

# SSMP



**Sewer System  
Management Plan  
2009**

A copy of this document will be available on the  
Triunfo Sanitation District Website

[www.triunfosanitationdistrict.com](http://www.triunfosanitationdistrict.com)

The Triunfo Sanitation District's Board of Directors meets on the fourth  
Monday of each month.

Meetings are publicly noticed and citizens are encouraged to attend.  
Comments on this document should be addressed  
at the Board of Directors Meetings.

# Table of Contents

## Introduction

Regulatory Requirements	1
Time Schedule	1
Sanitary Sewer System Facilities	3
Spill Response	4
SSMP Availability	4
Definitions and Acronyms	5
<b>Section 1: Goals</b>	
1.1 Regulatory Requirements	7
<b>Section 2: Organization</b>	
2.1 Background	9
2.2 Regulatory Requirements	10
<b>Section 3: Legal Authority</b>	
3.1 Regulatory Requirements	15
<b>Section 4: Operations and Maintenance Program</b>	
4.1 Regulatory Requirements	21
<b>Section 5: Design and Performance Provisions (Design and Construction Standards)</b>	
5.1 Regulatory Requirements	27
<b>Section 6: Overflow Emergency Response Plan</b>	
6.1 Regulatory Requirements	29
<b>Section 7: Fats, Oils, and Grease Control Program</b>	
7.1 Background	35
7.2 Regulatory Requirements	36
<b>Section 8: System Evaluation and Capacity Assurance Plan (Capacity Management)</b>	
8.1 Regulatory Requirements	41
<b>Section 9: Monitoring, Measurement, and Program Modifications</b>	
9.1 Regulatory Requirements	61
<b>Section 10: SSMP Program Audits</b>	
10.1 Regulatory Requirements	65
<b>Section 11: Communication Program</b>	
11.1 Regulatory Requirements	71

*Note:* Section numbers are based on the General Waste Discharge Requirements, Order No. 2006-0003-DWQ dated May 2, 2006.

page left blank intentionally

## List of Figures

<b>Figure I.1: TSD SSMP Time Schedule</b>	<b>2</b>
<b>Figure I.2: Map of TSD</b>	<b>3</b>
<b>Figure 2.1: TSD Organization Chart</b>	<b>12</b>
<b>Figure 2.2: Chain of Communication</b>	<b>13</b>
<b>Figure 8.1: Manhole Inspection Form</b>	<b>45</b>
<b>Figure 8.2: Capital Improvement Plan – OPWS and Sanitation (May 2009)</b>	<b>46</b>
<b>Figure 8.3: Capital Improvement Plan – ReWater (May 2009)</b>	<b>47</b>
<b>Figure 8.4: LV-02 (La Venta) Site Report</b>	<b>50</b>
<b>Figure 8.5: LV-02 (La Venta) Hydrograph (2007 - 2008)</b>	<b>51</b>
<b>Figure 8.6: LV-02 (La Venta) Scattergraph (2007 - 2008)</b>	<b>52</b>
<b>Figure 8.7: LV-03 (Kanan) Site Report</b>	<b>53</b>
<b>Figure 8.8: LV-03 (Kanan) Hydrograph (2007 - 2008)</b>	<b>54</b>
<b>Figure 8.9: LV-03 (Kanan) Scattergraph (2007 - 2008)</b>	<b>55</b>
<b>Figure 8.10: LV-04 (Lindero) Site Report</b>	<b>56</b>
<b>Figure 8.11: LV-04 (Lindero) Hydrograph (2007 - 2008)</b>	<b>57</b>
<b>Figure 8.12: LV-04 (Lindero) Scattergraph (2007 - 2008)</b>	<b>58</b>
<b>Figure 10.1: SSMP Review Meeting Agenda</b>	<b>65</b>
<b>Figure 10.2: SSMP Audit Checklist</b>	<b>66-69</b>

## List of Tables

<b>Table 9.1: Yearly SSO Totals</b>	<b>63</b>
<b>Table 9.2: SSO Cause Totals</b>	<b>63</b>
<b>Table 9.3: TSD SSO History (2005 – 2009)</b>	<b>63</b>

page left blank intentionally

# Appendices

- A. State of California, State Water Resource Control Board Order No. 2006-0003-DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, May 2, 2006
- B. State of California, State Water Resource Control Board Order No. WQ 2008-0002-EXEC, Adopting Amended Monitoring and Reporting Requirements for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, February 20, 2008
- C. Memorandum of Agreement, Between State Water Resource Control Board and California Water Environment Association, June 27, 2006
- D. Memorandum of Agreement, Between State Water Resource Control Board and California Water Environment Association Regarding Training Regarding Requirements Set Forth in General Waste Discharge Requirements For Sanitary Sewer Systems, February 28, 2008
- E. Amendment of Memorandum of Agreement, August 24, 2006
- F. Triunfo Sanitation District Rules and Regulations for the Sewage Discharge System, June 26, 1995, Resolution No. T95-1.
- G. Triunfo Sanitation District Rules and Regulations for the Sewage Collection System, April 24, 1989.
- H. Triunfo Sanitation District, Source Control Program, Enforcement Response Plan, DRAFT Version: January 16, 2007 sq
- I. Triunfo Sanitation District, Sanitary Sewer Overflow & Back-Up Response Plan, Feb 20, 2006
- J. Ventura Regional Sanitation District & Triunfo Sanitation District Sewage Spill Procedure and W/WW Operators Emergency Numbers, Personnel, and Resource Directory, September 7, 2008
- K. Ventura Regional Sanitation District Disaster Operations Plan, 2005
- L. Operator Assisted Sewer Information System (OASIS) Users Manual, Version 7, January 08, 2003
- M. Triunfo Sanitation District Sanitary Sewer Geographic Information System Database/Maps: CCTV Map Book; Hot Spot Map Book; Maintenance Map Book

## **Appendices (continued)**

- N. Scattergraph Principles and Practices, Principle Application of the Froude Number to Flow Monitoring, ADS Corp. 2006
  
- O. Scattergraph Principles and Practices, A Comparison of Various Applications of the Manning Equation, ADS Corp. 2004
  
- P. Scattergraph Principles and Practices, Characterization of Sanitary Sewer and Combined Sewer Overflows, ADS LLC 2007
  
- Q. VRSD Bell Canyon, Flow Report, 10 inch Discharge, MRC 2007

## **Introduction**

### **Regulatory Requirements**

The State Water Resources Control Board (SWRCB) has directed all federal and state agencies, municipalities, counties, districts, and other public entities (Enrollees) that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California to facilitate proper funding and management of the sanitary sewer system. This has been directed through the Statewide General Waste Discharge Requirements (WDR) for Sanitary Sewer System, Order No. 2006-0003-DWQ (Order) adopted on May 2, 2006.

As part of this Order, Triunfo Sanitation District (TSD) has developed and implemented a system-specific Sewer System Management Plan (SSMP). This plan includes provisions to provide proper and efficient management, operation, and maintenance of the sanitary sewer system. With the Order, a Time Schedule has been established based on population size with required tasks and associate sections completion dates.

### **Time Schedule**

The SSMP time schedule requires the use of the California Integrated Water Quality System (CIWQS) online reporting system to document identified SSMP section completion dates. Each of the SSMP elements is listed by Section and a Certification Date is identified as requiring completion per the Enrollees population size. TSD falls under the SSMP Time Schedule for populations between 10,000 and 100,000.

The State Water Resource Control Board Order No. 2006-0003-DWQ, Statewide WDR for Sanitary Sewer System was adopted on May 2, 2006. On June 27, 2006, California Water Environment Association (CWEA) and the SWRCB entered into a Memorandum of Agreement (MOA) (and amendment) for industry training on these new requirements. With the MOA in place, compliance deadlines were extended for both the electronic reporting and SSMP elements. On February 28, 2008, CWEA and the SWRCB signed a new MOA that extended the agreement until December 2009. The original WDR time schedule dates and MOA extension dates, shown in italics, are outlined in Figure I.1.

TSD has met all compliance date timelines to date, is on track with meeting the Final SSMP completion deadline, and has entered the appropriate information in the CIWQS online reporting system website for both Sanitary Sewer Overflow (SSO) and SSMP elements. TSD personnel have attended several training sessions on the SSO reporting and SSMP development requirements in the WDR through private consulting firms and regulatory agencies.

**Figure I.1: TSD SSMP Time Schedule**

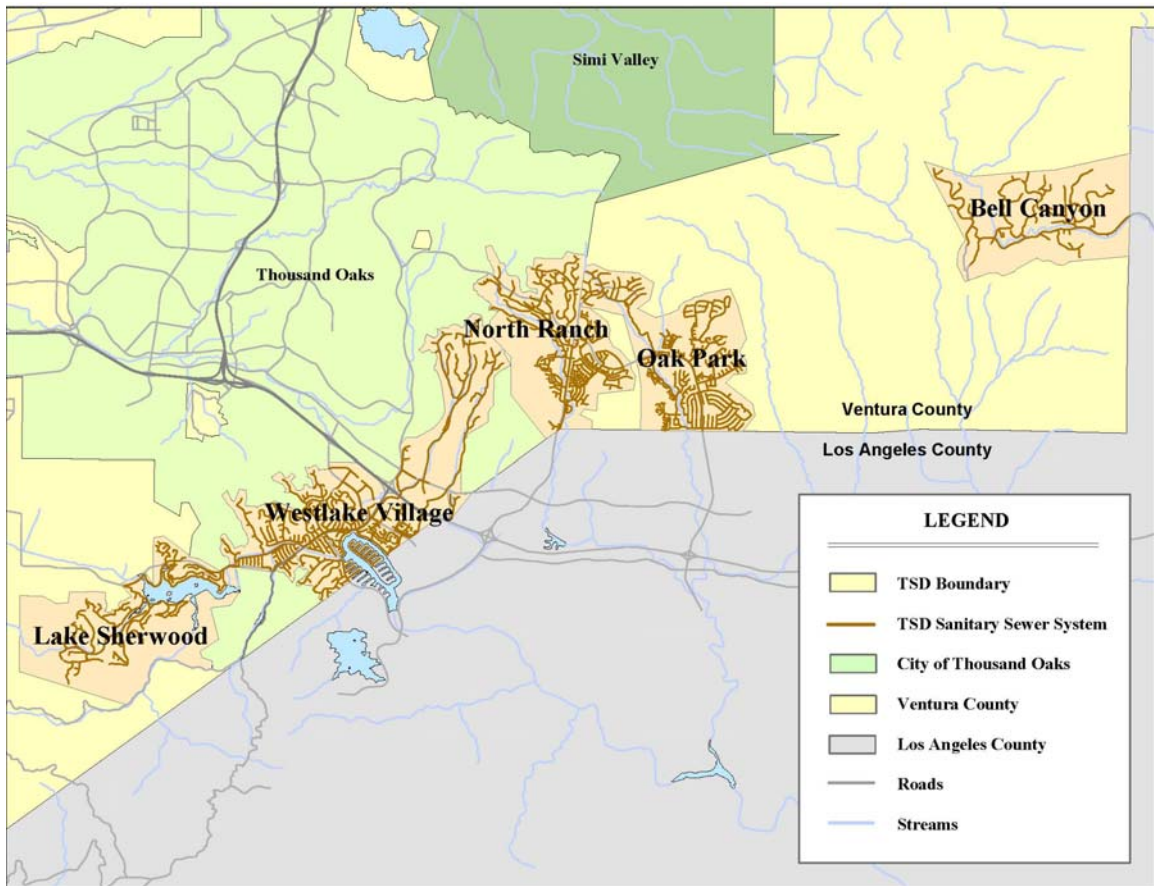
<b>Task and Associated Section</b>	<b>Completion Date</b>
Application for Permit Coverage <b>Section C</b>	<i>6 months</i>
Reporting Program <b>Section G</b>	<i>6 months</i>
SSMP Development Plan and Schedule <b>No specific Section</b>	November 1, 2007 <i>12 months</i>
Goals and Organization Structure <b>Section D 13, (i) &amp; (ii)</b>	November 1, 2007 <i>30 months</i>
Overflow Emergency Response Program <b>Section D 13 (vi)</b>	May 1, 2009 <i>30 months</i>
Legal Authority <b>Section D 13 (iii)</b>	May 1, 2009 <i>30 months</i>
Operations and Maintenance <b>Section D 13 (iv)</b>	May 1, 2009 <i>30 months</i>
Grease Control Program <b>Section D 13 (vii)</b>	May 1, 2009 <i>30 months</i>
Design and Performance <b>Section D 13 (v)</b>	August 1, 2009 <i>39 months</i>
System Evaluation and Capacity Assurance Plan <b>Section D 13 (viii)</b>	August 1, 2009 <i>39 months</i>
Final SSMP, incorporating all of the SSMP Requirements <b>Section D 13</b>	August 1, 2009 <i>39 months</i>

*NOTE: Dates shown in italic are from the May 2, 2006 WDR time schedule prior to the June 27, 2006 and February 28, 2008 CWEA and SWRQB MOA's.*

## Sanitary Sewer System Facilities

The TSD service area includes approximately 50 square miles within the County of Ventura as shown in Figure I.2. Population within the service area includes approximately 32,000 people and 12,200 sewer connections. TSD owns the collection system including 120 miles of sanitary pipelines, 5 pump stations, 1 mile of force mains, and 0.5 mile of pressure mains. TSD contracts with Ventura Regional Sanitation District (VRSD) for administration, management, and operation of the TSD facilities and the wastewater is discharged to the Las Virgenes Municipal Water District's (LVMWD) Tapia Water Reclamation Facility.

**Figure I.2: Map of TSD**



## **Spill Response**

The Order requires the SSMP to contain a Spill Response Plan that establishes standard procedures for immediate response to a SSO to minimize water quality impacts and potential nuisance conditions. The SWRCBs intent is to further gather additional information on the causes and sources of SSOs to augment existing information and to determine the full extent of SSOs and consequent public health and/or environmental impacts occurring in the State. The SWRCB requires SSOs be reported to Regional Water Boards and other regulatory agencies in a timely manner and be made available to the public in a complete, concise, and timely fashion. The SWRCB CIWQS online SSO reporting system is hosted, controlled, and maintained by the State Water Board at <http://ciwqs.waterboards.ca.gov>. This online database is maintained on a secure site requiring a unique username and password for reporting any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from the sanitary sewer system. TSD personnel have acquired and use this reporting system in the event of an SSO.

## **SSMP Availability**

The purpose of this SSMP is to provide a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer system. This SSMP will assist the TSD personnel with guidelines to assist in the reduction and prevention of SSOs and mitigation of any SSOs that may occur.

Per the Order, a copy of the General WDR and the certified SSMP will be maintained at the TSD offices, facilities, and/or Internet homepage. The SSMP is available to sanitary sewer system operating and maintenance personnel at all times and will be updated regularly to keep current with the sanitary sewer system.

## Definitions and Acronyms

The following is a list of acronyms and definitions used in this report:

BMP – Best Management Practice  
BWF - Base Wastewater Flow  
CCTV - Closed Circuit Television  
CIPP - Cured-In-Place Pipe  
CIWQS - California Integrated Water Quality System  
County - County of Ventura  
CWEA - California Water Environment Association  
EPG – Environmental Programs Group  
ERP – Enforcement Response Plan  
FSE - Food Service Establishments  
FOG - Fats, Oils, and Grease  
gpd - Gallons per Day  
gpm - Gallons Per Minute  
GIS – Geographic Information System  
GPS – Global Positioning System  
GWI - Groundwater Infiltration  
HAZMAT - Hazardous Materials  
I/I - Infiltration and Inflow  
IIPP - Illness and Injury Prevention Program  
LVMWD - Las Virgenes Municipal Water District  
MAR - Mean Annual Rainfall  
mgd - Million Gallons per Day  
MOA – Memorandum of Agreement  
MRP - Monitoring and Reporting Program  
NPDES - National Pollutant Discharge Elimination System  
OES - California Office of Emergency Services  
O&M - Operation and Maintenance  
PF - Peaking Factor  
POTW - Publicly Owned Treatment Works  
PVC - Polyvinyl Chloride  
R&R - Rules and Regulations  
RDI/I - Rainfall Dependent Infiltration and Inflow  
RWQCB - Los Angeles Regional Water Quality Control Board  
SMR - Self Monitoring Report  
SOC - Security Operations Center  
SOP - Standard Operating Procedures  
SSMP - Sewer System Management Plan  
SSO - Sanitary Sewer Overflow  
SSOERP - Sanitary Sewer Overflow Emergency Response Plan  
SWRCB - State Water Resources Control Board  
TSD - Triunfo Sanitation District  
U.S. – United States  
VCP - Vitriified Clay Pipe  
VRSD - Ventura Regional Sanitation District  
WDR - Waste Discharge Requirements  
WWTP - Wastewater Treatment Plant

page left blank intentionally