through an organization chart or similar document with a narrative explanation; and

A Collection system organization chart that identifies District personnel responsible for implementing specific programs in the SSMP is included in this section.

c. The chain of communication for reporting SSOs, from receipt of a complaint or other information, including the person responsible for reporting SSOs to the State and Regional Water Board and other agencies if applicable (such a County Health Officer, County Environmental Health agency, Regional Water Board, and/or State Office of Emergency Services (OES).

A chain of communication chart for reporting Sanitary Sewer Overflows (SSO) is located in this section and a detailed procedure for responding to and reporting SSO's can be found in our Sanitary Sewer Overflow Emergency Response Plan located in the Overflow Emergency Response Plan section.

# Valley Sanitary District Collection System Organization Chart Contact Number for all personnel (760) 238-5400



**Board of Directors:** Establish policy.

<u>General Manager:</u> Enforce policy, plan strategy, lead staff, allocate resources, authorize outside contractors to perform service, and serve as public information officer.

<u>District Engineer:</u> Legally Responsible Officer for certifying Sewer System Management Plan (SSMP) elements, SSO reports and lead the development and implementation of the SSMP. Prepare bid documents for and manage rehabilitation Capital Improvement Projects. Planning, organizing, administering, and directing the installation and upgrading of the District's wastewater collection system infrastructure. Responsible for ensuring the District's compliance with local, State and Federal regulations pertaining to wastewater collection.

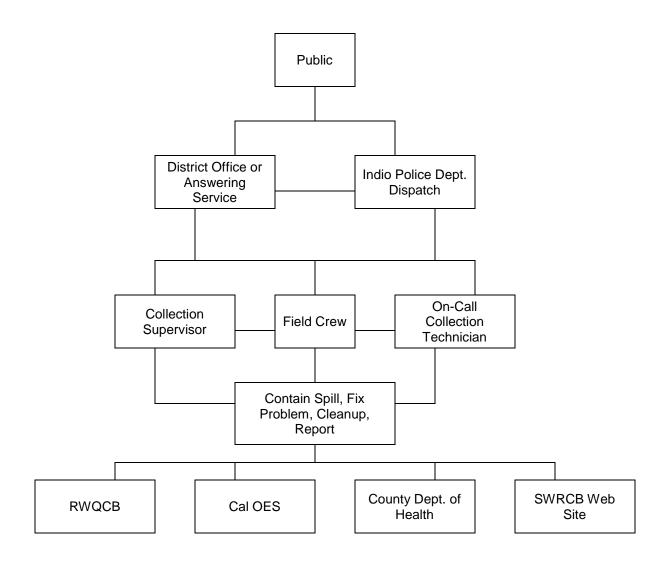
<u>Collection Supervisor:</u> Manage field operations and maintenance activities, provide relevant information to agency management, lead emergency response, and Legally Responsible Officer for certifying SSOs reports. Train field crews.

<u>Field Crew:</u> Under direction of the Collection Supervisor, conduct preventive and corrective maintenance activities, mobilize and respond to notification of stoppages and SSOs.

<u>Development Services Tech II:</u> Under direction of the District Engineer assist with plan and field reviews for compliance with District ordinances and regulations; perform FOG inspections; perform field construction inspections Legally Responsible Officer for certifying SSOs reports.

<u>Development Services Tech I:</u> Under direction of the District Engineer assist with plan and field reviews for compliance with District ordinances and regulations; perform FOG inspections; perform field construction inspections.

### **SSO Reporting Chain of Communications**



### 2.0 ORGANIZATION SSMP ELEMENT UPDATE LOG

- 1. 5/19/10 Updated the name of the General Manager from Rex Sharp to Joseph Glowitz. By Steve Shepard
- 2. 6/14/12- Removed Bill Rosamond From Organization Chart, Update new District phone number. By Steve Shepard
- 3. 2/21/13 Updated Organization Chart adding District Engineer. By Steve Shepard
- 4. 8/5/13 Updated Organization Cart to reflect changes to job titles. By Steve Shepard
- 5. 6/4/14 Updated Organizational Chart to reflect changes to job titles and personnel changes. By Steve Shepard

### VALLEY SANITARY DISTRICT

### SEWER SYSTEM MANAGEMENT PLAN

### Section 3 LEGAL AUTHORITY

In Compliance with
State Water Resource Control Board
Statewide General Waste Discharge Requirements
Order No. 2006-0003-DWQ

This Section outlines the requirements of the Statewide Sanitary Sewer General Waste Discharge Requirements (GWDR) order and describes how Valley Sanitary District Complies.

VSD's General Authority to operate a wastewater collection and treatment facility is included in California Health and Safety Code, Division 6, Part 1, Sanitary District Act of 1923, 6400-6825.

- 3. Legal Authority: Each Enrollee must demonstrate, though sanitary sewer system use ordinances, service agreements, or other legally binding procedures, that it possesses the necessary legal authority to:
  - a. Prevent illicit discharges into its sewer system, including I/I from satellite wastewater collection systems and laterals, stormwater, unauthorized debris, etc.

Valley Sanitary District (District) has in place Sewer Construction and Use Ordinance 2010-118 and Resolution 2008-998 Industrial Wastewater Pollutant Limitations. Illicit discharges are addressed in Article 2 – Prohibitions and Limits on Discharges.

b. Require proper design and construction of sewers and connections.

Revised "Valley Sanitary District Standard Specifications for Construction of Sanitary Sewers" (VSD Standard Specifications) was adopted by the Board of Directors as Resolution No. 678 to establish uniform construction standards for sanitary sewers and appurtenances.

Sewer Use and Construction Ordinance 2010-118, Article 3, "Sewer Construction" contains standards for sewer construction requirements, public and private sewer construction and out of district sewers. Article 5, "Facilities Requirements" also contains standards for construction of pre-treatment related facilities.

The District supplements these standards with:

- "Greenbook" Standard Specifications for Public Works Construction.
- California Plumbing Code, CCR Title 24, Part 5.
- Recommendations by and of California Registered Civil Engineers
- Accepted industry standards when applicable.

### c. Ensure access for maintenance, inspection and repairs to publicly owned portions of laterals.

The VSD Standard Specifications contains the definition of "Legal Access" in the General Section of the document. The "Sewers and Appurtenances" section of the VSD Standard Specifications contain requirements for the location of sewers as it pertains to public streets, rights of ways and easements. Ordinance 2008-118, Article 3, Sewer Construction, 303 E. also addresses easement requirements.

New subdivisions convey easement rights to the District for sewer in the dedications section of the tract map. Easements are also granted in some cases to the District by separate document.

### d. Limit the discharge of FOG and other debris that may cause blockages.

Ordinance 2010-118, Article 2, Prohibitions and Limits on Discharges, 202. A3. Prohibits the discharge of "Solid or viscous pollutants which will cause obstruction to the flow in the sewer system resulting in interference or damage to the sewerage facilities".

Resolution 2008-998 establishes a local limit of 400.0 milligrams per liter (mg/L) for oil and grease discharges.

The District has implemented a formal FOG control program that dedicates personnel to:

- Identify the impact of FOG on the collection system.
- Identify and document sources of FOG, restaurants, bakeries etc within the District.
- Establish outreach program to educate and assist FOG dischargers.
- Determine compliance by inspection/testing and ongoing monitoring.
- Interact with non-compliant FOG dischargers to achieve acceptable standards.
- Implement progressive enforcement as required.
- Work with potential dischargers prior to project development and discharge.

#### e. Enforce violations of its sewer ordinances.

Federal and State Laws grant the District the authority to prohibit flows and to take all actions necessary as described in Ordinance 2010-118, Article 1, General Provisions, 106, Authority.

Ordinance 2010-118 addresses enforcement of sewer ordinance violations in Article 7, Enforcement, 703. ENFORCEMENT PROCEDURES AND APPLICABLE FEES.

The California Penal Code Section 374.2(a) also provides enforcement authority for the malicious discharge or dumping of substances into the sanitary sewer capable of causing substantial damage or harm to the operation of the public sewer. A copy of 374.2(a) PC is included for reference.

### **Document locations**

- A copy of the Sewer Construction and use Ordinance 2010-118 and Resolution 2008-998 Industrial Wastewater Pollutant Limitations can be found in the Sewer uses ordinance section of the SSMP and on the District Website.
- A copy of the Valley Sanitary Standard Specifications for Construction of Sanitary Sewer and Resolution No. 678 can be found in the Standard Specification section of the SSMP and on the District website (www.valley-sanitary.org).

### 3.0 LEGAL AUTHORITY SSMP ELEMENT UPDATE LOG

1. 6/14/12- Updated reference to Sewer Use Ordinance 2010-118
By Steve Shepard

### VALLEY SANITARY DISTRICT

### SEWER SYSTEM MANAGEMENT PLAN

### Section 4 OPERATION & MAINTENANCE PROGRAM

In Compliance with
State Water Resource Control Board
Statewide General Waste Discharge Requirements
Order No. 2006-0003-DWQ

This section outlines the requirements of the Statewide Sanitary Sewer General Waste Discharge Requirements (GWDR) order and describes how Valley Sanitary District Complies.

- 4.0 Operation & Maintenance Program: The SSMP must include those elements listed below that are appropriate and applicable to the Enrollee's system:
  - 4a. Collection System Map: Each wastewater collection system agency shall maintain up-to-date maps of its wastewater collection facilities, showing all gravity line segments and manholes, pumping facilities, pressure pipe and valves, and applicable storm water and piping facilities.

The District owns and maintains a GIS system, Arc GIS, Arc Map 10, to maintain and update collection system mapping information. The graphical representations of the collection facilities are maintained in shape file format and overlaid over a County of Riverside parcel map and an aerial map of the District's service area. Staff digitizes as-built field drawings and information into the GIS.

The City of Indio & the City of Coachella are the local storm water authority. The District's storm water related file information includes a variety of drawings and a composite storm water system drawings compiled for the City of Indio by a professional engineering firm. These drawings are recorded as tiff files on a file server common access by all staff. The drawings are also available in conventional paper format and stored in a file drawer labeled as 2C drawings.

4b. Preventative Operation and Maintenance: Describe routine preventative operation and maintenance activities by staff and contractors, include a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventative Maintenance (PM) should have a system to document scheduled and conducted activities, such as work orders.

The District currently employs four employees dedicated to the operation and maintenance of the collection system. A Vactor 2100 Plus Series sewer cleaning vehicle is operated by two employees on a 5 day workweek schedule performing hydraulic rodding and vacuum removal of debris. A second Vactor 2100 Series sewer cleaning vehicle is utilized as a backup unit. One department employee operates the television inspection truck identifying and evaluating the existing collection system. All maintenance personnel inspect and document system deficiencies on a daily basis.

A computerized asset management system is used to record and document collection system structural deficiencies, FOG and root problem areas identified by maintenance personnel. This management system is also used to generate and schedule work orders for the line maintenance crew. All information entered into the system database, including footage cleaned per day, month and year and the date it was cleaned, can easily be retrieved for review. SSO occurrences recorded in this database contain time, date, cause and remedy information.

The periodic time frame for cleaning the entire system is based on a priority ranking system. Areas of less volume flow, i.e.: housing subdivisions require more frequent cleaning than interceptor sewers. Sewers with roots or other defects impeding flow and FOG problem areas are also higher in priorities to prevent SSOs.

4c. Rehabilitation and Replacement Program: Develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspection of manholes and sewer pipes, and a system of ranking the conditions of 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 to implement the short and long term plans plus a schedule for developing the funds needed for the capital improvement program.

The district has a sewer system inspection program that includes closed circuit television (CCTV) inspection of all sewer mains. These sewer mains are televised subsequent to the sewer cleaning operation. Also during the sewer main cleaning process all of the manholes are inspected by the cleaning crew. Inspection data is imported into our asset management program to be analyzed and the results displayed on a Geographical Information System (GIS) map of the sewer system.

In the District's annual capital improvement budget, money is budgeted for rehabilitation of manholes that are in the poor condition. Additional money is budgeted for sewer main point repairs where we find severe defects during CCTV inspection. The budget also includes funding for large projects that

rehabilitate sewer mains that are typically longer stretches of pipe with root intrusion, cracks or the material of the pipe has deteriorated.

All pump stations are inspected on a regular basis and any components found to be defective or worn are replaced.

The most recent collection system master plan, The "Valley Sanitary District Wastewater Collection System Master Plan" (Master Plan), was compiled in 2013 by an Engineering Consultant Firm. The document identified existing and projected future flows. The existing flows were used in a hydraulic model to reflect flow conditions in the existing collection system. This model scenario identified hydraulic deficiencies in the existing collection system. A separate model scenario was created combining existing and future flows to determine future collection system needs for short term through ultimate build out.

A section of the 2013 Sewer Master Plan also describes a pipeline replacement program for VSD based on the observed condition data obtained through CCTV and estimated condition based on age of the pipelines. This section presents a systematic, decision-making framework for prioritizing condition assessment activities, VSD's existing CCTV assessment data, and pipeline replacement and rehabilitation prioritizations based on the CCTV data.

This section breaks down the analysis results into two categories:

- 1. Replacement or rehabilitation of pipelines that fall under high risk category due to age or known deterioration based on CCTV data.
- 2. Regular cleaning and televising of pipelines that are under medium to low risk category.

A Capital Improvement program based on this modeling information was provided in the Master Plan that addresses remedies for collection system deficiencies and the provision of capacity for future flow. The capital improvement program outlined implementation horizons of 0-5 years, 5-10 years and 10 years to build-out.

According to the Master Plan there are 12 recommended improvement projects for the Valley Sanitary District collection system. These improvement projects are phased according to scenarios evaluated in the model: existing system, 5-year planning horizon, and build-out conditions. They are ordered according to the severity of the deficiency they address.

- Requa Interceptor
- Avenida Esmeralda Interceptor
- Monroe Interceptor
- Clinton Street
- Shields Interceptor
- Avenue 48 West Upgrade
- Arabia Interceptor/ Jackson Street

- Highway 111 Interceptor
- Avenue 49 Interceptor
- Industrial Place/ Market Interceptor
- Avenue 44/ Palo Verde Interceptor
- Lago Vista

## 4d. Training: Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be appropriately trained.

Prior to the end of their orientation period Collection personnel are required to obtain a California Water Environmental Association (CWEA) Collection System Technician Grade 1 certification and to complete training contained in the collection department orientation manual, which is a check list of the minimum knowledge of collection department equipment and safety procedures.

Currently the District Board of Directors supports the education and promotion of collection personnel to advanced job positions and higher pay scales for the acquisition of higher grade certifications up to a grade 3 in there field.

The District budgets each year for continued education and training for employees. Collection personnel attend selected CWEA training conferences and specialty workshops as part of the continued educational training process.

The Districts Injury and Illness Program includes regular safety training for District personnel throughout the year.

The bid documents for contracted work on the District's Collection system include a contractor safety program that requires safety training for contractors.

A copy of the Contractor Safety program, Collection Department Orientation Manual, and a summary of the most recent calendar year of safety training topics are available for review upon request.

## 4e. Contingency Equipment and Replacement Inventories: Provide Equipment and replacement part inventories, including identification of critical parts.

The collection department keeps an inventory of parts needed to repair the most common components in the collections system which are subject to a failure that would interrupt service.

All of the District's lift stations have a bypass overflow and can be shut down for extended periods of time for required repairs.

The most important piece of equipment for the collection system is the Vactor combination truck. We have two similar combination units that are rotated for usage and act as backups to each other if either unit were to be down for servicing or repairs.

We utilize two local suppliers that carry well stocked inventories of sewer system parts and components.

### **Document Locations**

- A copy of the "Collection System Master Plan" can be located for reference in the Mater Plan Section of the SSMP and on the District website.
- A copy of the most recent District budget including a time schedule and a plan for developing funds for long term and short term capital improvement projects can be located for reference in the Annual Budget Section of the SSMP and on the District website (www.valleysanitary.org).

### 4.0 Operation & Maintenance Program

### **SSMP Element Updates Log**

- 1. 6/4/14- Section 4c: Collection System Master Plan date changed from 2003 to 2013. By Heberto Moreno
- 2. 6/16/14- Section 4c: Added Pipeline Replacement Evaluation information and updated Capital Improvements projects based on our 2013 Master Plan. By Heberto Moreno
- 3. 6/18/14- Section 4e: Updated and added information regarding the Vactor Units. By Heberto Moreno

#### **VALLEY SANITARY DISTRICT**

#### **SEWER SYSTEM MANAGEMENT PLAN**

### Section 5 DESIGN & PERFORMANCE PROVISIONS

In Compliance with
State Water Resource Control Board
Statewide General Waste Discharge Requirements
Order No. 2006-0003-DWQ

This Section outlines the requirements of the Statewide Sanitary Sewer General Waste Discharge Requirements (GWDR) order and describes how Valley Sanitary District Complies.

### 5. Design and Performance Provisions

5a. Standards for Installation, Rehabilitation and Repair: The SSMP must identify design and construction standards and specifications for the installation of new sanitary sewer system, pump stations and other appurtenances; and the rehabilitation and repair of existing sanitary sewer system.

Revised "Valley Sanitary District Standard Specifications for Construction of Sanitary Sewers" (VSD Standard Specifications) was adopted by the Board of Directors as Resolution No. 678 to establish uniform construction standards for sanitary sewers and appurtenances.

Sewer Use and Construction Ordinance 2010-118, Article 3, "Sewer Construction" contains standards for sewer construction requirements, public and private sewer construction and out of District sewers.

The District supplements these standards with:

- "Greenbook" Standard Specifications for Public Works Construction.
- California Plumbing Code, CCR Title 24, Part 5.
- <u>City of Indio Public Works Street Standards and the City of Indio/Indio Water</u>
   Authority (IWA) Design Standards and Specifications
- <u>City of Coachella Public Works Street Standards and the City of Coachella Water Design Standards and Specifications</u>
- Recommendations by California Registered Civil Engineers
- Accepted industry standards when applicable.

5b. Standards for Inspection and Testing of New, Rehabilitated, and Repaired Facilities: The SSMP must identify the procedures and standards for inspecting and testing the installation of new sewers, pumps and other appurtenances and for rehabilitation and repair projects.

Standards for inspection and testing are outlined in "Valley Sanitary District Standard Specifications for Construction" any testing procedure that are not covered under the VSD Standard specification shall be tested in accordance with the most recent edition of "Standard Specifications for Public Works Construction".

### **Document locations**

A copy of the Valley Sanitary Standard Specifications for Construction of Sanitary Sewer and Resolution No. 678 can be found in the Standard Specification section of the SSMP and on the District's website (www.valley-sanitary.org).

### 5.0 Design & Performance SSMP ELEMENT UPDATE LOG

1. 6/14/12- Changed reference to new Sewer use Ordinance 2010-118. By Steve Shepard

### VALLEY SANITARY DISTRICT

#### SEWER SYSTEM MANAGEMENT PLAN

### Section 6 SANITARY SEWER OVERFLOW EMERGENCY RESPONSE PLAN

In Compliance with
State Water Resource Control Board
Statewide General Waste Discharge Requirements
Order No. 2006-0003-DWQ

This Section outlines the requirements of the Statewide Sanitary Sewer Overflow (SSO) General Waste Discharge Requirements (GWDR) order and describes how Valley Sanitary District Complies.

- 6. Overflow Emergency Response Plan: Each Enrollee shall develop and implement an overflow emergency response plan that identifies measures to protect public heath and the environment. At a minimum, this plan must include the following:
  - a. Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner.
  - b. A program to ensure an appropriate response to all overflows;
  - c. Procedure to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g., health agencies, Regional Water Boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach water of the State in accordance with the MRP. All SSOs shall be reported in accordance with the MRP, the California Water Code, other State Law and other applicable Regional Water Board WDRs or NPDES permit requirements. The SSMP should identify the officials who receive immediate notification:
  - d. Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;
  - e. Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and
  - f. A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.

The District's Overflow Response plan was developed to be an up to date, step by step guide on how to respond to, report and prevent an SSO from negatively impacting public health, the environment and personal property. The Overflow Emergency Response plan addresses all of the elements outlined above. A copy of the Overflow Emergency Response plan is included in this section.

### VALLEY SANITARY DISTRICT MANUAL OF POLICIES AND PROCEDURES

SUBJECT: SANITARY SEWER OVERFLOW EMERGENCY RESPONSE PLAN

Administrative Policy: Policy No.96-B007 Date Issued 08/13/96 Revised 08/05/2013

### **PURPOSE**

The District operates & maintains a collection system, which consists of pumping stations, gravity sewer mains and force mains. These facilities are well maintained and normally should not result in any sanitary sewer overflow/spills. However, the possibility exists that unforeseen accidents, unusual equipment failure or other events not controllable by the District could result in a sanitary sewer overflow/spill. This procedure provides a plan that when enacted in response to an overflow/spill would reduce or eliminate public health hazards, prevent unnecessary property damage and minimize the inconvenience of service interruptions. In order for response personnel to accurately assess the level of response, the potential for outside cost associated with cleanup, potential liability claims for property damage and to accurately report sanitary sewer overflows/spills to regulatory agencies the following methods of containment shall apply.

#### NOTIFICATION

Calls coming into the office reporting sewer overflows or backups are handled in two different ways depending on if the call is during regular business hours or if it is after hours, night, weekends or a holiday. From the time a call comes in, to the time a technician arrives on scene is expected to be less than one hour. A Sanitary Sewer Overflow (SSO) Reporting chain of communication is included in this plan as Appendix A

- 1. Procedures for calls that are received during working hours:
  - A. The phone operator obtains all relevant information available regarding the backup or overflow including:
    - Time and date call received;
    - Specific location;
    - Description of problem;
    - Caller's name and phone number;
    - Is the overflow heading to storm drain or wash;
    - Other relevant information;
  - B. The phone operator notifies the collection supervisor and the supervisor dispatches collection maintenance personnel.

- 2. Procedures for calls that are received during non- office hours:
  - A. Calls that come into the regular office phone number are automatically forwarded to the answering service.
  - B. The answering service phone operator obtains all relevant information regarding the backup or overflow.
  - C. The answering service operator pages a numeric pager that is carried by the designated on call collection technician.
  - D. The on call collection technician calls into the answering service to obtain information regarding the backup or overflow.
- 3. Procedures for a call that are called into the City of Indio, City of Coachella, 911 or overflow that are discovered by public safety officers.
  - A. The Indio Police dispatcher obtains all relevant information and then calls our office number to relay the information.
- 4. In the event that there may be a break down in any of the communication systems both the District answering service and Indio Police dispatch have a phone number list with District personnel home phone and cell phone numbers and are directed to go down the list until a District personnel has acknowledged the call.

### **RESPONSE**

Procedures when arriving on the scene of a back up or overflow:

- Evaluate spill and make corrections as needed to contain and remedy cause of spill.
- Record all events and volume of spill via photos and written report on Sewer overflow report (Appendix B).
- Contact Collection Supervisor if spill qualifies as a Category 1 Spill or if property damage occurs.

### CONTAINMENT

- Dikes (construct small dikes of dirt and or sandbags to contain spill).
- Divert (construct small dikes to change direction of sewer flow or direct to a containment area)
- Retain (let spill collect in natural low areas and remove as soon as possible).

- Plug off street storm drains or cover curb catch basins with plastic and sand bags to prevent spill from entering.
- Contain the sewer overflow to the maximum extent possible to prevent the discharge of sewage into surface waters.

#### CONTROL

- Jet sewer to clear sewer main, determine cause of blockage.
- Transfer sewage by utilizing jet vactor truck or by-pass pumps to divert flow to treatment plant or downstream manhole.
- Repair problem if overflow is caused by a damaged sewer main.

#### ENTRY INTO AREA

- Use barricades, cones or flagmen to control traffic or pedestrians.
- Isolate spill area.

### **CLEANUP AND RECOVERY**

- Use jet vacuum truck or trash pump to recover spilled materials for transfer to treatment plant or return to sewer.
- Use sand or other absorbent product to absorb spilled material and remove with shovels or front-end loader.
- Double check area of spill to assure final cleanup and disinfection is completed.
- If an overflow enters a storm drain pipe, locate the furthest down stream storm drain manhole and divert the flow in the storm drain to the sewer system using by-pass pump or Vacuum truck until the storm drain is free of sewage.
- If sewage enters a storm channel make every effort to recover and cleanup the spill area and post the area with the contaminated water warning signs.

### **SANITARY SEWER OVERFLOW CATEGORIES**

**Category 1** – Discharges of untreated or partially treated wastewater of <u>any</u> <u>volume</u> resulting from an enrollee's sewer system failure or flow condition that:

- Reaches a surface water and/or reaches a drainage channel tributary to a surface water; or
- b. Reaches a separate municipal storm drain system and is not fully captured and returned to the sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the separate municipal storm drain system is considered to have reached surface water unless the storm drain system discharges to a dedicated groundwater infiltration basin (e.g., infiltration pit, percolation pond).

Category 2 – Discharges of untreated or partially treated wastewater of 1,000 gallons or greater resulting from an enrollee's sewer system failure or flow condition that does not reach surface water, a drainage channel, or the separate municipal storm drain system unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.

**Category 3** – All other discharges of untreated or partially treated wastewater resulting from an enrollee's sewer system failure or flow condition.

### Private Lateral Sewage Discharges (PLSD)

Discharges of untreated or partially treated wastewater resulting from blockages or other problems <u>within a privately owned sewer lateral</u> connected to the enrollee sewer system or from private sewer system assets may be <u>voluntarily</u> reported to the CIWQs Online SSO Database.

The enrollee is also encouraged to provide notification to Cal OES when a PLSD greater than or equal to 1,000 gallons has or may result in a discharge to surface water. For any PLSD greater than or equal to 1,000 gallons regardless of the spill destination, the enrollee is also encouraged to file a spill report as required by Health & Safety Code section 5410 et. seq. and Water Code section 13271 or, notify the responsible party that notification and reporting should be completed as specified above and required by state law.

### Safety

Whenever District personnel responds to a report of an overflow/spill, they may encounter an emergency situation that requires immediate action. Depending on the nature or cause of the overflow/spill, personnel may be performing mechanical or electrical repairs at a pumping station, removing a mainline stoppage with the Vactor, or repairing a damaged section of pipeline. At this point, it is essential that all applicable safety procedures are followed so that the response does not cause the situation to escalate. The most critical aspect of resolving an incident of this nature is to safely and competently perform the actions necessary to return the damage equipment or facility to operation as soon as possible.

Typical responses may require personnel to implement the following types of safety procedures.

- Lockout/Tagout of equipment for repairs
- Confined Space Entry procedures
- Traffic control procedures
- Trench safety and shoring procedures
- Equipment and/or vehicle operation
- Use of personnel protective equipment

Another important aspect of responding to an overflow/spill is the ability to maintain adequate communication via two-way radio and/or cellular telephone. Responders may need to call for additional resources as the situation may warrant as well as to notify other personnel and supervisors of the situation.

### **PROCEDURES**

This section provides the step-by-step procedures explaining the actions to be taken in response to an overflow/spill. This section is divided into three sections depending on the cause of the overflow/spill: Mainline stoppage, force main leak or pump station failure.

### MAINLINE STOPPAGE

- 1. Contact property owner or person reporting overflow/spill and obtain information on location to determine if the spill is within the District's service area and for completion of reporting requirements.
- 2. Upon arrival at the scene a determination must be made as to the source of the overflow/spill. Is it coming from a mainline or is it from an individual building lateral or private sewer? If the overflow/spill has spilled onto a general public right-of-way, containment and corrective actions will be needed to insure the health and safety of the public.
- 3. If it is determined that the overflow/spill is originating from a private lateral or sewer, contain the spill, then the owner or property manager must be notified and informed that they are responsible for corrective action and any damages, i.e. clearing the blockage and reporting. Chronic overflows/spills at the same property shall be referred to the City of Indio Code Enforcement Division for resolution.
- 4. Estimate the volume of the spill utilizing the Sewer Overflow Volume Estimation Workbook that is located in the Collection office.
- 5. If an overflow/spill has originated from the mainline sewer manhole, secure the spill area. Prevent sewage flow from entering Surface Water or Storm Drain catch basin, if possible.
- 6. In the event of a spill over 50,000 gallons; to a surface water, water quality monitoring will be required using the procedures outlined in the SSO Water Quality Monitoring Program.
- Inspect flow conditions downstream from the overflow structure to determine location of blockage. Always set up the Vactor at the next manhole downstream from the surcharged structure.

- 8. Once the blockage has been relieved or problem corrected and the overflow has ceased, every attempt should be made to contain the sewage that has spilled.
- If there is flooding or property damage notify the Collection System Supervisor immediately. Have the home owner fill out the personal property damage list form (Appendix C). The Collection System Supervisor shall notify the General Manger.
- 10. Take photographs of the affected area and/or property damage for District records.
- 11. To minimize health hazards and damage, provide proper cleanup by removing debris and sanitizing affected areas with bleach.
- 12. Do not discuss District liability; but provide factual information. Be polite and sympathetic to property owners concerns. Inform Collection System Supervisor and the General Manager immediately.

### **FORCE MAIN LEAK**

In the event that a spill has occurred due to a leak from a force main the following actions shall be taken:

- 1. Turn the pumps to the off position.
- Inspect the bypass system down stream to make sure that the sewer system can accommodate the extra flow.
- 3. Contain and recover the entire sewage spill as best as possible and report as required.
- 4. Depending on the nature of the damage to the pipeline, location of leak, volume of flow being conveyed and depth of the pipeline, emergency repairs maybe conducted by District personnel or by a contractor.

### **PUMP STATION FAILURE**

Each pump station is with fitted an alarm system that provides information to the District in the event of a system failure. Each of the pump stations are equipped with an overflow system that, in the event of a pump station failure, the wastewater will build up in the wet well until it reaches a level were it should flow through a bypass line to the gravity system without overflowing out of the upstream system. District staff shall respond when an alarm message is received regarding a pump station failure and utilize the following procedure:

 Upon receiving a pump station alarm, the collection system person on call shall respond to the pump station from which the alarm has originated.

- 2. Based upon the nature of the problem the collection system personnel shall determine the appropriate course of action and decide on the staff response that will be needed. The Collection System Supervisor shall be notified.
- A determination shall be made as to the likelihood that the shutdown or equipment failure will result in the release of sewage. Immediately notify the Collection System Supervisor and mobilize the necessary personnel and/or equipment to correct the problem.
- 4. Take the necessary steps to return the pump station to proper operation.
- 5. If an overflow/spill has occurred, contain the area and notify the Collection System Supervisor. Refer to mainline stoppage procedures for containment & cleanup.

### REPORTING TO THE BOARD OF DIRECTORS & MEDIA RELATIONS

The General Manager shall be responsible to notify the Board of Directors regarding all major spills so that the Board of Directors will be prepared in the event of media request information.

Collection personnel shall not respond directly to the media other than to refer all questions and request from the media to the General Manager.

The General Manager and the Collection System Supervisor are responsible to ensure all Collection and Operation personnel are trained in and follow these procedures.

All Collection personnel are responsible for following these procedures and completing reports with all pertinent information.

### REPORTING OUTSIDE THE DISTRICT ORGANIZATION

Reporting is the process that ensures that the appropriate people and public agencies are informed of the occurrence of and the details related to the unauthorized release of treated or untreated sewage.

### SSO REPORTING AND NOTIFICATION TIMEFRAMES

For any SSO greater than or equal to 1,000 gallons that results or may result in a discharge to a surface water of the state, either directly or by way of a drainage channel or separate municipal storm drain system, the enrollee shall, as soon as possible, but not later than two (2) hours after (A) that enrollee has knowledge of the discharge by discovery or receiving information from a public informant or

other source(s), (B) notification is possible, and (C) notification can be provided without substantially impeding cleanup or other emergency measures, notify the California Office of Emergency Services (Cal OES) and obtain a notification control number.

Category 1 & Category 2 SSOs –All SSOs that meet the above criteria for Category 1 or Category 2 SSOs shall be reported as soon as: (1) the enrollee has knowledge of the discharge, (2) reporting is possible, and (3) reporting can be provided without substantially impeding cleanup or other emergency measures.

- a. Draft reports for Category 1 and Category 2 SSOs shall be submitted to the CIWQS Online SSO Database as soon as possible but no later than 3 business days after the enrollee is made aware of the SSO by citizen complaint or discovery.
- A final certified Category 1 or Category 2 report shall be completed through the CIWQS Online SSO Database <u>within 15 calendar days</u> of the end date of the SSO.

**Category 3 SSOs** – All SSOs that meet the criteria for Category 3 SSOs shall be reported to the CIWQS Online SSO Database and certified within 30 days after the end of the calendar month in which the SSO occurs (e.g., all SSOs occurring in the month of February shall be entered into the database by March  $30^{th}$ ).

### California Office of Emergency Services (Cal OES)

California Office of Emergency Services is responsible for maintaining and implementing the State of California's Emergency Plan. The Cal OES must be notified immediately if the sewage enters or will enter the Whitewater Storm Channel. The Cal OES operator will give you a report number and they will notify other state agencies of the spill. Their notification list includes California Department of Fish and Game, California Highway Patrol, California Department of Health Services, Caltrans, US Environmental Protection Agency, and US Fish and Wildlife Service.

Telephone Number (800) 852-7550 or (916) 845-8100

### Regional Water Quality Control Board (RWQCB)

The RWQCB is part of the State Water Resources Control Board (SWRCB) and it is charged with the protection of all state water resources and with protecting the beneficial uses of those resources. This includes surface water, ground water, salt and fresh waters. The SWRCB has the legal authority to abate, through cease and desist order, any situation that impacts or threatens to impact the waters of the state. This

includes regulating all discharges to state waters, pursuing cleanup of spills, and assuring proper disposal of pollutants. The agency has broad powers to enforce standards and prohibitions to protect the waters of the state. Damage assessment reports or remedial action plans maybe required of the discharger. They have extensive expertise in the area of the impact of spills on the environment and they have the ability to conduct monitoring when required.

Telephone (760) 346-7491 FAX (760) 341-6820 E-Mail: spillreportrx@waterboards.ca.gov

### **Riverside County Environmental Health Department**

The Riverside County Environmental Health Department must be contacted when the spill poses a threat to public health and safety. They may order the discharger to abate the contamination. They may also require posting of the area to warn the public of the potential hazard.

Telephone (760) 863-7570 FAX (760) 863-7013

### SPECIALTY CONTRACTORS LIST

In the event that a repair is required that District personnel would not be able to carry out, the following contractors may be available to do the work. These contractors have successfully completed emergency repairs for the District in the past.

<b>Contractors Company</b>	Phone	Cell	<b>Contact Person</b>
Borden Excavating	(909) 795-5410	(951) 543-5856	Shaun Borden
V&M Construction Co.	(760) 347-3933	(760) 272-4069	Matt Wright
Downing Construction	(909) 797-7444	(951) 543-5855	Randy Downing
James A. Shirley Inc.	(760) 228-0447	(760) 401-2619	Jim Shirley
Van Dyke Corp.	(760) 367-9151	(760) 275-7217	Matt Green

### **VEHICLES AND EQUIPMENT LIST**

Vehicle No.	Equipment Description	Location of Equipment	Fuel Type	Use	Comments
01	1/2 ton PU Truck	Yard	Gas	Sewer/Maints.	Avail. 24 hours
04A	Jet Vactor Truck	Yard	Diesel	Sewer/Maints.	Avail. 24 hours
04B	Jet Vactor Truck	Yard	Diesel	Sewer/Maints.	Avail. 24 hours
38	1 ton Crane Truck with arrow board	Yard	Gas	Const./Maints.	Avail. 24 hours
06	3/4 ton PU Truck with arrow board	Yard	Diesel	Const./Maints.	Avail. 24 hours
21	TV Inspection Van	Yard	Gas	TV Inspection	Avail. 24 hours
	Lateral Camera	Yard		Lateral TV Inspection	Avail. 24 hours
	6 inch Trash Pump	Yard	Diesel	Pump/Bypass	Avail. 24 hours
	Jet Trailer with 1/2" Hose & 600' hose	Yard	Diesel	Sewer Maints	Avail. 24 hours
	Easement Machine w/600 feet of hose	Yard	Gas	Sewer Maints.	Avail. 24 hours
	8-12 inch Air Plug	Shop			
	12 -18 inch Air Plug	Shop			
	18-24 inch Air Plug	Shop			
	8-12 inch Air Bypass Plug	Shop			
	12-18 inch Air Bypass Plug	Shop			
	18-24 inch Air Bypass Plug	Shop			

### **Collection System Pump Station Locations**

Site Name - Carver Pump Station Location – Avenue 48 and Bataan Emergency by-pass - Yes

Site Name - Barrymore Pump Station Location - Barrymore and Garbo Emergency by-pass - Yes

Site Name - Vandenberg Location - Vandenberg and Pic Way Emergency by-pass - Yes Site Name – Shield Pump Station Location – Avenue 46 and Shield Rd. Emergency by - pass - Yes

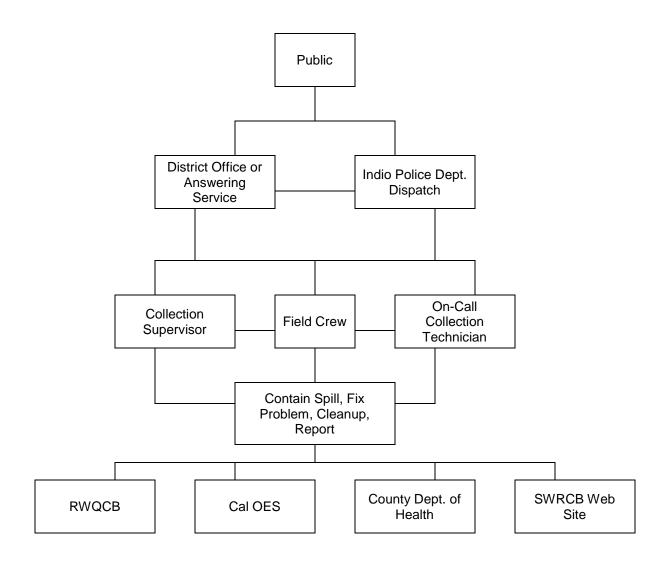
Site Name – Calhoun Pump Station Location – Calhoun St. and Avenue 49 Emergency by - pass - Yes

### **OVERFLOW RESPONSE TRAINING**

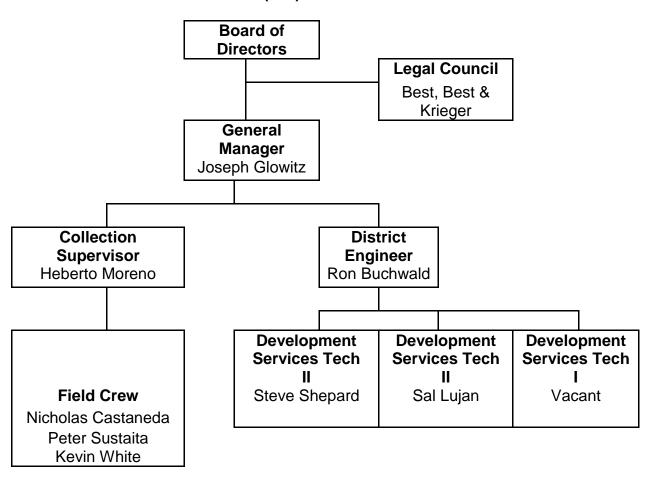
District collection personnel have regular training on responding and reporting sewer overflows and conduct mock drills on responding to overflow situations.

Contractors that work for the District are given a copy of and are trained on the Overflow Response Plan in a preconstruction meeting before starting any projects.

Appendix A
SSO Reporting Chain of Communications



# Valley Sanitary District Collection System Organization Chart Contact Number for all personnel (760) 238-5400



**Board of Directors:** Establish policy.

**General Manager:** Enforce policy, plan strategy, lead staff, allocate resources, authorize outside contractors to perform service, and serve as public information officer.

<u>District Engineer:</u> Legally Responsible Officer for certifying Sewer System Management Plan (SSMP) elements, SSO reports and lead the development and implementation of the SSMP. Prepare bid documents for and manage rehabilitation Capital Improvement Projects. Planning, organizing, administering, and directing the installation and upgrading of the District's wastewater collection system infrastructure. Responsible for ensuring the District's compliance with local, State and Federal regulations pertaining to wastewater collection.

<u>Collection Supervisor:</u> Manage field operations and maintenance activities, provide relevant information to agency management, lead emergency response, and Legally Responsible Officer for certifying SSOs reports. Train field crews.

<u>Field Crew:</u> Under direction of the Collection Supervisor, conduct preventive and corrective maintenance activities, mobilize and respond to notification of stoppages and SSOs.

<u>Development Services Tech II:</u> Under direction of the District Engineer assist with plan and field reviews for compliance with District ordinances and regulations; perform FOG inspections; perform field construction inspections Legally Responsible Officer for certifying SSOs reports.

<u>Development Services Tech I:</u> Under direction of the District Engineer assist with plan and field reviews for compliance with District ordinances and regulations; perform FOG inspections; perform field construction inspections.

## Appendix B Valley Sanitary District Collection System Department

### **SEWER OVERFLOW REPORT**

### **INSTRUCTIONS:**

<u>Category 1 Sanitary Sewer Overflow (SSO)</u> – Please complete Part 1 and Part 3 for all discharges of sewage upstream of a wastewater treatment plant headwork's resulting from a failure in the sanitary sewer system that:

- A. Reaches a surface water and/or reaches a drainage channel tributary to a surface water; or
- B. Reaches the separate municipal storm drain system and is not fully captured and returned to the sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the separate municipal storm drain system is considered to have reached surface water unless the storm drain system discharges to a dedicated groundwater infiltration basin (e.g., infiltration pit, percolation pond).

<u>Category 2 SSO</u> – Please complete Part 1 and Part 3 for all discharges of sewage of 1,000 gallons or greater resulting from a sewer system failure that does not reach surface water, a drainage channel or the separate municipal storm drain system unless the unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.

<u>Category 3 SSO-</u> Please complete Part 1 for all other discharges of sewage resulting from a failure in the sanitary sewer system.

<u>Private Lateral SSO</u> – Please complete Part 1 and Part 2 for sewage discharge that are caused by blockages or other problems within a privately owned lateral or sewer.

### **PART 1:** All Sewer Overflows

Final SSO Identification No. (From SSO Online database)				
Date Reported:	Call Received Time:			
	Caller's Phone			
Caller's Address:				
Applicable Region: <u>Region 7</u>	County: <u>Riverside</u>			
Technician Name:	Technician arrival Date & time:			
Estimated spill start date/time:	Estimated spill end date/time:			
Estimated overflow volume (gallons):				
Estimated overflow volume recovered (gallons):				

Spill Location and affected area: (GPS, street addres name of structure, e.g. pump station etc. if applicable	ss/intersection/distance and direction from Intersection e):
Spill Appearance point:(e.g., Cleanor	ut, manhole, pump station etc.)
Spill cause:	
	_ Did the spill reach a storm drain pipe?
Drinking water supply impacted?	Other impacts
Was the spill discharged to a storm drain pipe that wa	as not fully captured and returned to the sanitary
sewer system?	
SSO Containment Date & time	
Description of spill's final destination(unpave	d area, street gutter, other paved area etc,)
Spill response activities: (restore flow, CCTV, va	acuum, return spill to sewer etc.)
Spill response completion date:	
PART 2: Private Lateral SSO's	
Is the sewage discharge a private lateral sewage disc	charge?
Provide the contact information for the party responsi	ible for the private lateral:
PART 3: Category 1 SSO's	
Sanitary Sewer Overflow (SSO) Sequential Tracking	No. (From OES):
Estimated amount of overflow to reach a drainage ch Storm drain:	nannel or waters of the U.S. or not recovered from
Did the overflow impact a beach?Were	
Name of impacted surface water:	

Is there an ongoing investigation?				
Were samples taken? L	ist the param	eters analyz	zed for:	
Which Regulatory agencies received sar	nple results?			
Spill corrective action taken/preventative	measures ta			
REPORTING REQUIREMENTS				
Within 2 hours of becoming aware of any notify California Office of Emergency Ser			r than or equal to <u>1,000 gallons</u> ,	
Category 1 & 2 SSO – Must be reported than 3 business days after the District is completed through the Online SSO Systematic and remediation.	made aware	of the SSO.	A final certified report must be	
<u>Category 3 SSO</u> – Must be reported to calendar month in which the SSO occurs		SSO Databa	ase within 30 days after the end of the	
<u>Private Lateral Sewage Discharges</u> – May be reported to the Online SSO Data based upon the District's discretion.				
AGENCY	DATE	TIME	PHONE / FAX / OR VOICE	
Regional Water Quality Control Board (760) 346-7491 FAX (760) 341-6820	DAIL	TIME	THORE TYPE TO SECOND	
California Office Of Emergency Services (800) 852-7550				
County Health Officer (760) 863-7570 FAX (760)-863-7013				
Prepared by:			Date:	
Title:				
Reported by:			Date:	
Title:				

#### REPORT DECLARATION

The following statement of certification is to be signed by a duly authorized representative of Valley Sanitary District:

"I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware and imprisonment for knowing violations."

Approved by:	Date
Title:	

SKETCH OF AREA: (Include manholes, intersection, location of stoppage and spill, etc)

#### **APENDEIX C**

#### **SEWER BACKUP INCIDENT REPORT**

Date of incident	Time		
Name	Address		
Number of people living at residence	Approximate age	of home_	
Number of Bathrooms	Number of rooms Affected	l	
Approximate Time Sewerage has been	sitting		_hrs/days
Does the home have a Backwater Preve	ention Device?	Yes()	No()
If yes, was the device operational at the	time of the overflow?	Yes()	No()
If no, would one have prevented the over	rflow into the house?	Yes()	No()
Have there ever been any previous spills	s at this location?	Yes()	No()
Has there been any plumbing work done	e recently?	Yes()	No()
Is there a functioning and non-contamina	ated bathroom available?	Yes()	No()

Please Diagram the Rooms Affected(shade the areas most heavily affected)

#### AFFECTED PERSONAL PROPERTY INVENTORY SHEET

List all item that came into contact with any water due to the sewer backup.

Address	Date	
1		
2		
11		
12		
Name	Signature	

# Valley Sanitary District Sanitary Sewer Overflow Water Quality Monitoring Program Standard Operating Procedures

#### Introduction

The Regional Water Quality Control Boards and State Water Boards are required to gather Sanitary Sewer Overflow (SSO) information and make it available to the public. A category one SSO is defined as any discharge of untreated or partially treated wastewater of any volume resulting from a sanitary sewer system failure or flow condition that reaches surface waters and/or drainage channels that contribute to surface waters or reach a storm sewer system that are not fully captured and returned to the sanitary sewer system. The SSO Water Quality Monitoring Program is to assess the impact from a category one SSO in which 50,000 gallons or greater are spilled to surface waters. The following are Valley Sanitary District's standard operating procedures to follow in such events.

#### **Description of Collections**

Valley Sanitary District (VSD) is located in a desert region. Stream flows in any storm channel or wash is very rare, except where the VSD's sewer treatment plant effluent outfall enters the Whitewater Channel. The other unique feature within the District is the fact that there are few storm drain pipes that could carry a SSO to any storm channel or wash. In most cases, streets are used to convey storm water to the storm channel. Except where VSD's effluent outfall enters the Whitewater channel, the channel or wash will be dry if a SSO makes it to the storm channel, which will prevent a SSO from entering surface water. None the less, VSD has developed standard operating procedures to deal with a large SSO that would reach surface waters.

There is one potential area where a large SSO could reach surface waters. This location is from the HWY 111 corridor and to the south which will travel through the Van Buren Street surcharge to street grade where it will migrate to the dirt channel adjacent to Dillon Street that eventually drains to Whitewater Storm channel. This route will have an extended detention time between initial spill point and the potential Whitewater surface water since it needs to reach a certain elevation before being able to flow into the storm channel. All initial efforts will be to contain the SSO so that a large flow will not enter the storm channel.

In the event that a category one SSO in which 50,000 gallons or greater should reach surface waters, the following actions will occur: Notification and reporting to Cal OES will be made; incident reports, technical reports, and a corrective action report will be prepared; and sample collections will be obtained to demonstrate the contamination limit of the SSO.

#### **Notification and Reporting**

In the event of a Category one SSO in which 50,000 gallons or greater are spilled to surface waters.

 Within 2 hours of becoming aware of SSO: Notify California Office of Emergency Services (Cal OES) and obtain notification control number. Call Cal OES: (800) 852 – 7550

- Submit draft report within three (3) business days of becoming aware of SSO and certify within 15 calendar days of SSO end date.
  - Enter data into the California Integrated Water Quality System (CIWQS) Online SSO database, certified by enrollee's Legally Responsible Official.

http://ciwqs.waterboards.ca.gov/

- Conduct water quality sampling within 48 Hours after initial SSO notification
  - Upload results into CIWQS, this is required.

#### SSO Overflow Report

Refer to the SSO Overflow Report Form included in the Emergency Sewer Overflow Response Plan.

The completed form will be used in contacting Cal OES and providing them with the necessary information to obtain a control number for the SSO.

#### **SSO Technical Report**

A Technical Report must be submitted in the CIWQS online SSO Database within 45 calendar days of the SSO end date.

The report shall include the following:

- Causes and Circumstances of the SSO
  - Complete and detailed explanation of how and when the SSO was discovered.
  - Diagram showing the SSO failure point, appearance point(s), and final destination(s).
  - Description of the methodology employed and available data used to calculate the volume of the SSO and the volume recovered.
  - Description of the cause of the SSO.
  - Copies of original field crew records to document the SSO.
  - Historical maintenance records for the failure location.
- Enrollee's Response to SSO
  - Chronological narrative description of all actions taken to terminate the spill
  - Explanation of how the SSO plan was implemented to and mitigation of.
  - o Final corrective action(s) completed or planned, including future schedules of actions.
- Water quality monitoring
  - o Description of sampling activities conducted including results and the evaluation of.
  - Detailed location map illustrating the sampling points.

#### **SSO Corrective Action Report**

Refer to Corrective Action Report form included within this document.

The completed form will be submitted as a draft report within three (3) business days of becoming aware of SSO.

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#### **Water Quality Sampling**

Water Quality Sampling will be conducted within 48 Hours after initial SSO notification.

Three (3) locations will be sampled. Each location will have a total of 4 samples obtained for the following analytes: Total coliform and E. Coli MPN, Fecal coliform MPN, Enterococcus MPN and Ammonia.

- Upstream of the spill site will be sampled to demonstrate original conditions of the Whitewater Storm Channel. This location is VSD's sewer treatment plant effluent outfall (the beginning of the surface water within the Whitewater Storm Channel).
- The spill introduction point (located approximately 1-mile from the outfall location) located at 48<sup>th</sup> Street and Dillon. This is where most storm water from the southern portion of the District enters the storm channel and the location where the SSO would enter the storm channel.
- Downstream of the spill site will be sampled to demonstrate the final conditions of the Whitewater Storm Channel which is located at 50<sup>th</sup> Street bridge. This is the closest and safest point to where one could enter the storm channel to take samples. This is approximately 1-mile downstream from the spill location.
- At each of the above locations the person taking samples will make an estimation of the spill travel time in the surface water by trying to measure the speed of the surface water.

A SSO sampling kit has been put together to quickly take the above samples. Follow the sample collections guidelines included in this document and complete the Chain of Custody (COC) for the contracted laboratory sample analysis.

PLEASE BE CAREFUL, CONTAINERS CONTAIN PERSERVATIVES. VSD Recommends the proper PPE be worn if needed due to preservatives that maybe harmful by contact or ingestion.

#### <u>Procedure for Microbiological Sampling</u>

Total Coliform, Fecal Coliform, E.coli and Enterococcus

- 1. Fill out the information on the label, the bottle should be a 125mL pre-preserved with Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>.
- 2. Open the sample bottle being careful not to touch the inside of the lid or bottle.
- 3. Fill the bottle to just above the 100mL fill line.
- 4. **Do not allow the bottle to overflow**, this will wash out the sample preservative.
- 5. Place the sample bottle in a plastic bag and seal it. Keep the sample cool by placing it in a cooler on ice.
- 6. Fill out the chain of custody provided.
- 7. Return the sample to the lab, the sample must reach the lab within 6 hours of the time it is taken.

#### **Procedure for Ammonia Sampling**

- 1. Collect the sample in a 500mL plastic container, pre-preserved with H<sub>2</sub>SO<sub>4</sub>.
- 2. During sample collection, containers should be filled slowly until sample reaches the bottom of the containers neck.
- 3. Complete the information on the sample label, including: date, time, and location.
- 4. Keep the sample cool by placing it in a cooler on ice.
- 5. Fill out and sign the chain of custody with correct information.
- 6. Transport the sample to laboratory.

**Sample rejection**: Samples will be rejected from the laboratory for the following reasons.

- 1. Incomplete form, lack of information: date, time collected, collector's initials or signature.
- 2. Bottle does not contain the proper amount of sample.
- 3. **Out of Holding time**, when received at the laboratory.
- 4. Received to lab with at temperature >6°C.(42.8°F)

### **Chain of Custody**

Client Name: Valley-Sanitary District Department: Collections (760) 238-5416				Sample Preservative & Container →	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Na2S2O3	H2SO4		
Project Name: Sanitary Sewer Overflow (SSO)					_	,	No	IPN	а)	
Address: 45-50	00 Van Buren St	. Indio,	CA 92201			n &	s MF	۳	nonië	
Date Sample Taken	Time Sample Taken	Matrix	Grab (G) or Comp ( C)	Sample Location ID	Analysis Requested  →  # of Containers  ↓	Total Coliform E. coli MPN	Enterococcus MPN	Fecal Coliform MPN	NH3-N (Ammonia)	
		ww	G	Upstream (EFF-001C Outfall)	4	Х	Х	Х	Х	
		ww	G	Spill point (48 & Dillon)	4	х	х	х	х	
		ww	G	Downstream (50 & SW channel)	4	х	х	х	х	

Sampled By: (Signature)		' '		Sample Method: Grab	
Relinquished By: (Signature)	Date / Time	:	Received By: (signature)		Date / Time:
Relinquished By: (Signature)	Date / Time	:	Received By: (signature)		Date / Time:

### 6.0 Sanitary Sewer Overflow Emergency Response Plan SSMP ELEMENT UPDATE LOG

- 1. 8/5/13 The overflow response plan was revised and a Water Quality Monitoring Program was developed to meet the requirement of the revised MRP that was adopted in 2013. by Steve Shepard
- 2. 6/12/14 Overflow Response Plan was revised to reflect changes to the organization chart. By Steve Shepard

#### VALLEY SANITARY DISTRICT

#### SEWER SYSTEM MANAGEMENT PLAN

### Section 7 Fats, Oils and Grease (FOG) Control Program

In Compliance with
State Water Resource Control Board
Statewide General Waste Discharge Requirements
Order No. 2006-0003-DWQ

This Section outlines the requirements of the Statewide Sanitary Sewer General Waste Discharge Requirements (GWDR) order and describes how Valley Sanitary District Complies.

- 7. Fats, Oils and Grease (FOG) Control Program: Each Enrollee shall evaluate its service area to determine whether a FOG control program is needed. If an Enrollee determines that a FOG program is not needed the Enrollee must provide justification as to why it is not needed. If FOG is found to be a problem, the Enrollee must prepare and implement a FOG source control program to reduce the amount of these substances discharged to the sanitary sewer system. This plan shall include the following as appropriate:
  - a. An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;
    - A FOG based article will be included in the District informational publication mailed to all VSD customers with the annual Newsletter. The Newsletter is published annually in April. The FOG publication will describe the impact of FOG and methods to prevent the disposal of FOG to the sanitary sewer.
    - A FOG based article will be made available in the public information center at the Indio City Hall.
    - FOG based literature shall be distributed to businesses and residents in areas where FOG problems are identified on an as needed basis. This literature would be in addition to the annual Newsletter publication information where proactive prevention methods are encouraged for FOG prevention.
    - The District will convey to restaurant kitchen staff best management practice educational material explaining the impact of FOG on the sewer system and the 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 service area:

The District wastewater facility does not currently operate anaerobic digestion or other facilities capable of accepting and treating FOG from commercial haulers. The District provides a link from the CalFOG website for Grease Hauling and Rendering Companies:

http://www.calfog.org/Hauler.html#Riverside

The District also provides a link from the CalFOG website for a list of facilities accepting grease:

http://www.calfog.org/GreaseFacilities.html

The reference pages from the CalFOG website are copied and included in this section for reference.

- c. The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;
- The District has the authority to prohibit flows and to take all actions necessary as described in Valley Sanitary District (VSD) Ordinance 2010-118, Article 1, General Provisions, 106, Authority.
- 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;
  - Article 5, Facilities Requirements, 506, Gravity Separation Interceptor of VSD Ordinance 2010-118. In part this section states:

"Any person so required by the General Manager shall install and maintain a gravity separation interceptor. Sanitary wastewater shall not be allowed to pass through the interceptor. The interceptor shall conform to approved District standards".

As defined in this section of the Ordinance a Gravity Separation Interceptor/Grease Interceptor is a "A detention chamber that complies with District approved standards for removing fats, oils, grease (FOG) and solids from wastewater before said wastewater is discharged to the sewer collection system".

- The 2007 California Plumbing Code is used as the base reference document for grease interceptors. The use of grease traps is prohibited by the County of Riverside Department of Environmental Health. Grease interceptors are sized by the County of Riverside. VSD will review the recommendation and accept it or upsize the grease interceptor.
- Food Service Establishments are required to obtain a general discharge permit that has conditions that mandate minimum maintenance requirement

for grease interceptors and BMP requirements for kitchen staff including record keeping and staff training.

A copy of the General Permit conditions for food service establishments is included in this section of the SSMP.

- e. Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the FOG ordinance;
  - The authority to inspect grease producing facilities is contained in Resolution 2010-118, Article 6, Monitoring, Reporting, Notification and Inspection Requirements, 601.1 Inspection and Sampling Conditions, paragraph A.
    - A. The District may inspect and sample the wastewater generating and disposal facilities of any user to ascertain whether the intent of this Ordinance is being met and the user is complying with all requirements.
  - The authority to enter grease producing facilities is also contained in Resolution 2010-118, Article 6, Monitoring, Reporting, Notification and Inspection Requirements, 601.2 Inspection and Sampling Conditions, Right of Entry.
    - B. The District shall have the right to place on the user's property or other locations as determined by the District, such devices as are necessary to conduct sampling or metering operations. Where a user has security measures in force, the user shall make necessary arrangements so that personnel from the District shall be permitted to enter without delay for the purpose of performing their specific responsibilities.
  - Enforcement Authorities are empowered by Federal and State Laws grant the
    District the authority to prohibit flows and to take all actions necessary as
    described in Ordinance 2010-118, Article 1, General Provisions, 106,
    Authority.

Ordinance 2010-118 addresses enforcement of sewer ordinance violations in Article 7, Enforcement, 703. ENFORCEMENT PROCEDURES AND APPLICABLE FEES.

The California Penal Code Section 374.2(a) also provides enforcement authority for the malicious discharge or dumping of substances into the sanitary sewer capable of causing substantial damage or harm to the operation of the public sewer.

f. An identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section.

The collections department has identified areas where VSD has grease problems in the collection system and has developed a cleaning schedule to prevent sewer overflows. These areas are included in preventative maintenance schedules that may include weekly inspection and cleaning every 3 months as part of VSD's trouble spot maintenance program, or cleaning every 12 or 18 months.

g. Development and implementation of source control measures for all sources of FOG discharges to the sanitary sewer system for each section identified in (f) above.

In residential areas where Fats, Oil and Grease (FOG) is Discovered in the sewer system VSD implements a public education program that includes distributing educational material door to door that explains the negative effects of putting FOG into the sewer and the proper disposal of FOG.

In areas were there are food service establishments and FOG is discovered in the sewer system, VSD increases the inspection of these establishments by our FOG Control Inspector.

#### **Document locations**

 A copy of the Sewer Construction and Use Ordinance 2010-118 and Resolution 2008-998 Industrial Wastewater Pollutant Limitations can be found in the Sewer uses ordinance section of the SSMP and on the District website (www.valley-sanitary.org).

## Valley Sanitary District Food Service Establishment Wastewater Discharge Permit General Permit Conditions

#### PART 1-EFFLUENT LIMITATION AND DISCHARGE RESTRICTIONS

Permittee is authorized to discharge wastewater into the District's sewer system, subject to the following effluent limitations and discharge restrictions:

#### A. EFFLUENT LIMITATION

Permittee shall not discharge into the sewer system Fats, Oils, and Grease (FOG) or any substance that may accumulate and/or cause or contribute to blockages in the sewer system or at the lateral, which connects the permittee's facility to the sewer system. The permittee shall not exceed any effluent limitations as outlined in District Ordinance 2008-118 and District Resolution 2008-998.

#### **B. DISCHARGE RESTRICTIONS**

The following general prohibitions apply:

- 1. **Use of food grinders.** Installation of food grinders in the plumbing system of new constructions of Food Service Establishments is prohibited.
- 2. Use of additives in lieu of interceptor pumping or maintenance. Introduction of any additives into a Food Service Establishment's wastewater system for the purpose of emulsifying or biologically/chemically treating FOG for grease remediation or as a supplement to interceptor maintenance is prohibited.
- 3. **Disposal of waste cooking oil into drainage pipes.** All waste cooking oils shall be collected and stored properly in receptacles such as barrels or drums for recycling or other acceptable methods of disposal.
- 4. Discharge of wastewater with temperatures in excess of 140°F into any grease interceptor.
- 5. Discharge of wastes from toilets, urinals, and other fixtures containing fecal matter to sewer lines intended for grease interceptor service.
- 6. Discharge of any waste including FOG and solid materials removed from the grease interceptor to the sewer system. Grease removed from grease interceptors shall be waste hauled periodically as part of the operation and maintenance requirements for grease interceptors.
- 7. Operation of grease interceptors with FOG and solids accumulation exceeding 25% of the design hydraulic depth of the grease interceptor. Referred to as the 25% Rule, this requirement is to ensure that the minimum

hydraulic retention time and required available volume is maintained to effectively intercept and retain FOG that would be discharged into the sewer system.

#### PART II - REQUIREMENTS FOR FOG CONTROL

Permittee shall comply with the following requirements to control the discharge of FOG to the sewer system:

#### A. BEST MANAGEMENT PRACTICES (BMPs)

Permittee shall implement BMPs in its operation to minimize the discharge of FOG to the sewer system. At a minimum, permittee shall implement the following BMPs when applicable:

- 1. Installation of drain screens. Drain screens shall be installed on all drainage pipes in food preparation areas.
- 2. Segregation and collection of waste cooking oil. All waste cooking oil shall be collected and stored properly in recycling receptacles such as barrels or drums. Such recycling receptacles shall be located and maintained properly to ensure that they do not leak or attract vermin. Licensed waste haulers or an approved recycling facility must be used to dispose of waste cooking oil.
- 3. Disposal of food waste. All food waste shall be disposed of directly into the trash or garbage, and not into sinks. Double-bagging food wastes that have the potential to leak in trash bins is highly recommended.
- 4. Employee training. Employees of the food service establishment shall be trained within 180 days of the effective date of this Permit, and twice each calendar year thereafter, on the following subjects:
  - a) How to "dry wipe" pots, pans, dishware and work areas before washing to remove grease.
  - b) How to properly dispose of food waste and solids in enclosed plastic bags prior to disposal into trash bins or containers to prevent leaking and odors.
  - c) The location and use of absorption products to clean under fryer baskets and other locations where grease may be spilled or dripped.
  - d) How to properly dispose of grease or oils from cooking equipment into a grease receptacle such as a barrel or drum without spilling.
  - e) How to properly clean kitchen mats and dispose of wastewater.
- 5. Kitchen signage. Best management and waste minimization practices shall be posted conspicuously in the food preparation and dishwashing areas at all times.

Training shall be documented and employee signatures retained indicating each employee's attendance and understanding of the practices reviewed. Training records shall be available for review at any reasonable time by a District's designee and the Riverside County Health Department.

#### **B. FOG PRETREATMENT**

- 1. Grease Interceptor Requirement. Permittee shall install, operate, and maintain an approved type and adequately sized grease interceptor. The grease interceptor shall be adequate to separate and remove FOG contained in wastewater discharges from the permittee's facility prior to discharge to the sewer system. Dishwasher shall be connected to the grease interceptor.
- 2. Grease Interceptor Maintenance Requirement. Grease Interceptors shall be maintained in efficient operating condition such that the combined FOG and solids accumulation does not exceed 25% of the design hydraulic depth of the grease interceptor. Any exceedance above 25% constitutes a violation of this permit. This requirement is to ensure that the minimum hydraulic retention time and required available volume is maintained to effectively intercept and retain FOG discharged to the sewer system.
- 3. Grease Interceptor Maintenance Frequency. Grease interceptors shall be maintained by periodic removal of the full content of the interceptor which includes wastewater accumulated FOG, floating materials, sludge, and solids. In general a Permittee shall fully pump out contents of the grease interceptor at a minimum of once per quarter (at least once every three months), unless a more frequent pumping schedule is required. The maintenance frequency may be adjusted if sufficient data have been obtained to establish a frequency consistent with the 25% Rule. The District may change the maintenance frequency at any time to reflect changes in actual operating conditions. Based on the actual generation of FOG from the Food Service Establishment, the maintenance frequency may increase or decrease; however, the interval between cleaning events shall not be greater than six months.

#### PART III - RECORD-KEEPING AND NOTIFICATION REPORTING REQUIREMENTS

#### A. RECORD-KEEPING REQUIREMENTS

Permittee shall keep records for at least two years and submit or make available for review, the following documents to the District, upon request:

- 1. A Record/Logbook of BMPs being implemented, including employee training.
- 2. Records of any spills and/or cleaning of the lateral or sewer system.
- 3. A logbook or record of grease interceptor cleaning and maintenance practices and activities.

- 4. Copies of records and manifests of waste hauling interceptor contents, which will include:
  - Name of hauling company
  - Name and signature of operator performing the pumpout
  - Documentation of full pumpout with volume of water and FOG removed (e.g., 1,500 gallons)
  - Documentation if repairs to the grease interceptor are required
  - Identification of the facility where the hauler is planning to dispose of the waste

#### **B. NOTIFICATION REQUIREMENTS**

Permittee shall comply with the notification requirements:

1. Notification of Spill:

In case of a sewage spill, Permittee shall notify the District and the Riverside County Health Department immediately by phone.

Valley Sanitary District	(760) 238-5400
Riverside County Health Department	(760) 863-7000
Riverside County Health Department FAX	(760) 863-7013

Confirmation of this notification shall be made in writing to the Pretreatment Manager at the address specified in the Permit no later than five (5) working days from the date of the incident. The written notification shall state the date of the incident, the reasons for the discharge or spill, what steps were taken to immediately correct the problem, and what steps are being taken to prevent the problem from recurring. The Permittee is required to notify the Riverside County Health Department of all sewage spills.

#### 2. Notification Regarding Planned Changes

Permittee shall notify the District at least 60 days in advance prior to any facility expansion/remodeling, or process modifications that may result in new or substantially increased FOG discharges or a change in the nature or volume of the discharge. Permittee shall notify the District in writing of the proposed expansion or remodeling and shall submit any information requested by the District for evaluation of the effect of such expansion on Permittee's FOG discharge to the sewer system.

#### **PART IV - STANDARD CONDITIONS**

#### A. NON-TRANSFERABILITY OF PERMIT

This Permit is issued specifically to the owner and facility location specified in this permit. This Permit is issued for a specific user, for a specific operation at a specific location, and creates no vested rights. Any permit that is transferred to a new owner and/or operator or to a new facility is void. Permittee shall notify the District in writing prior to the transfer of ownership

and shall give a copy of the existing permit to the new owner or operator. The new owner shall submit a permit application within 30 days of assuming ownership and/or operation of a facility.

#### B. ACCESS REQUIREMENTS

Access to all parts of the permittee's facility shall be granted to the District's personnel and/or its designee for the purpose of conducting compliance inspection during all times the facility is open, operating, or any other reasonable time. The District may conduct random, unannounced inspections to verify compliance with the terms and conditions of this permit.

#### C. PENALTIES

Any person who violates any provision of the FOG Rules and Regulations; or any permit condition, prohibition or effluent limitation; or any suspension or revocation order shall be civilly liable for a penalty pursuant to Section 711.D.6 of the Valley Sanitary District Sewer Use and Construction Ordinance 2008-118

#### D. SEVERABILITY

The provisions of this permit are severable. If any provision of these permits limitations and/or requirements, or the application thereof, to the Permittee is held invalid, the remainder of the permit limits and/or requirements shall remain in full force and effect.

#### E. TERMINATION OF SERVICE

The District, by Order of the General Manager, may physically terminate sewer service to any property on a term of any order of suspension or revocation of a permit or upon the failure of a person not holding a valid wastewater discharge permit to immediately cease discharge, whether direct or indirect, to the District's sewer facilities after due notification. All costs for physical termination shall be paid by the permittee as well as all costs for reinstating service.

### 7.0 Fats Oils & Grease SSMP ELEMENT UPDATE LOG

1. 6/14/12- Changed reference to current Sewer Use Ordinance 2010-118. By Steve Shepard

#### VALLEY SANITARY DISTRICT

#### SEWER SYSTEM MANAGEMENT PLAN

### Section 8 SYSTEM EVALUATION & CAPACITY ASSURANCE PLAN

In Compliance with
State Water Resource Control Board
Statewide General Waste Discharge Requirements
Order No. 2006-0003-DWQ

This Section outlines the requirements of the Statewide Sanitary Sewer General Waste Discharge Requirements (GWDR) order and describes how Valley Sanitary District Complies.

- 8. System Evaluation and Capacity Assurance Plan: the Enrollee shall prepare and implement a capital improvement plan that will provide hydraulic capacity of key sanitary sewer elements for dry weather, peak flow conditions as well as the appropriate design storm or wet weather event. At a minimum, the plan must:
  - 8a. 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 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 limited capacity) and the major sources that contribute to the peak flow associated with overflow events.

Valley Sanitary District has never had an SSO as a result of hydraulic deficiency, however some portions of the Collection System flow at design capacity or above. For this reason VSD developed a collection system master plan. The most recent collection system master plan, The "Valley Sanitary District Collection System Master Plan" (Master Plan), was prepared in 2013 by an engineering consultant. The document identified existing and projected future flows. The existing flows were used in a hydraulic model to reflect flow conditions in the existing collection system. This model scenario identified hydraulic deficiencies in the existing collection system. A separate model scenario was created combining existing and future flows to determine future collection system needs from short term through ultimate build out. Flow hydraulic modeling is verified by physical system inspection by District Staff.

The Valley Sanitary District service area is in an arid region of the State. The average annual rain fall is approximately 3 inches and during the wettest month an average of less than the 1 inch of rain falls. The collection department has a procedure for sealing manholes to prevent inflow in areas within the District that experience flooding. The sewer systems that are flowing at capacity have redundancy built into the system to help prevent any unexpected surge of flow from causing an overflow. Also during rain events the collection department monitors the collection system closely to help prevent any unexpected inflow.

8b. Design Criteria: Where design criteria do not exist or are deficient, undertake the evaluation identified in (a) above to establish appropriate design criteria; and

Design criteria exist for hydraulic deficiencies. This criteria is a combination of methodologies and design concepts obtained from numerous sources including the District's "Standard Specifications for Construction", sewer material manufacturers design criteria and recommendations, from registered civil engineers and industry accepted standards.

8c. 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, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding.

A capital improvement program based on this modeling information was provided in the Master Plan that addresses remedies for collection system deficiencies and the provision of capacity for future flow.

In the Master Plan as a guide there are 12 recommended improvement projects for the Valley Sanitary District collection system. These improvement projects are phased according to scenarios evaluated in the model: existing system, 5-year planning horizon, and build-out conditions. And are ordered according to the severity of the deficiency they address.

- Requa Interceptor
- Avenida Esmeralda Interceptor
- Monroe Interceptor
- Clinton Street
- Shields Interceptor
- Avenue 48 West Upgrade
- Arabia Interceptor/ Jackson Street
- Highway 111 Interceptor
- Avenue 49 Interceptor
- Industrial Place/ Market Interceptor
- Avenue 44/ Palo Verde Interceptor
- Lago Vista

8d. Schedule: The Enrollee shall develop a schedule of completion dates for all portions of the capital improvement program developed in (a) - (c) above. This schedule shall be reviewed and updated consistent with the SSMP review and update requirements as described in Section D. 14 of the WDR.

A schedule for the estimated completion dates for all of the phases of the capital improvement program to increase the capacity of the collection systems that were outlined in the Collection System Master Plan and an outline of the funding

source are contained in each year's annual budget. This schedule is updated annually.

The progress of these projects will be outlined in the biennual SSMP audit and also in the five year SSMP updates.

#### **Document Locations**

- A copy of the "Collection System Master Plan" can be located for reference in the Master Plan Section of the SSMP and on the District website (www.valley-sanitary.org).
- A copy of the most recent District budget including a time schedule and a plan for developing funds for long term and short term capital improvement projects can be located for reference in the Annual Budget Section of the SSMP and on the District website (www.valley-sanitary.org).

## 8.0 SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN SSMP ELEMENT UPDATE LOG

- 1. 6/04/14- Updated to most recent Collection System Master Plan from 2003 to 2013 version. By Heberto Moreno
- 2. 6/18/14- Changes made to section 8c in regards to CIP projects based on 2013 Master Plan. By Heberto Moreno

#### VALLEY SANITARY DISTRICT

#### SEWER SYSTEM MANAGEMENT PLAN

### Section 9 MONITORING, MEASUREMENT & PROGRAM MODIFICATIONS

In Compliance with
State Water Resource Control Board
Statewide General Waste Discharge Requirements
Order No. 2006-0003-DWQ

This Section outlines the requirements of the Statewide Sanitary Sewer Overflow (SSO) General Waste Discharge Requirements (GWDR) order and describes how Valley Sanitary District Complies.

#### 9.0 Monitoring, Measurement, and Program Modifications: The Enrollee Shall:

### 9a. Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;

A computerized asset management system is used to record and document collection system structural deficiencies, FOG and root problem areas identified by maintenance personnel. This management system is also used to generate and schedule work orders for the line maintenance crew. All information entered into the system database, including footage cleaned per day/month/year and the date it was cleaned, can easily be retrieved for viewing and review on a GIS Map. SSO occurrences recorded in this database contain time, date, cause, and volume and remedy information. All this information is analyzed and maintained by the Collection Supervisor.

### 9b. Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP:

The Collection System Supervisor monitors the implementation of each element of the SSMP to prioritize each task. A biennial SSMP audit report will be prepared to illustrate the effectiveness of the SSMP and to also point out its deficiencies and what modifications will take place to correct them.

#### 9c. Assess the success of the preventive maintenance program;

The condition of assets prior to and during preventative maintenance activity is noted in the asset management program. A follow up CCTV inspection is also preformed to asses the structural condition, that is also imported into the asset management program. This data is analyzed immediately following the completion of the work orders. Then it is determined whether further maintenance is required, if the frequency of maintenance needs to be increased or decreased in order to increase efficiency, or if a repair may be required.

### 9d. Update program elements, as appropriate, based on monitoring or performance evaluations; and

As sewer system Inspection data is analyzed and procedures and methods are evaluated to determine their efficiency, modifications are made to each relevant element of the SSMP.

### 9e. Identify and illustrate SSO trends, including: Frequency, Location, and Volume.

SSO reports that include all relevant information that is needed to report each spill to the State's online data base are prepared at the time of the sewage spill. This information includes but is not limited to the time, location, volume, cause and remedy. This information is analyzed and a determination is made whether the asset will require scheduled preventative maintenance or if the asset will need to be repaired. An outline showing the quantitative data of past years SSO's is included in the biennial SSMP Audit.

#### VALLEY SANITARY DISTRICT

#### SEWER SYSTEM MANAGEMENT PLAN

### Section 10 SSMP PROGRAM AUDITS

In Compliance with
State Water Resource Control Board
Statewide General Waste Discharge Requirements
Order No. 2006-0003-DWQ

This Section outlines the requirements of the Statewide Sanitary Sewer Overflow (SSO) General Waste Discharge Requirements (GWDR) order and describes how Valley Sanitary District Complies.

10.0 SSMP Program Audits: As part of the SSMP, the Enrollee shall conduct periodic internal audits, appropriate to the size of the system and the number of SSOs. At a minimum, these audits must occur every two years and a report must be prepared and kept on file. This audit shall focus on evaluating the effectiveness of the SSMP and the Enrollee's compliance with the SSMP requirements identified in this subsection (D.13) of the WDR, including identification of any deficiencies in the SSMP and steps to correct them.

Two Years from the date of the final completion and certification of the SSMP and biennially thereafter, staff will conduct an audit of each section of the SSMP, evaluating the effectiveness, ensuring compliance and identifying any deficiencies. The evaluation results and any changes to the SSMP section that are made to improve the program's performance will be outlined in a audit report and a copy of the report will be included in this section of the SSMP.

# Valley Sanitary District (VSD) Sewer System Management Plan (SSMP) 2013 Biennial Audit

The purpose of the Biennial SSMP audit is to evaluate the effectiveness of the Valley Sanitary District's SSMP and to ensure that all elements within the SSMP are up to date and that they are being implemented and managed appropriately. The SSMP audit is a critical process that promotes continuous improvement, ultimately resulting in the most efficient collection system management plan possible. This process includes the examination of events, experiences, and data from the previous two calendar years so that successes and challenges can be identified and correlated with strengths and weaknesses of the District's SSMP.

The audit reviews the twelve program elements for calendar years 2011 and 2012. Each element is assigned a status and recommendation(s) for improvement. Annual Performance and Sewer System Overflow (SSO) statistics for calendar years 2008 through 2012 are included in Table 1. Any changes that have taken place are reflected in the SSMP element update log located in each section of the SSMP.

#### **1.0 GOALS**

**Status:** The goals stated in the SSMP are still appropriate and accurate.

**Recommendation**: No action needed.

#### **2.0 ORGANIZATION**

Status: The organization charts are current, the chain of communication for SSO

response and reporting is current and key personnel contact info is current.

**Recommendation**: To continue to update this section as staffing changes are made.

#### 3.0 LEGAL AUTHORITY

**Status:** An updated Sewer Use Ordinance was adopted on November 9, 2011 All of the required legal authority elements are addressed in the revised use ordinance. The Legal Authority Section 3 in the SSMP has been updated to reflect the changes needed due to the adoption of the newest Sewer Use Ordinance 2010 118.

**Recommendation**: No action needed.

#### 4.0 Operation and Maintenance

#### 4a) Collection System Maps:

**Status:** The Collection System Atlas is up to date and as the sewer system maintenance is preformed the Atlas is verified for accuracy, any needed changes are made at the office. We have produced an updated paper version of our Sewer Atlas and developed a system to easily print the Atlas. The City of Indio owns the Storm Drain System in our service area. We have a paper map of the storm drain system but it could use improvement. The city does not have a complete atlas that is compatible with our GIS system.

**Recommendation**: We are continuing to work on producing a GIS Atlas of the City's storm drain system by using the information obtained by the City and by observations out in the field. The storm drain GIS project will be a long term project.

#### 4b) Preventative Operation and Maintenance:

**Status:** The Preventative Maintenance program is on schedule and the priority set for areas that require more frequent cleaning has prevented nearly all sewer main overflows. In 2010 we developed a sewer main root foaming program to control root growth in sewer mains. The annual performance statistics are outlined in table 1 that show the effectiveness of the Preventative Maintenance Program.

**Recommendation**: To continue the preventative maintenance program as scheduled and to modify the schedule as needed.

#### 4c) Rehabilitation and Replacement Program:

**Status:** The CCTV inspection program has been affective in identifying defective sections of sewer pipe. The sections that are indentified as being a high risk for collapse are repaired as they are discovered. The goal for the CCTV program is to televise the entire sewer system, the oldest sections first and import the data into our asset management program. The annual performance statistics for sewer main CCTV inspection, manhole inspections and sewer system repair and rehab are outlined in Table 1.

**Recommendation**: To continue the sewer system rehabilitation program identifying sewer system asset condition through our inspection program and rehabilitating assets on a risk priority system.

#### 4d) Training:

**Status:** The collection staff continues to maintain CWEA Collection Tech Certifications and works toward obtaining higher certifications. Staff attends CWEA sponsored training seminars and short schools. Staff are also trained in house on all aspects of the property operation of the Collection system. Our standard operating procedures for

collection system operations and the equipment used to maintain the collection system has been updated and we hold training sessions on these procedures on a regular basses. Documentation to support attendance to training classes is kept up to date and available in the Collections office.

**Recommendation**: To continue to train collection staff on a regular basis utilizing both CWEA sponsored seminars, workshops and in house training classes.

#### 4e) Contingency Equipment and Replacement Inventories:

**Status:** We are maintaining back up equipment and repair parts for our assets. **Recommendation**: To continue to replenish our inventory of replacement parts

#### 5.0 Design and Performance Provisions

**Status:** The District maintains standard specification for construction and testing and a sewer use ordinance that includes standard for sewer construction. A revised Sewer Use Ordinance was adopted in 2010. A revised Standard Specifications for the Construction of Sanitary Sewer has been started and is in draft form.

**Recommendation**: To complete and adopt the new revised Standard Specifications for the Construction of Sanitary Sewer by the next SSMP Audit.

Proposed WDR changes: No significant changes.

#### 6.0 Overflow Emergency Response Plan:

**Status:** The Sanitary Sewer Overflow Emergency Response Plan meets all of the requirements of the WDR. All the LRO and Data submitter information is current and up to date.

**Recommendation:** The Sanitary Sewer Overflow Emergency Response Plan will be updated with the most current information when the new SSS WDR MRP is adopted so that it will include all of the latest requirements. To continue provide Sanitary Sewer Overflow Emergency Response Plan training.

#### **7.0 FOG Control Program:**

**Status:** The SSMP contains up to date information regarding the District's FOG Control Program. The annual performance statistics outlined in Table 1 show the performance of the FOG program and its effectiveness in preventing SSOs.

**Recommendation:** To continue to implement the FOG Program.

#### **8.0 System Evaluation and Capacity Assurance Plan:**

**Status:** The District annually budgets for repairs, rehabilitation and increased capacity for the collection system. The FY 2013/2014 budget includes over \$300,000 for collection system rehabilitation and \$60,000 for collection system point repairs. The District also included in the budget funding to complete the design of the Requa Street Interceptor, a large trunk sewer main that will substantially increase the capacity of the collection system as well as relieve sewer mains along Highway 111 and Dr. Carreon Boulevard. The District intends to construct the Requa Interceptor in late 2014.

The District is in the process of completing the Collection System Master Plan. This document will have a comprehensive capital improvement plan which will include all sewer main deficiencies such as, capacity, age and material failures. The capital improvement plan will be prioritized in terms of need and sectioned to include repairs that need to be completed now, within 5 years from now and by build-out estimated in 25 years or 2035.

The annual performance statistics outlined in Table 1 shows the performance of the System Evaluation and Capacity Assurance Plan and its effectiveness in preventing SSOs.

**Recommendation:** To update the SSMP to reflect any required changes once the final Collection System Master Plan is adopted.

#### 9.0 Monitor, Measure, and Program Modifications:

**Status:** The condition of the collection system assets are inspected during regular preventative maintenance and CCTV inspection. Then the information is brought into the office and evaluated. At that time the preventative maintenance schedule in the computer based asset management program is modified as needed.

The annual performance statistics are outlined in Table 1 shows the performance of the SSMP and its effectiveness in preventing SSOs. This information is analyzed and a determination is made whether the asset will require modification to the scheduled preventative maintenance or if the asset will need to be repaired. An outline showing the quantitative data of past years SSO's and the cause is included.

**Recommendation:** To continue to monitor the performance of the SSMP and modify any of the program in order to prevent any SSO's.

#### **10.0 SSMP Program Audit:**

**Status:** This SSMP audit evaluates the effectiveness of the SSMP, our compliance with the SSMP and also recommended modifications to the SSMP. The annual performance statistics outlined in Table 1 shows the performance of the SSMP and its effectiveness in preventing SSOs.

**Recommendation:** To update the SSMP to reflect any required changes recommended by this audit or as needed in order to stay in compliance with the WDR and to prevent any SSO's.

#### **11.0 Communication Program:**

**Status:** The District's website has information about programs to assist the public prevent SSO's. We also have information about our SSMP and how the public can provide input on the development of the SSMP.

**Recommendation:** To continue to update the SSMP information on the District website.

#### **12.0 SSMP Completion and Certification:**

**Status:** On July 28, 2009 the collection system SSMP was adopted by our Board of Directors and Certified on the State Water Board CIWIQ website.

**Recommendation:** Update and recertify the SSMP within (5) years of the last certification or as required upon the adoption of new regulation.

**Table 1 Annual Collection System Activity Statistics** 

Indicator	2009	2010	2011	2012	2013
Miles of gravity sewer	243	243	243	243	243
Number of Pump Stations	5	5	5	5	5
Number of SSOs (total)	0	1	0	1	1
During Rain Event SSOs					
Number of SSOs (by volume range)					
<10 gal					
10-99 gal		1			1
100-999 gal					
1000-9999 gal				1	
≥10,000 gal					
Total SSO Volume	0	50	0	3000	15
Volume Reaching Surface Water	0	0	0	0	0
Volume Not Contained but Not Reaching	0	0	0	0	0
Surface Water					
Volume Recovered	0	50	0	3,000	15
Net Volume (total minus recovered)	0	0	0	0	0
Number of SSOs per 100 Miles of Sewer per Year	0	0.41	0	0.041	0.41
Volume of SSOs per 100 Miles of Sewer per Year	0	20.5	0	1,235	6
Total Volume Conveyed to the Plant (billion gal)	2.3	2.2	2.2	2.3	
Number of SSO (by cause)					
Roots					
Grease (FOG)					
Debris					
Debris from Laterals					
Vandalizum		1			
Construction Debris					
Multiple causes					
Infrastructure failure					
Inflow & Infiltration					
Pump Station Failure					
Flow Capacity Deficiency					
Natural Disaster					
Bypass					
Other				1	1
Average Emergency Response Time, minutes					
Business Hours	n/a	17	n/a	n/a	35
Non-Business Hours	n/a	n/a	n/a	40	n/a
Number of Lateral SSOs <sup>1</sup>	0	3	0	0	1
Total Lateral SSOs Volume <sup>1</sup>	0	160	0	0	5,125
Total Lateral SSOs Volume Recovered <sup>1</sup>	0	20	0	0	5,125
Total SSOs Lateral Volume Reaching Surface		20	O O		3,123
Water <sup>1</sup>	0	0	0	0	0
Maintenance Activities	1	3	J	3	
Footage Cleaned (Miles)	130	127	102	147.5	125.3
Mainline Root Foaming (Linear feet)	n/a	n/a	6,581	13,917	13,700
Televised Inspection (Miles)	16.4	16.3	11	18.8	18.5

Manholes Inspection (number)	1,658	225	902	1,683	1,662
Mainline Point Repairs(number)	3	11	7	5	0
Manholes Rehabed (number)	20	0	28	0	0
Mainline Lining Rehab ( Linear feet)	0	0	1,440	0	6,268
Mainline Dig and Replace (Linear feet)	0	100	0	500	216
FOG Program Activities					
Approx. Number of Restaurants Indentified	167	152	200	205	227
Restaurants Inspected	38	40	24	0	102
Restaurants Being Monitored under FOG					
Program	38	78	101	102	115

#### Notes for Table 1:

1. The Lateral SSOs were reported to CIWIQ as District spills because at the time we did not have any documentation that defined the ownership of the sewer lateral from the property to the District sewer main. In November 2010 the the District adopted a revised sewer use ordinance that clarified that sewer laterals are ownered by the owner of the property that they serve.

### 10.0 SSMP PROGRAM AUDITS SSMP ELEMENT UPDATE LOG

- 1. 8/1/11 Added 2011 biannual audit report. By Steve Shepard
- 2. 8/1/13 Added 2013 and removed 2011 biannual audit report. By Steve Shepard.
- 3. 6/23/14 Updated Annual SSO Statistics Table. By Heberto Moreno

#### VALLEY SANITARY DISTRICT

#### SEWER SYSTEM MANAGEMENT PLAN

### Section 11 COMMUNICATION PROGRAM

In Compliance with
State Water Resource Control Board
Statewide General Waste Discharge Requirements
Order No. 2006-0003-DWQ

This Section outlines the requirements of the Statewide Sanitary Sewer General Waste Discharge Requirements (GWDR) order and describes how Valley Sanitary District Complies.

11. Communication Program: The Enrollee shall communicate on a regular basis with the public on the development, implementation, and performance of its SSMP. The Communication system shall provide the public the opportunity to provide input to the Enrollee as the program is developed and implemented.

The Enrollee shall also create a plan of communication with systems that are tributary and/or satellite to the Enrollee's sanitary sewer system.

Approximately each year a newsletter will be sent out to all of the District's customers with information about the performance of the Sewer System Management Plan or Sewer Collection System.

A copy of the most recent news letter is included in this section of the SSMP or on the District website (www.valley-sanitary.org).

#### VALLEY SANITARY DISTRICT

#### SEWER SYSTEM MANAGEMENT PLAN

### Section 12 SSMP COMPLETION & CERTIFICATION

In Compliance with
State Water Resource Control Board
Statewide General Waste Discharge Requirements
Order No. 2006-0003-DWQ

This Section outlines the requirements of the Statewide Sanitary Sewer General Waste Discharge Requirements (GWDR) order and describes how Valley Sanitary District Complies.

12. SSMP Completion and Certification: Both the SSMP and the Enrollee's program to implement the SSMP must be certified by the Enrollee to be in compliance with the requirements set forth above and must be presented to the Enrollee's governing board for approval at a public meeting. The Enrollee shall certify that the SSMP, and subparts thereof, are in compliance with the general WDRs within the time frames identified in the time schedule provided in subsection D.15 of the WDR, below.

In order to complete this certification, the Enrollee'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 the State Water Board.

Valley Sanitary District has followed all the Certification procedures and has met all of the time frame schedules provided in Subsection D.15 of the WDR.

A copy of the documentation substantiating this is included in this Section.

Every five years the SSMP will be updated with the most up to date information and will be approved by the Board of Directors in a public meeting.