

**SEWER SYSTEM MANAGEMENT PLAN AUDIT FOR
THE CITY OF SAN DIMAS
2011 AND 2012**

- May 2, 2006 – State Water Resources Control Board adopted Statewide General Waste Discharge Requirements (WDRs).
- January 1, 2007 – Electronic reporting of Sanitary Sewer Overflows (SSO).
- July 28, 2009 – Sewer System Management Plan (SSMP) adopted by the City Council.
- September 2011 – First SSMP audit due and every two years thereafter per subsection D.13.x of the WDRs and Section 10.1 of the City's SSMP.
- July 28, 2014 – Due date for the recertification of the SSMP.

Elements of the SSMP

1. **Goals** – description of the City's SSMP goals.
2. **Organization** – description of the City's organizational structure.
3. **Legal Authority** – description of the City's legal rights, including codes and ordinances, to enforce the requirements of the WDRs.
4. **Operation and Maintenance Program** – outlines the City's maintenance schedule and methodology to ensure proper management and maintenance of sewer facilities.
5. **Design and Performance Provisions** – description of methods by which the City ensures that new and rehabilitated sewer facilities are properly designed and installed.
6. **Overflow Emergency Response Plan** – describes how the City responds to, reports, and documents SSO events within the City.
7. **Fat, Oil, and Grease (FOG) Control Program** – describes how the City prevents or minimizes the discharge of fats, oils, and grease into the sewer lines in an effort to minimize SSOs.
8. **System Evaluation and Capacity Assurance** – how the City ensures that adequate capacity is available for new and existing developments.
9. **Monitoring, Measurement, and Program Modifications** – details the City's program to continually monitor and assess the performance of each SSMP element in achieving the goals and objectives of the SSMP and updating them as necessary.
10. **SSMP Program Audit and Certification** – describes the City's plan to periodically assess the effectiveness of the SSMP in reducing SSOs.
11. **Communication Program** – summarizes the City's plan to ensure that stakeholders are aware of the City's SSMP.

PERFORMANCE MEASURES

Overflow Prevention/Collection System Maintenance

Performance Indicator		2011	2012
Input			
1	Total number of pump station condition assessments scheduled	1	0
2	Total miles of scheduled CCTV	0.00	0.00
3	Total miles of scheduled periodic cleaning	12.26	12.88
4	Total miles of scheduled cleaning (periodic and contract CCTV)	12.26	12.88
5	Total number of pump station inspections scheduled	728	728
6	Total number of manhole inspections scheduled	4,536	4,590
Workload/Output			
7	Total number of SSOs responded to in a 12-month period *	2	6
8	Total volume of SSOs	450	4,865
9	Total SSO response time	2.00	5.73
10	Total miles of sewer lines maintained	101.36	101.65
11	Total miles of scheduled periodic cleaning completed	16.01	7.53
12	Total number of pump stations maintained	7	7
13	Total number of pump station inspections completed	726	616
14	Total number of manhole inspections completed	4,536	4,590
15	Total SSOs > 1,000 gallons responded to	0	1
16	Total FOG-related SSOs responded to	1	0
17	Total root-related SSOs responded to	1	4
18	Total SSOs due to other causes (debris, vandalism, etc.)	0	1
19	Total number of capacity-related SSOs	0	0
20	Total number of SSOs due to pump station malfunction	0	1
21	Number of SSOs responded to within 2 hours or less	2	6
22	Total miles of scheduled CCTV completed	0.00	0.00
23	Total miles of scheduled cleaning completed	18.55	78.31
24	Total miles of CCTV completed (including contract CCTV)	0.24	67.02
25	Number of pump station condition assessments completed	1	0
26	Total miles of sewer lines cleaned (all including contract CCTV)	18.79	145.32
27	Total number of service requests responded to	18	25
Efficiency			
28	Number of SSOs per 100 miles of sewer lines	1.97	5.96
29	Volume of SSOs recovered	30	3,010
30	Number of SSOs that reached surface water	420	1,845
31	Average response time per SSO	1.00	0.96
32	Average number of SSOs per pump station	0	0
Effectiveness/Outcome			
33	Percentage of SSOs > 1,000 gallons	0.00%	16.67%
34	Percentage of SSOs captured	6.67%	61.87%
35	Percentage of SSOs due to FOG	50.00%	0.00%
36	Percentage of SSOs due to roots	50.00%	66.67%
37	Percentage of SSOs due to other causes	0.00%	0.00%
38	Percentage of SSOs that reached surface water	93.33%	37.92%
39	Percentage of SSOs with response time 2 hours or less	100.00%	100.00%
40	Percentage of manhole inspections completed	100.00%	100.00%
41	Percentage of scheduled CCTV completed	N/A	N/A
42	Percentage of pump station condition assessments completed	0.00%	N/A
43	Percentage of pump station inspections completed	99.73%	84.62%
44	Percentage of scheduled cleaning completed **	130.57%	58.43%
45	SSOs from house laterals not related to mainline sewer problems	0	0

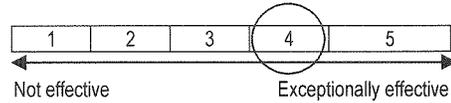
* Not including SSOs from house laterals.

**All scheduled periodics were completed. The higher and/or less than 100 percent completion rate recorded could be attributed to the different sewer segment length determination methods used by field staff and office engineers (GIS), plus the fact that occasional adjustments in the frequencies of the periodics are not reflected in these numbers.

SEWER SYSTEM MANAGEMENT PLAN AUDIT

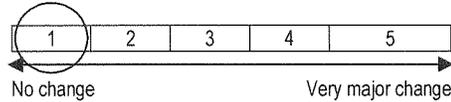
A. Goals and Objectives

To what extent, on a scale of 1 to 5, has the SSMP been effective in reducing SSOs in the City?



B. Organization

How would you describe the changes in the City's organizational structure on a scale from 1 to 5? Please specify.



C. Legal Authority

Give the year of adoption of the latest version of the following County Codes/Ordinances.

- 1) County Industrial Waste Ordinance
Date: 2002
- 2) City Municipal Code/County Plumbing Code
Date: 2010
- 3) City Municipal Code/County Building Code
Date: 2010

D. Operation and Maintenance Program

- 1) What was the actual expenditure on each of these elements of the City's/ CSMD's O&M programs for the last four fiscal years?
- (i) New Equipment Purchase
 - (ii) Capital Improvement – Accumulative Capital Outlay (ACO)
 - (iii) Travel and Training

	*2010-11	*2011-12	*2012-13
(i)	\$2,204,329	\$1,017,529	\$1,149,495
(ii)	\$1,930,968	\$3,161,726	\$2,334,444
(iii)	\$21,521.09	\$34,458	\$35,422

- 2) Expenditures/Revenues Data
- (i) Total Budget Amount
 - (ii) Actual Expenditures on CCTV
 - (iii) Total O&M Expenditure
 - (iv) Sewer Service Charge Rates – Consolidated

(i)	\$52,085,000	\$48,820,000	\$40,961,000
(ii)	\$4,372,768	\$4,515,928	\$1,177,182
(iii)	\$29,476,378	\$28,378,489	\$26,828,128
(iv)	\$40.50	\$40.50	\$44.50

*Consolidated Sewer Maintenance District (CSMD) data.

E. Design and Performance Provision

- 1) What dollar amount of the City's/CSMD's expenditure went into:
- (i) Sewer Plan Check
 - (ii) Construction Management and Inspection
 - (iii) Project Design
- * CSMD data

	*2010-11	*2011-12	*2012-13
(i)	\$157,844	\$182,388	\$226,864
(ii)	\$632,672	\$559,360	\$426,720
(iii)	\$486,729	\$268,179	\$156,757

- 2) Has there been any major change in the City's design standard? If so, specify and indicate fiscal year in which it occurred?

Yes		No	✓
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F. Overflow Emergency Response Plan

1. Total number of SSOs (private lateral SSOs not included).
2. Percentage responded to within 2 hours.

2011	2012
2	6
100%	100%

L. List of identified deficiencies and planned corrective actions, if any.

As of December 31, 2013, the CSMD has completed the interior inspection of approximately 13 miles (13 percent) of the gravity sewer system within the City by CCTV camera to evaluate the physical condition of the pipes. This is part of the ongoing efforts by the CSMD to identify and correct any structural or maintenance deficiencies in the sewer system. From these inspection projects, it was determined that 3 segments of sewer pipe, approximately 900 feet in length, required rehabilitation by the installation of a pipe lining material. These sewer segments have been lined as part of the CSMD's ACO Program to rehabilitate sewer pipes as a result of structural deficiencies. The final CCTV inspection project, which includes the remaining 83 miles of sewer pipelines, has recently been completed and is pending review. Any sewer segments identified as requiring rehabilitation will be included in a future ACO Program project.

There were no sewer capacity issues and no major structural or maintenance deficiencies detected during this audit period.

M. Comments

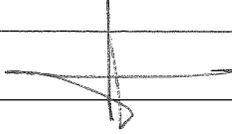
The City/Sewer Maintenance Districts (SMDs) SSMP has been very effective in keeping the number and total volume of SSOs in the City significantly below the Statewide median.

There were also very few citizen complaints during the same period.

The SSMP along with associated programs, based on all categories of performance indicators shown on page 2, seem to have significantly enhanced the City's sewer collection system management and operations.

N. CERTIFICATION

We, the undersigned, do hereby certify that information contained in this audit report is to the best of our knowledge true.

Name (s)	Position	Signature	Date
County of Los Angeles Department of Public Works			
Nicholas A. Agbobu, Senior Civil Engineer			
City of San Dimas			
Krishna Patel, Director of Public Works			7/14/2014