

APPENDIX W

Regulatory Inspections & Responses

City of Glendale

Hicks, John

From: Hardgrove, Daniel
Sent: Friday, September 13, 2013 12:23 PM
To: Yuen, Pansy@Waterboards
Cc: Hicks, John
Subject: Follow up Documents Requested from Sept 10 Meeting
Attachments: SSMP Appendix N_spot repairs compil'd only.pdf; Sewer System Metrics thru AUG2013.pdf; SSMP Self Audit #2_JAN2013_with attachments.pdf

Pansy,

It was a pleasure meeting with you and the rest of the Board representatives this past Tuesday , September 10th , at your office in downtown Los Angeles. Please find attached the various documents that were requested for review at our meeting (1 of 2 emails). I believe the table found immediately below will be useful in navigating the attached materials:

Item Requested	Document(s) Name:
1. Hydraulic Analysis Summary from the 2007 Master Plan Update	Glendale Final WWMP_July 2007.pdf
2. System Evaluation and Capacity Assurance Plan (SECAP)	Glendale SECAP Summary_SEP2013.docx SS Pipeline Upgrade Priority Model 9-11-13.pdf
3. Volume Estimating procedure and Training on since Audit.	Training on Vol Estimating 2013.pdf
4. SSMP Audit No. 2 includes capital improvement projects completed since implementation of the SSMP. Also attached- Key collection system performance metrics through August2013	SSMP Self Audit #2_JAN2013_with attachments.pdf Sewer System Metrics thru AUG2013.pdf
5. Spot Repair Records.	SSMP Appendix N_spot repairs.pdf

The attachments are fairly sizable, so I will be sending them under 2 separate emails. I would appreciate it if you can send me an email confirming that they have been received and that you were able to open the attachments.

We look forward to our continued close working relationship as both the Board and the City mutually seek to develop and refine our collection system management, preventative maintenance and SSO response to help protect the State's water quality and the environment.

Regards,
Dan Hardgrove
Deputy Director of Public Works
Maintenance Services
Glendale Public Works

Hicks, John

From: Hardgrove, Daniel
Sent: Friday, September 13, 2013 12:27 PM
To: Yuen, Pansy@Waterboards
Cc: Hicks, John
Subject: Follow up Documents Requested from Sept 10 Meeting
Attachments: Training on Vol Estimating 2013.pdf, Glendale Final WWMP_July 2007.pdf, Glendale.SECAP.Summary.docx

Attachments. 1 additional pending 2 of 3 emails.

Regards,
Dan Hardgrove
Deputy Director of Public Works
Maintenance Services
Glendale Public Works

Hicks, John

From: Hardgrove, Daniel
Sent: Friday, September 13, 2013 12:38 PM
To: Hicks, John
Subject: FW: Follow up Documents Requested from Sept 10 Meeting
Attachments: SS Pipeline Upgrade Priority Model 5-11-13.pdf

Dan Hardgrove
Deputy Director of Public Works
Maintenance Services
Glendale Public Works

From: Hardgrove, Daniel
Sent: Friday, September 13, 2013 12:28 PM
To: 'Yuen, Pansy@Waterboards'
Subject: Follow up Documents Requested from Sept 10 Meeting

Attachments 3 of 3 emails

Thanks,
Dan Hardgrove
Deputy Director of Public Works
Maintenance Services
Glendale Public Works

Kennedy/Jenks Consultants

2355 Main Street, Suite 140
Irvine, California 92614
949-261-1577
949-261-2134 (Fax)

Final Report Wastewater Master Plan Update

July 2007

Prepared for

City of Glendale
633 East Broadway
Glendale, CA 91206

KJ Project No. 0685008

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Plate 1 Citywide Pipeline Analysis – Future PWWF Conditions (24" X 36")

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Abbreviations and Definitions

The following abbreviations and definitions are used within the report:

<u>Abbreviation</u>	<u>Definition</u>
AAF	annual average flow
ac	acre
ADD	average day demand
ADWF	average dry weather flow
APN	assessor parcel number
AWWF	average wet weather flow
BMP	Best Management Practices
BOD	biochemical oxygen demand
cf	cubic feet
CFR	Code of Federal Regulations
cfs	cubic foot per second
CIP	Capital Improvement Program
D/d	depth to diameter
dia.	Diameter
DSP	Downtown Specific Plan
DU	dwelling unit
DU/ac	dwelling units per acre
ENR	Engineering News Record
EPA	U.S. Environmental Protection Agency
EADWF	Existing Average Dry Weather Flows
FADWF	Future Average Dry Weather Flows
FEMA	Federal Emergency Management Agency
FPDWF	Future Peak Dry Weather Flows
FPWWF	Future Peak Wet Weather Flows
fps	feet per second
GIS	geographic information system
gpac	gallons per acre day
gpcd	gallons per capita per day
gpm	gallons per minute
hcf	hundred cubic feet
HGL	hydraulic grade line
hp	horsepower
HTP	Hyperion Treatment Plant
I&I	infiltration and inflow
IWPP	industrial waste pretreatment program
JPA	Joint Powers Agreement
K/J	Kennedy/Jenks Consultants
KWH	kilowatt hours
LA	City of Los Angeles

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<u>Abbreviation</u>	<u>Definition</u>
LACSD	Los Angeles County Sanitation Districts
LAGWRP	Los Angeles-Glendale Water Reclamation Plant
LF	linear foot
MFD	multi-family dwelling
MGD	million gallons per day
mg/l	milligrams per liter
NCPi	National Clay Pipe Institute
NOS	North Outfall Sewer
NPDES	National Pollutant Discharge Elimination System
O&M	operations and maintenance
PDWF	peak dry weather flow
population/DU	population per dwelling unit
POTW	publicly owned treatment works
pph	persons per household
PWWF	peak wet weather flow
ROW	right-of-way
RWQCB	Regional Water Quality Control Board
sf	square feet
SFC	sewer facilities charge
SFD	single-family dwelling
SMW	sewer maintenance workers
SRWCB	State Regional Water Control Board
SS	suspended solids
TAZ	traffic area zone
TDH	total dynamic head
VCP	vitrified clay pipe

Executive Summary

BACKGROUND AND OBJECTIVES

The City of Glendale (City or Glendale) is a Charter City located northeast of the City of Los Angeles in the San Gabriel Mountains. Glendale's population of approximately 200,000 resides in over 75,000 dwelling units within a 30.6-square-mile area. The City's current planning efforts estimate that Glendale's population is projected to reach approximately 225,000 by the year 2030. The City performed its last Wastewater Master Plan in 1998.

The City of Glendale's existing wastewater collection system is comprised of four types of facilities. These facilities are wastewater collection system pipelines, permanent wastewater monitoring metering stations, a wastewater pump station, and co-ownership in a wastewater treatment facility. The facility evaluation elements of this Master Plan focus on a hydraulic evaluation of the existing collection system pipelines and a condition/capacity assessment of the existing pump station. The Los Angeles Glendale Water Reclamation Plant (LAGWRP) is not included in this Master Plan as it is operated and maintained by the City of Los Angeles and its capacity and upgrade requirements are handled under a separate Joint Powers Agreement.

The existing wastewater collection system within Glendale contains approximately 380 miles of underground wastewater pipelines. These pipelines range from 8 inches to 36 inches in diameter, with approximately 87% of the system being 8-inch. Wastewater is collected in these facilities and is conveyed primarily by gravity through a "trunk" wastewater pipeline system to regional interceptors for treatment at the Hyperion Treatment Plant (HTP) or the LAGWRP, with sludge discharged to the Hyperion System.

Wastewater flows are accumulated by the wastewater pipeline system in seven district drainage basins and then measured at prescribed locations prior to final discharge to the North Outfall Sewer (NOS), the primary trunk line owned and operated by the City of Los Angeles to convey flow to the HTP. In the last few years, the City installed permanent inline flow metering facilities to replace the permanent flume facilities that had served the City for 30 to 40 years. These metering stations provide ongoing flow data for billing considerations with the City of Los Angeles and are used as the basis of existing flow conditions in this Master Plan. (See Figure 2-2 for basin designations and outfall locations)

Given the projection of additional growth and newly allowable mixed use development in much of the downtown area, the City has established a focused need to assess the hydraulic capacity of the wastewater system. Accordingly, the focus of this Wastewater Master Plan Update is to perform a hydraulic evaluation of Glendale's wastewater facilities to establish a prioritized capital improvement program. The hydraulic evaluation is conducted through the development and calibration of a computerized hydraulic model. The model is used to evaluate the capacity of the existing and future system so that a comprehensive capital improvement program can be prepared. This activity has been necessitated by recent downtown development and the associated Downtown Specific Plan developed by the City.

The objectives of this Master Plan are to:

- Develop a calibrated hydraulic model of the wastewater system.
- Input the anticipated future land use conditions on the wastewater system, and evaluate the existing system's capability to convey existing and ultimate flows.
- In concert with City staff, develop appropriate design criteria for the evaluation of the system.
- Prepare cost estimates of the necessary improvements.
- Document this information in a letter report of findings in the form of a 2007 Wastewater Master Plan Update.

Through the conduct of these objectives, the general purpose for this planning effort is to assess those areas within the City that may be capacity limited facilities and provide a methodical plan for the improvement of these identified areas.

WASTEWATER SYSTEM FINDINGS AND RECOMMENDATIONS

The findings of this study are based on a comprehensive evaluation of available data and an analysis of the existing wastewater system's ability to meet existing and ultimate flows. These primary findings and recommendations are summarized herein to address the key elements of the Wastewater Master Plan Update. Additional minor recommendations are presented within this Master Plan document. The primary findings and recommendations are summarized as follows:

General System Findings and Recommendations

Through the conduct of the Master Plan, there are a number of general system findings and recommendations identified. A few of these key elements are provided in this section.

- Existing wastewater flows were derived by utilizing utility billing data to attach monthly water consumption to each individual parcel within the City. Return-to-sewer ratios (RTS) were applied based upon land use to determine sewer flows. These flows were calibrated to the flow monitoring information derived from the City's ongoing flow monitoring program.
- Several discussions were held with City staff regarding both the process and results of development of future wastewater flow projections. Based upon these discussions, future planning projections were developed based primarily on the recently completed Traffic Zone Analysis (TAZ) whereby future population and employment factors were developed for approximately 500 areas in the City. This baseline data was further modified to integrate additional development implications of the Disney Grand Central Creative Campus (GC3) project tributary to the Doran Pump Station and a decision to

calculate the loadings for all parcels in the DSP under both the TAZ and General Plan criteria and utilize the greater of the two values for future parcel level loadings in the downtown area.

- The results of this analysis projects the City's ultimate wastewater flows will increase to approximately 22 MGD, an increase of approximately 27% under ultimate buildout conditions.
- In addition to the projection of future increases in dry weather flows, the measured increase in flows during the rain storm event of February 23, 2005 was used to project future wet weather flows in the City's wastewater system. This event, classified as a 5-year storm, indicates that the City's collection system should be able to convey approximately 11 MGD of additional flow during a similar wet weather.
- Through the conduct of the Master Plan Update, it is recommended the City adopt new sewer design criteria. The two components of the new criteria are: a) depth to diameter criteria (d/D) - all pipelines greater than 16-inches should not exceed .67 d/D under future peak wet weather conditions, and pipelines less than or equal to 16-inch should not exceed .5 d/D, and b) wet weather criteria - the peak wet weather response factor is based on a 5-year storm, as measured in February 2005. These recommendations are based on the need to meet new State regulations for the use of a wet weather design criteria, the goal to minimize potential sanitary sewer overflows (SSO's), and discussions with City staff related to the cost and benefit of additional conveyance capacity.
- Given the magnitude of potential growth, the development and adoption of a revised Sewer Facility Charge is desirable to generate revenues commensurate with new development's impact on existing system capacity and provide for capital reinvestment. This new charge should also consider the cost implications of new capacity costs assessed to the City by the City of Los Angeles' through its Sewer Facility Charge program.

Collection and Pumping System Findings and Recommendations

The evaluation of the City's wastewater collection and pumping system is the foundation of the City's Wastewater Master Plan Update. The findings and recommendations provided herein are based on the results of the computerized hydraulic model, available information on system age/condition, and discussions with City staff. These findings and recommendations are summarized in this section.

- The City has an ongoing video inspection program that is designed to assess the condition of the wastewater collection system. In general, most of the City's collection system appears to be in generally good condition because of the City's strong maintenance, repair, replacement, and rehabilitation efforts.

- The majority of the City's wastewater collection system is composed of VCP sewer lines. VCP is a commonly used sewer pipeline material and is generally considered to provide reliable service for over 80 years. As one of the older municipalities in its region, the City's wastewater system contains many older pipelines. In fact, approximately half of the wastewater system is over 75 years old. While facility age in and of itself does not constitute a significantly deteriorated condition, it is an important factor in the development of a facility repair and replacement program. Accordingly, the City should correlate this information with a proactive video inspection program and the ongoing street resurfacing/reconstruction program to plan for the rehabilitation or replacement of these in the coming years.
- The results of the hydraulic evaluation indicate that the majority of the City's collection system has adequate capacity. However, under various current and future peak dry and peak wet weather conditions, approximately 74,400 feet was identified to have insufficient capacity to meet the City's design criteria. While the determination of actual footage to be improved may vary during pre-design when other pipe improvement considerations are included, the projection provides a framework for the magnitude of the City's potential pipeline improvement program requirements.
- The resulting pipelines with potential capacity limitations were segregated by drainage basin for subsequent prioritization, grouping, and final pre-design evaluation by the City during plan implementation. Table ES-1 reflects the estimated cost of these improvements to be approximately \$31 million. The general location of these facilities is depicted graphically in Figure ES-1.
- The City owns, operates, and maintains one wastewater pumping station, the Doran Street Wastewater Pumping Plant (lift station) that lifts sewage from an existing 18" trunk sewer passing under the Verdugo Wash Flood Control Channel. This facility was originally constructed sometime around 1930 as a below ground, bi-level facility. The last major reconstruction of this lift station was in 1982 when upper level and ground level structures were added. Capacity analysis of this facility indicated that future development north of the lift station will generate a peak flow of approximately 3 MGD. This flow value exceeds the estimated 2.5 MGD firm capacity for this facility, as well as the capacity of the existing 18" pipe beneath the Verdugo Channel feeding the lift station. These projected flows will also exceed the operational capacity of the existing wet well configuration.
- Given these capacity issues, future improvements will need to consider upsizing the 18" influent piping to 27", increasing wet well operational and emergency storage capacity by lowering the wet well invert elevation several feet, and upgrading the pump capacities. Implementation of these improvements to the existing facility does not appear to be practical or feasible. As such, this finding suggests that construction of a new, properly equipped and technically current lift station is a better alternative. Based on these factors and discussions with City staff, it is recommended that this facility be scheduled for replacement. The estimated costs of these improvements are approximately \$7.7 million, as shown in Table ES-1.

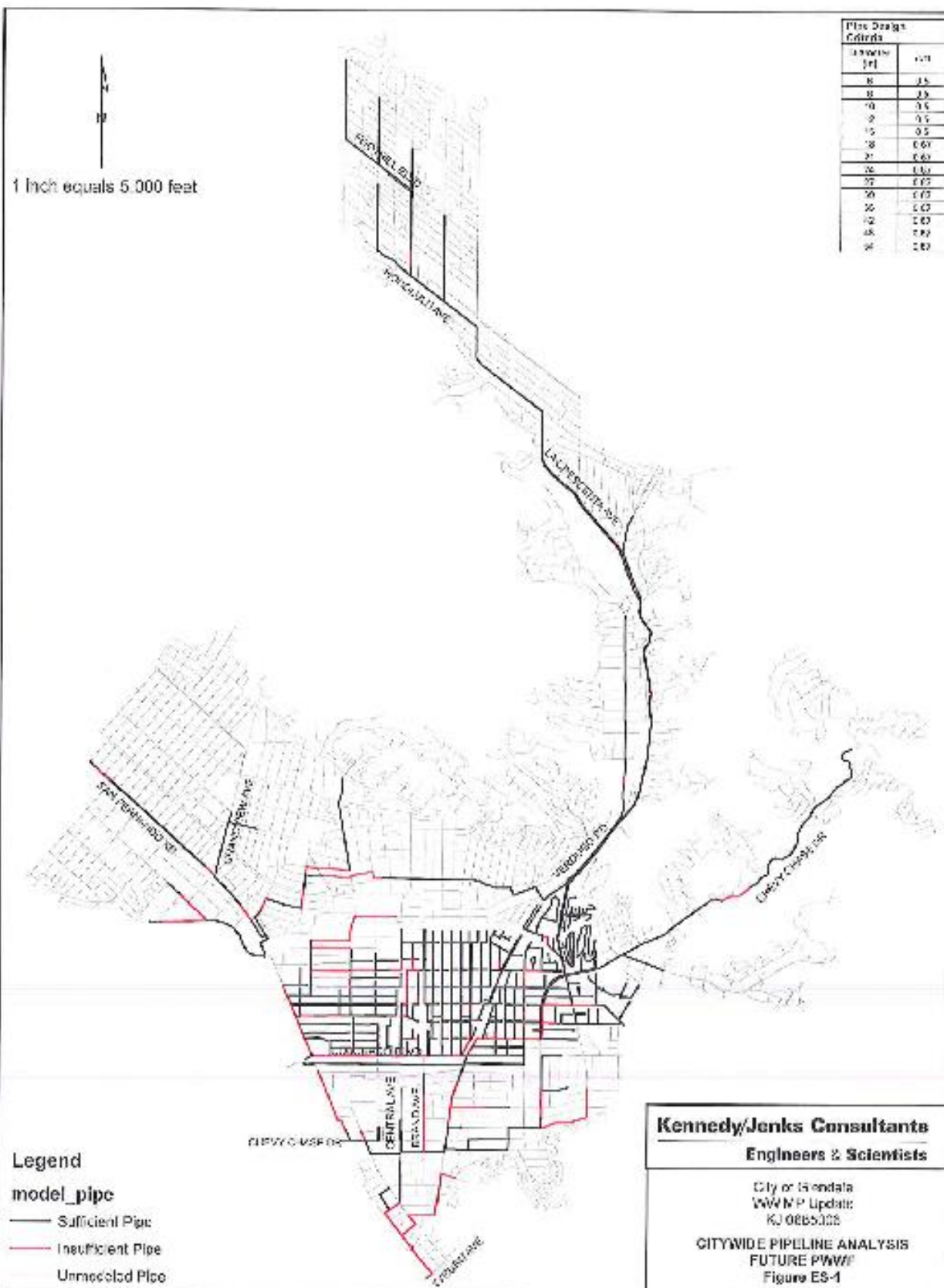
- Given the magnitude of these costs, discussions with City staff suggest that there are a number of factors still outstanding with the long-term strategy for this facility that may affect the final costs and disposition of this facility. These factors include: a) timing and magnitude of the additional flows from the Disney GC3 complex, b) ability to rehabilitate or replace Doran and the associated 18-inch influent pipeline at its exiting location to meet the ultimate demands, and c) potential relocation of this facility northwest of the Verdugo Wash on the Power Plant site and the construction of a new pipeline over the wash to eliminate the current 18-inch siphon under the wash. In consideration of these factors the City has programmed for the pre-design evaluation of this facility in the coming months. This evaluation, in conjunction with the resolution of the other institutional elements, will provide additional input in the final improvement plan and cost considerations for this important wastewater facility.

**TABLE ES-1
SUMMARY OF SYSTEM IMPROVEMENT COSTS**

PIPELINE IMPROVEMENT COSTS	FPWWF (ft.) ^(a)	FPWWF (\$'s) ^(a)
Colorado Flume	28,456	11,887,400
Chevy Chase Flume	12,512	4,978,800
Doran Pump Station Basin	3,178	1,439,000
Doran Flume	10,315	4,594,600
Elk Flume	3,781	1,447,700
Salem/San Fernando Flume	7,319	2,824,100
Tyburn Flume	8,846	3,856,500
Total Length & Cost of Deficient Pipelines – Future Conditions	74,407	\$30,808,000

DORAN PUMP STATION IMPROVEMENT COSTS	Estimated Cost (\$'s)
New Doran Pump Station	7,000,000
New 27" Pipeline Under the Verdugo Wash	700,000
Total New Doran Pump Station Improvement Costs	\$7,700,000

(a) FPWWF means future peak wet weather flow conditions.



City of Glendale
System Evaluation and Capacity Assurance Plan Summary

This document is intended to summarize the City of Glendale's System Evaluation and Capacity Assurance Plan as detailed in the City's SSMP. For more detailed information please refer to Chapter 8 of the SSMP (page 33).

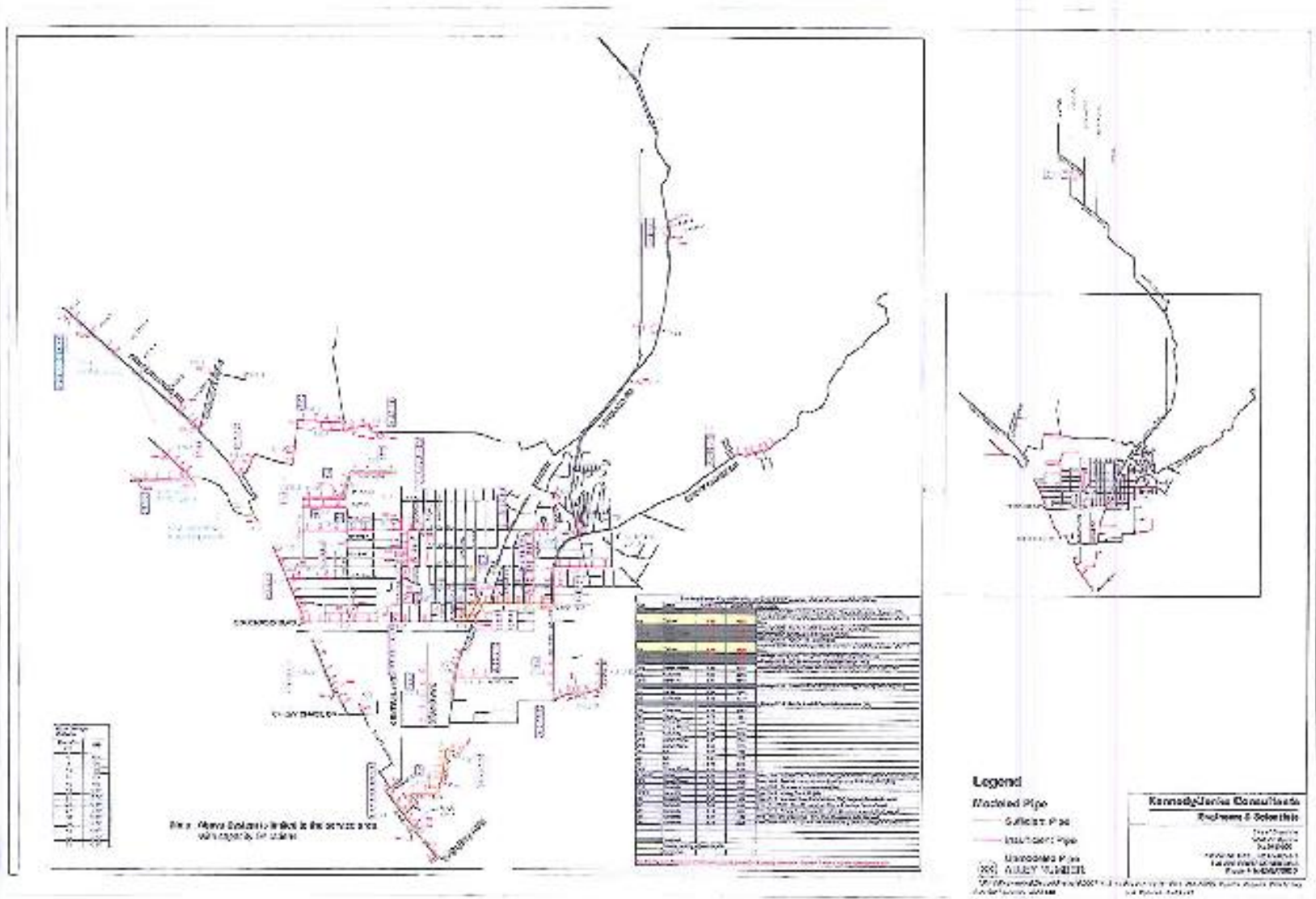
The attached PDF File, titled "SS Pipeline Upgrade Priority Model 9-11-13", summarizes the sewer system pipeline segments that the City's 2007 Master Plan Update (attached also) identified as deficient. Further, the table in the bottom center of the page clearly shows the pipes that have already been upsized and are scheduled to be upsized (including the ones currently in design and construction). The City's Engineering Division has prioritized the lines that were deemed deficient in the Master Plan Update to better allocate monetary resources. Thus, pipeline segments that have a high priority number are upsized after the segments with lower priority numbers. Very low priority numbers represent pipes that are currently flowing above 0.5 d/D (or 0.67 d/D for larger lines) or very close to these design criteria.

It is important to note that the 2007 Hydraulic Model assumed maximum development in the downtown area over a 20-plus year time horizon. Therefore, the attached PDF File ("SS Pipeline.....") is representative of future sewer flows in the year 2030 after maximum development of each parcel. So, the new design criteria of 0.5 d/D and 0.67 d/D is applied to these future flows during a 5-year rainstorm (under the maximum build out scenario). We believe the City is being extremely conservative in the identification of deficient sewer lines for the following reasons:

- 1) It is unrealistic to assume that every parcel in the downtown area will eventually be developed/redeveloped to its maximum density (per the zoning code and General Plan).
- 2) Most cities have adopted 0.75 d/D as their design criteria to ensure adequate capacity and, again, most cities apply this design criteria to peak dry weather flows not future wet-weather flows.
- 3) Using 0.5 d/D and 0.67 d/D (in the year 2030) during the future peak dry scenario is already extremely conservative, applying this criteria to the future peak wet scenario is, quite frankly, unheard of.

During the City's meeting with Regional and State Board Staff on 9/10/13, a question was asked if Glendale ever performed an Inflow and Infiltration ("I and I") study. The answer to this question is, "yes." The City's original 1998 Wastewater Master Plan included an extensive wet-weather sewer flow monitoring program to help identify areas (if any) of the city experiencing significant inflow and infiltration problems. This data was used to complete the 2007 Master Plan Update and to calibrate the model using the City's seven outfall monitoring locations at the Los Angeles border (15-minute, real-time flow data was available for every rain event since 2004).

In short, the City of Glendale's sewer system currently has adequate sewer capacity, and thanks to the City's proactive approach in the area of hydraulic modeling, will have more than adequate sewer capacity in the future.



Station	Length (ft)	Material	Notes
1+00	100	48" Dia. RCP	Under 10th St
2+00	100	48" Dia. RCP	Under 10th St
3+00	100	48" Dia. RCP	Under 10th St
4+00	100	48" Dia. RCP	Under 10th St
5+00	100	48" Dia. RCP	Under 10th St
6+00	100	48" Dia. RCP	Under 10th St
7+00	100	48" Dia. RCP	Under 10th St
8+00	100	48" Dia. RCP	Under 10th St
9+00	100	48" Dia. RCP	Under 10th St
10+00	100	48" Dia. RCP	Under 10th St
11+00	100	48" Dia. RCP	Under 10th St
12+00	100	48" Dia. RCP	Under 10th St
13+00	100	48" Dia. RCP	Under 10th St
14+00	100	48" Dia. RCP	Under 10th St
15+00	100	48" Dia. RCP	Under 10th St
16+00	100	48" Dia. RCP	Under 10th St
17+00	100	48" Dia. RCP	Under 10th St
18+00	100	48" Dia. RCP	Under 10th St
19+00	100	48" Dia. RCP	Under 10th St
20+00	100	48" Dia. RCP	Under 10th St
21+00	100	48" Dia. RCP	Under 10th St
22+00	100	48" Dia. RCP	Under 10th St
23+00	100	48" Dia. RCP	Under 10th St
24+00	100	48" Dia. RCP	Under 10th St
25+00	100	48" Dia. RCP	Under 10th St
26+00	100	48" Dia. RCP	Under 10th St
27+00	100	48" Dia. RCP	Under 10th St
28+00	100	48" Dia. RCP	Under 10th St
29+00	100	48" Dia. RCP	Under 10th St
30+00	100	48" Dia. RCP	Under 10th St
31+00	100	48" Dia. RCP	Under 10th St
32+00	100	48" Dia. RCP	Under 10th St
33+00	100	48" Dia. RCP	Under 10th St
34+00	100	48" Dia. RCP	Under 10th St
35+00	100	48" Dia. RCP	Under 10th St
36+00	100	48" Dia. RCP	Under 10th St
37+00	100	48" Dia. RCP	Under 10th St
38+00	100	48" Dia. RCP	Under 10th St
39+00	100	48" Dia. RCP	Under 10th St
40+00	100	48" Dia. RCP	Under 10th St
41+00	100	48" Dia. RCP	Under 10th St
42+00	100	48" Dia. RCP	Under 10th St
43+00	100	48" Dia. RCP	Under 10th St
44+00	100	48" Dia. RCP	Under 10th St
45+00	100	48" Dia. RCP	Under 10th St
46+00	100	48" Dia. RCP	Under 10th St
47+00	100	48" Dia. RCP	Under 10th St
48+00	100	48" Dia. RCP	Under 10th St
49+00	100	48" Dia. RCP	Under 10th St
50+00	100	48" Dia. RCP	Under 10th St
51+00	100	48" Dia. RCP	Under 10th St
52+00	100	48" Dia. RCP	Under 10th St
53+00	100	48" Dia. RCP	Under 10th St
54+00	100	48" Dia. RCP	Under 10th St
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58+00	100	48" Dia. RCP	Under 10th St
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71+00	100	48" Dia. RCP	Under 10th St
72+00	100	48" Dia. RCP	Under 10th St
73+00	100	48" Dia. RCP	Under 10th St
74+00	100	48" Dia. RCP	Under 10th St
75+00	100	48" Dia. RCP	Under 10th St
76+00	100	48" Dia. RCP	Under 10th St
77+00	100	48" Dia. RCP	Under 10th St
78+00	100	48" Dia. RCP	Under 10th St
79+00	100	48" Dia. RCP	Under 10th St
80+00	100	48" Dia. RCP	Under 10th St
81+00	100	48" Dia. RCP	Under 10th St
82+00	100	48" Dia. RCP	Under 10th St
83+00	100	48" Dia. RCP	Under 10th St
84+00	100	48" Dia. RCP	Under 10th St
85+00	100	48" Dia. RCP	Under 10th St
86+00	100	48" Dia. RCP	Under 10th St
87+00	100	48" Dia. RCP	Under 10th St
88+00	100	48" Dia. RCP	Under 10th St
89+00	100	48" Dia. RCP	Under 10th St
90+00	100	48" Dia. RCP	Under 10th St
91+00	100	48" Dia. RCP	Under 10th St
92+00	100	48" Dia. RCP	Under 10th St
93+00	100	48" Dia. RCP	Under 10th St
94+00	100	48" Dia. RCP	Under 10th St
95+00	100	48" Dia. RCP	Under 10th St
96+00	100	48" Dia. RCP	Under 10th St
97+00	100	48" Dia. RCP	Under 10th St
98+00	100	48" Dia. RCP	Under 10th St
99+00	100	48" Dia. RCP	Under 10th St
100+00	100	48" Dia. RCP	Under 10th St



Wastewater Crew Tailgate Safety Meetings and Topics for 2013

Notes:

1. All meetings are on Mondays unless otherwise indicated. 6: 45 A.M. to 7:15 A.M.
2. Topic Area Codes:

Topic Code	Area	No. Mtgs.	Topic Code	Area	No. Mtgs.
PPE	PPE, Operation Specific	3/11	GTSM	General Trade & Safety Manual	1/2
HSKP	Housekeeping, Shop & Worksite - Whly Assign	/1	CE	Core Equipment	1/4
SBM	Smart Body Management Daily Crew Stretching	/1	WW	Specific Trade Techniques & Updates	5/4
HD	Harassment & Discrimination in the Workplace	/1	VEH	Vehicle Updates and Traffic Control	1/4
MSDS	Material Safety Data Sheets and Hazchem	/1	EF	Environmental Factors	2/5
APM	Administrative Policy	1			

3. We will keep these meetings in our shop, informal and relaxed. All of us have valuable experience and insight that can help each one of us to **get home in one piece one day at a time.**

Thanks for your interest in safety.....Bryan, Roy, John

Rev. 09/13/13 JNH

Note: Grayed-out topics are completed as of the date of the revision.

<u>Date</u>	<u>Topic</u>	<u>Topic Area</u>	<u>Discussion Leader</u>
1/30/13	New PD Unit (#4572) Familiarization	CE	Carey Olecott from Haaker
2/6/13	Confined Spaced Entry and Rescue Drill / Critic	PPE/ WW	David Martinez
2/21/13	Near Term Pump Station Alarm/ SSO reporting Responsibility	WW	John Hicks
2/27/13	4/13/12- Review of Audit by State Water Control Board and Response/ Care for tools and Equipment	WW/CE	John Hicks
3/13/13	SSO Drill volume Calculations Review 3/15/13	WW	David Martinez
3/16/13	SSO Wetted Street Volume Math Refresher	WW	Dan Ori
3/27/13	Pump Lifting SOP at the Doran Lift Station	PPE/ WW	David Martinez

[illegible]

City of Glendale
Public Works Maintenance Services, Street Department

WEEKLY SAFETY TRAINING MEETING

Crew Operation: **WASTEWATER (Sewers)**

Location: Wastewater Shop

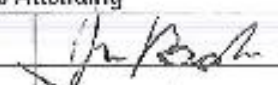
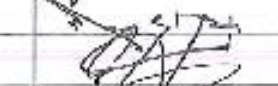
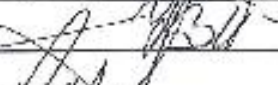
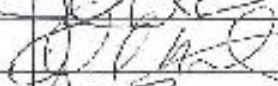
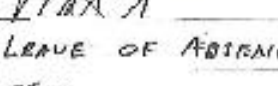
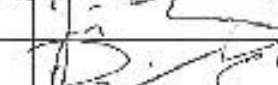
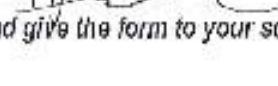
Date: 3/16/13

Subject: SSO Wetted Street Volume Math Refresher

Presenter: Daniel Ori

This tailgate was used to instruct and refresh the crew on various methods of wetted street volume mathematics. The tailgate consisted of using geometry to determine the three dimensional area of a right triangle, isosceles triangle, and a square. Then converting the areas of the shapes to gallons of water captured to gain an accurate estimate of wastewater prevented from escaping into a fresh water drainage channel.

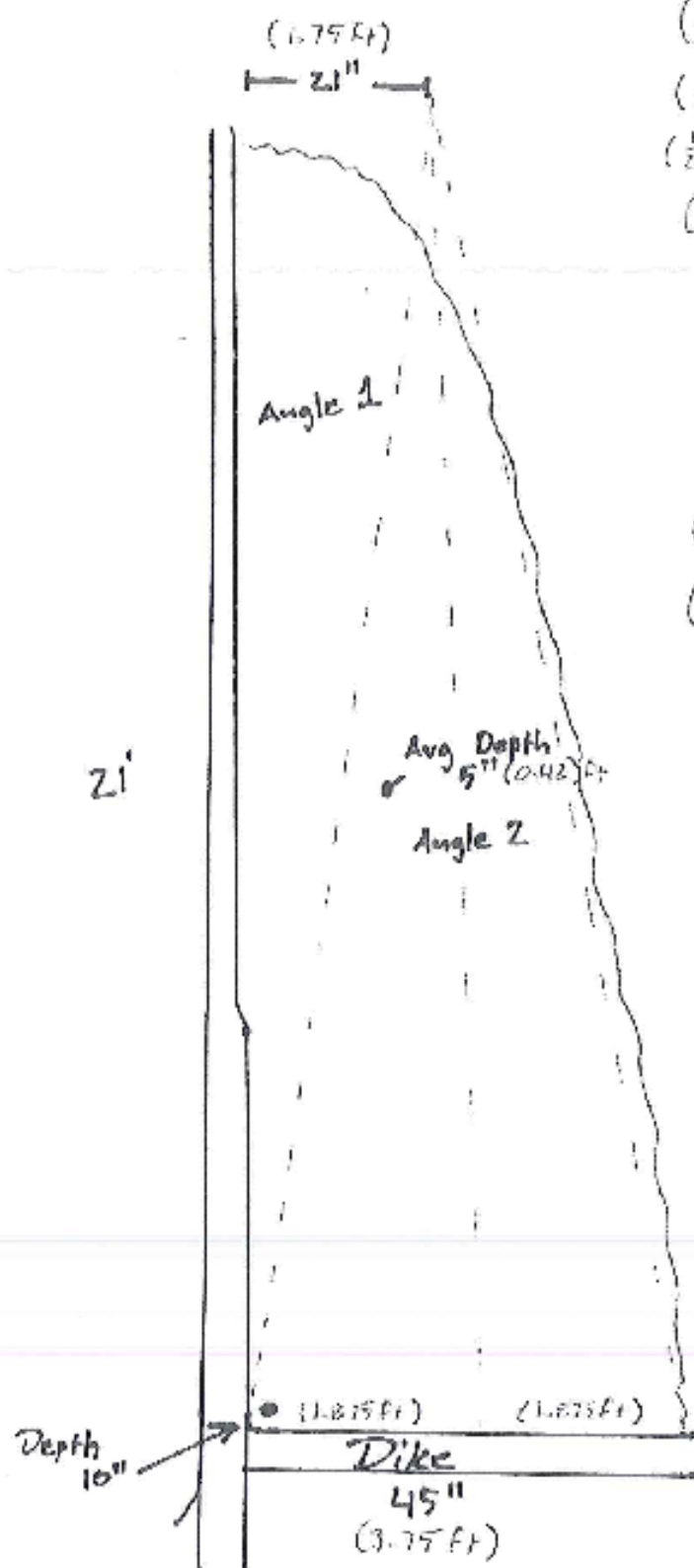
Signatures of Employees Attending

Jason Badgley		Bryan Oriaga	
James Garcia		Armin Reyes	
Afonso Herrera		Roy Rodriguez	
Brian Hernandez		Vardan Tagesyan	
John Hicks		Rod Torres	
Dave Martinez		J. Mike Urquiza	LEAVE OF ABSENCE
Jim McCloskey		Nery Villagran	
Dan Ori			

Complete all sections and give the form to your supervisor.

Signature _____

Gibbs Free Energy: $\Delta G = \Delta H - T\Delta S$



Angle 1

$$\left(\frac{1}{2}\right)(L \times W) \times D$$

$$\left(\frac{1}{2}\right)(6.75 \times 21) \times 0.42$$

$$\left(\frac{1}{2}\right)(36.75 \text{ ft}) \times 0.42 \text{ ft}$$

$$\left(\frac{1}{2}\right)(15.4) = 7.72 \text{ ft}^3$$

$$7.72 \text{ ft}^3 \times 7.48 = 58 \text{ Gals}$$

Angle 2

$$\left(\frac{L}{2} \times W\right) \times D$$

$$\left(\frac{3.75}{2} \times 21\right) \times 0.42$$

$$(1.875 \times 21) \times 0.42$$

$$39.4 \times 0.42$$

$$16.5 \text{ ft}^3$$

$$16.5 \text{ ft}^3 \times 7.48 = 124 \text{ Gals}$$

Total Captured

$$\text{Angle 1} + \text{Angle 2} = \text{Total Gals}$$

$$58 \text{ Gals} + 124 \text{ Gals} = 182 \text{ Gals}$$

182 Gallons Captured

City of Glendale
Public Works Maintenance Services, Street Department

WEEKLY SAFETY TRAINING MEETING

Crew Operation: **WASTEWATER (Sewers)**

Location: Wastewater Shop

Date: 3/13/13

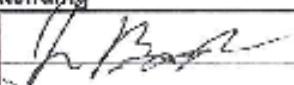
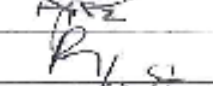
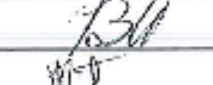
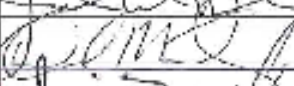
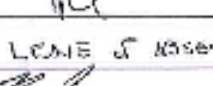
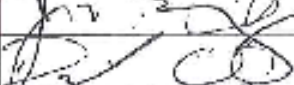
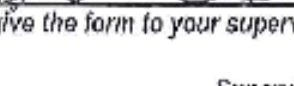
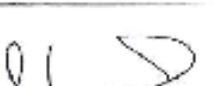
Subject: S.S.O. Drill Volume Calculation Review 3/5/13

Presenter: David Martinez

When doing Volume Calculations make sure to check your work and make sure you get credit for all Volume Captured.

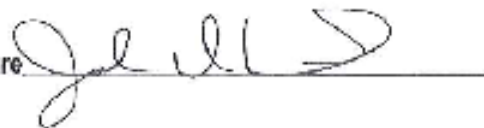
See attachment.

Signatures of Employees Attending

Jason Badgley		Bryan Ortega	
James Garcia		Armin Royce	
Alfonso Herrera		Roy Rodriguez	
Brian Hernandez		Vardan Tagosyan	
John Hicks		Rod Torres	
Dave Martinez		J. Mike Urquiza	
Jim McCloskey		Nery Villagran	
Dan Ori			

Complete all sections and give the form to your supervisor.

Supervisor's Signature



**City of Glendale California
Wastewater Maintenance Section
Rev. 11/4/10
SSO Volume Estimating Worksheet**

Did an overflowing manhole reach a storm drain?

Yes/No
(circle one)

If yes – Go to Step 1.

If no – perform wetted street volume calculations on reverse.

Step 1. Determine Estimated Spill Volume to Street from overflowing Manhole.

A. Estimated spill start date/time:

3/5/13 1831
MM/DD/YY Time 24 hr

B. Estimated spill end date/time:

3/5/13 1953
MM/DD/YY Time 24 hr

C. Total spill time in minutes = B. – A.

82
Minutes

D. Estimated Overflow Rate

10
Reference GPM
(P, A, B, C)

References

1. Pictures (P), 2. Table A, 3. Table B, 4. Table C

E. Estimated Spill Volume to Street = 82 X 10 = 820
C. D. Gals. ✓

Did sewer overflow inside a building or residence?

Yes/No
(circle one)

If yes – Go to Step 2.

If no – Go to Step 3.

Step 2. Estimate Spill Volume to Building or Residence.

F. Determine total wetted floor area in sq. feet.

1. Room Inventory	Length (ft.)	X	Width (ft.)	=	Area (ft. ²)
a. _____	_____		_____	=	_____
b. _____	_____		_____	=	_____
c. _____	_____		_____	=	_____
d. _____	_____		_____	=	_____
e. _____	_____		_____	=	_____

G. Total wetted floor area (add 1. a thru 1. e.)

= _____

Volume Estimating Worksheet (page 2)

H. Estimated average depth of wetted floor in inches = _____
(in.)

Note: If can't actually measure, make a reasonable assumption 1/8" - 1/2".

I. Convert depth in inches to ft. $H. / 12$ = _____
(ft.)

J. Estimated Spill Volume (Building or Residence) = $G. \times I.$ = _____
(ft³)

K. Convert Estimated Spill Volume (Building or Residence) to gals.

$J. \times 7.48$ = _____
(gals.)

Step 3. Determine Total Estimated Spill Volume

L. Total Estimated Spill Volume = $E. + K.$ = 820
(gals.)

Step 4. Determine Estimated Volume of Spill Vacuum Recovered

M. Estimated Vacuum Recovery Start date/time: 3/5/13 1945
MM/DD/YY Time 24 hr

N. Total Vacuum Recovery Time in minutes $B. - M.$ = 8
(mins.)

O. Est. Volume of Spill Vacuum Recovered = $\frac{N.}{D.} \times 10$ = 80
(gals.)

Step 5. Estimated volume of spill that reached surface water, drainage channel, or not recovered from storm drain:

P. [Est. Spill Volume to Street] - [Est. Volume of Spill Vacuum Recovered] - [Est. Spill Volume Captured] =

$E. - O. - \text{Volume Captured (below)}$ = 673
(gals.)

Determine Wetted Street Volume or Volume Captured

1. Attach copy of sketch from stoppage report.

Length (L) = 18 ft.

Width (W) = 6 ft.

Depth (D) = Average Observed (in.) = 2 / 12 = .166 ft.

wetted street volume = $\frac{L}{1} \times \frac{W}{1} \times \frac{D}{1} = 17.928 \text{ ft}^3 \times 7.48 = 134.1 \div 2 = 67.05$
Gals.

Depth Information in Ft.

1/8" = 0.01 FT

1/4" = 0.021 FT

3/8" = 0.031 FT

City of Glendale
Public Works Maintenance Services, Street Department
WASTEWATER TRAINING MEETING

Crew Operation: **WASTEWATER** (Sewers)

Location: Wastewater Shop

Date: 08/29/13

Subject: Volume Estimate and Field Worksheet for 8/28/13 SSO at Rock Glen adjacent 2Fwy.

Presenter: John Hicks

Volume Estimation Methods:

1. Total volume based on combined overflow rate of two adjacent manholes (100 gpm + 50 gpm) and elapsed time.
2. Overflow rate from CWEA Southern Sections Collection Systems Committee chart.
3. Subtracted:
 - a. Amt. vacuum recovered on scene - overflow rate x time between commencement of vacuum recovery and stoppage relief.
 - b. Volume of liquid estimated to have been recovered from receiving separate storm drain by vacuum truck. Operator's assessment of level in combo unit debris bin and known cylindrical dimensions of bin.

See SSO Volume Estimating and Field Worksheets attached.

Signatures of Employees Attending

John Hicks		Bryan Ortega	
Jason Badgley	Administrative Leave	Armin Reyes	
James Garcia		Roy Rodriguez	
Alfonso Herrera		Vardan Tagesyan	
Brian Hernandez		Rod Torres	
Dave Martinez		J. Mike Urquiza	
Jim Mc Closkey		Nery Villagran	
Daniel Ori			

Complete all sections and give the form to your supervisor.

Supervisor's Signature _____

Roy F. Rodriguez

City of Glendale California
Wastewater Maintenance Section
 Rev. 11/4/10
SSO Volume Estimating Worksheet

Did an overflowing manhole reach a storm drain?

Yes/No
(circle one)

If yes – Go to Step 1.

If no – perform wetted street volume calculations on reverse.

Step 1. Determine Estimated Spill Volume to Street from overflowing Manhole.

A. Estimated spill start date/time:

08/28/13 08:08
MM/DD/YY Time 24 hr

B. Estimated spill end date/time:

08/28/13 08:34
MM/DD/YY Time 24 hr

C. Total spill time in minutes = B. – A.

26
Minutes

D. Estimated Overflow Rate

P
Reference
(P, A, B, C)

150
155
GPM

References

1. Pictures (P), 2. Table A, 3. Table B, 4. Table C

E. Estimated Spill Volume to Street =

26 x 155 = 4030
C. D. Gals.

JNH
9.12.13
* Only Recovered
3 mins of
100 GPM
from MH # 030413
3900

Did sewer overflow inside a building or residence?

Yes/No
(circle one)

If yes – Go to Step 2.

If no – Go to Step 3.

JNH
9.12.13
SEE NOTE
ON PL. 1 OF
FIELD WORKSHEET

Step 2. Estimate Spill Volume to Building or Residence.

F. Determine total wetted floor area in sq. feet.

1. Room Inventory	Length (ft.)	x	Width (ft.)	=	Area (ft. ²)
a. _____	_____		_____	=	_____
b. _____	_____		_____	=	_____
c. _____	_____		_____	=	_____
d. _____	_____		_____	=	_____
e. _____	_____		_____	=	_____

G. Total wetted floor area (add 1. a thru 1. e.)

= _____

Volume Estimating Worksheet (page 2)

H. Estimated average depth of wetted floor in inches = _____ (in.)

Note: If can't actually measure, make a reasonable assumption 1/8" - 1/2"

I. Convert depth in inches to ft. $H. / 12$ = _____ (ft.)

J. Estimated Spill Volume (Building or Residence) = $G. \times I.$ = _____ (ft³)

K. Convert Estimated Spill Volume (Building or Residence) to gals.

$J. \times 7.48$ = _____ (gals.)

Step 3. Determine Total Estimated Spill Volume

L. Total Estimated Spill Volume = $E. + K.$

3900 ~~4030~~ + 0

3900
= ~~4030~~
(gals.)

9.12.13

Step 4. Determine Estimated Volume of Spill Vacuum Recovered

M. Estimated Vacuum Recovery Start date/time: 08/28/13 08:31
MM/DD/YY Time 24 hr

N. Total Vacuum Recovery Time in minutes $B. - M.$ = 3 (mins.)

O. Est. Volume of Spill Vacuum Recovered = $\frac{3}{N.} \times \frac{100}{D.} = \frac{300}{1}$ (gals.)

Step 5. Estimated volume of spill that reached surface water, drainage channel, or not recovered from storm drain:

P. [Est. Spill Volume to Street] - [Est. Volume of Spill Vacuum Recovered] - [Est. Spill Volume Captured] =

3900
~~4030~~ - 723 = 3177
E. - O. - Volume Captured (below) = 3307 (gals.)

9.12.13

Determine Wetted Street Volume or Volume Captured

1. Attach copy of sketch from stoppage report.

Length (L) = _____ ft.

Width (W) = _____ ft.

Depth (D) = Average Observed (in.) = _____ / 12 = _____ ft.

wetted street volume = _____ $\times$ _____ $\times$ _____ = _____ ft.³ $\times 7.48$ = _____ Gals.

Depth Information in Ft.

1/8" = 0.01 FT

1/4" = 0.021 FT

3/8" = 0.031 FT

City of Glendale California
Wastewater Maintenance Section
Rev. 12/15/11
SSO Field Worksheet

Location of SSO: 1606 Rockglen Ave, Lincoln
(closest street address to overflow/cross street)

Date and time sanitary sewer system agency (Time Maintenance Services was informed)
was notified or discovered spill: 08/28/13 08:08
MM/DD/YY Time 24 hr

Estimated spill start date/time: 08/28/13 08:08
(Same as time immediately above unless you have reliable info of earlier start) MM/DD/YY Time 24 hr

Estimated operator arrival date/time: 08/28/13 08:25
MM/DD/YY Time 24 hr

Spill appearance point (Check one):

- ☐ Building or structure
- ☐ Force main or pressure sewer
- ☐ Gravity sewer
- ☒ Manhole
- ☐ Other sewer system structure
- ☐ Pump station
- ☐ Other (Specify)

1606 Rockglen Ave
MH # 030413 (South Side of Street) = 100 GPM
MH # 030412 (North Side of Street) = 50 GPM
L.A. City Side 5 GPM

Private lateral spill?

If no - move on to Estimated spill end date/time:

If yes - move on to County Health Department notification If private lateral spill reached public right of way. No further notification is required. Clean-up sewage on public right of way. Notify property owner/resident of requirement to correct or risk water shutoff. Private lateral spills are NOT SSO's as of this revision.

(circle one) POSSIBLE FOR
Yes/No Yes C&G
CINQS Report
for this event

JNR
9-2-13

Estimated spill end date/time: 08/28/13 08:34
MM/DD/YY Time 24 hr

Health Department notified within 15 mins of arrival on scene? (circle one) Yes/No Yes

24 Hour Number (213) 974-1234

Note: Health Dept. Notification required for all SSO's even if they never make it to a public right of way.

Time County Health Department notified: 08/28/13 08:34

Operator # _____ Ticket # 2588541 MM/DD/YY Time 24 hr

8/29/13 14:35
Updated with Continue on Reverse
Becky (626) 430-5365

SSO Field Worksheet

(page2)

Spill response activities (Check all that apply):

- ☒ Cleaned-up (mitigated effects of spill)
- ☒ Contained all or a portion of spill
- ☐ Inspected sewer using CCTV to determine cause *On Schedule for 8/30/13*
- ☒ Restored flow
- ☒ Returned all or a portion of the spill to the sanitary sewer system
- ☐ Other (Specify) *Contracted City of LA (Doris Yard)*

Answer the following three questions about this event:

#1. Is the spill volume greater than or equal to 1000 gals? Yes/No No

#2. Did the spill discharge to a drainage channel or surface water? Yes/No No

#3. Did the spill discharge to a storm drain pipe that was not fully Captured and returned to the sanitary sewer system? Yes/No No

Did you answer "yes" to any of the above questions? Yes/no No

If Yes SSO is----->

Category 1

If No SSO is----->

Category 2
(circle one)

Final spill destination (Check all that apply):

- ☐ Building or structure
- ☐ Other paved surface
- ☐ Storm drain
- ☐ Street/curb and gutter
- ☐ Surface water
- ☐ Unpaved surface
- ☐ Other (Specify) _____

Estimated total spill volume: (Attach Calculations) A. 3900 gallons 4036 JW11 9.12.13

Estimated volume of spill recovered: B. 723 gallons

Estimated volume of spill that reached surface water, drainage channel, or not recovered from storm drain: C. 3177 3307 gallons JW11 9.12.13

Did you answer yes to either question #2 or #3 above?..... Yes/No No

If Yes call OES within 2 hrs of time agency notified or discovered spill.

OES Phone # 1-800-852-7550

OES Control # 13-5365 Time OES notified: 08/28/13 10:08
MM/DD/YY Time 24 hr

Call supervisor to review circumstances and reporting.

Supervisor called: Hicks present at the MM/DD/YY Time 24 hr
Special circumstances/Comments: Scene.

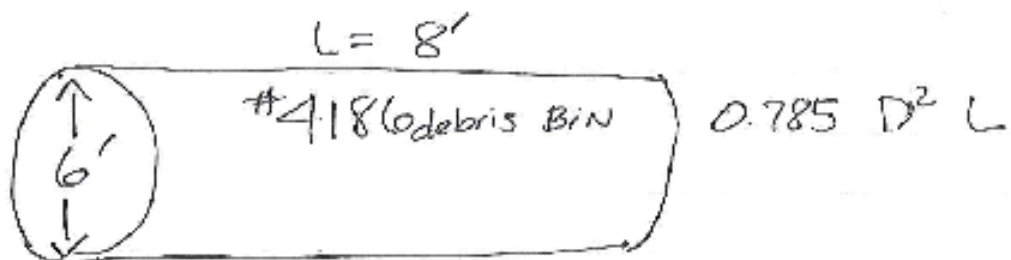
Attach This Worksheet to The Stoppage Report Package for This Event

8/29/13 14:38

Updated CAL EMA Spoke to Mr. Grady

Supplemental for 1606 Rock Glen SSO 8/28/13

Total Volume of Overflow
= 4030 gals



$$\begin{aligned} &= 0.785 (6 \text{ ft})^2 (8 \text{ ft}) \\ &= 0.785 (36 \text{ ft}^2) (8 \text{ ft}) \\ &= 0.785 (288 \text{ ft}^3) \\ &= 226 \text{ ft}^3 \end{aligned}$$

f(1/4) debris bin

$$(1/4) 226 \text{ ft}^3 = 56.5 \text{ ft}^3$$

$$56.5 \text{ ft}^3 \times 7.48 \text{ gals} = 422.6 \text{ gals}$$
$$\frac{422.6 \text{ gals}}{\text{ft}^3} = 423 \text{ gals}$$

$$\% = \frac{\text{Volume Recovered}}{\text{Total SSO VOL}} = \frac{723}{4030 \text{ } 3900}$$

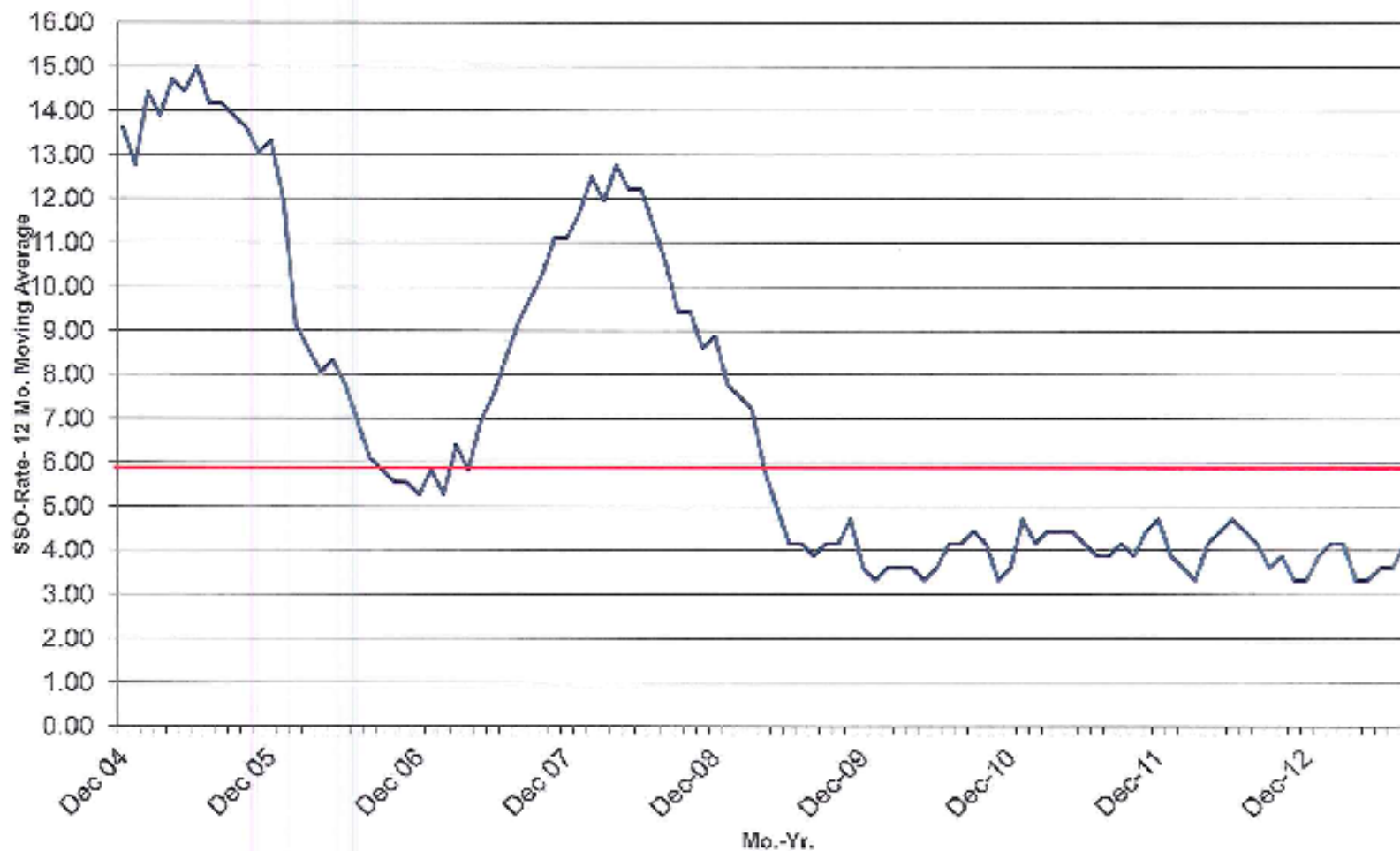
$$= .179 \times 100 = 17.9\%$$

18.5 %

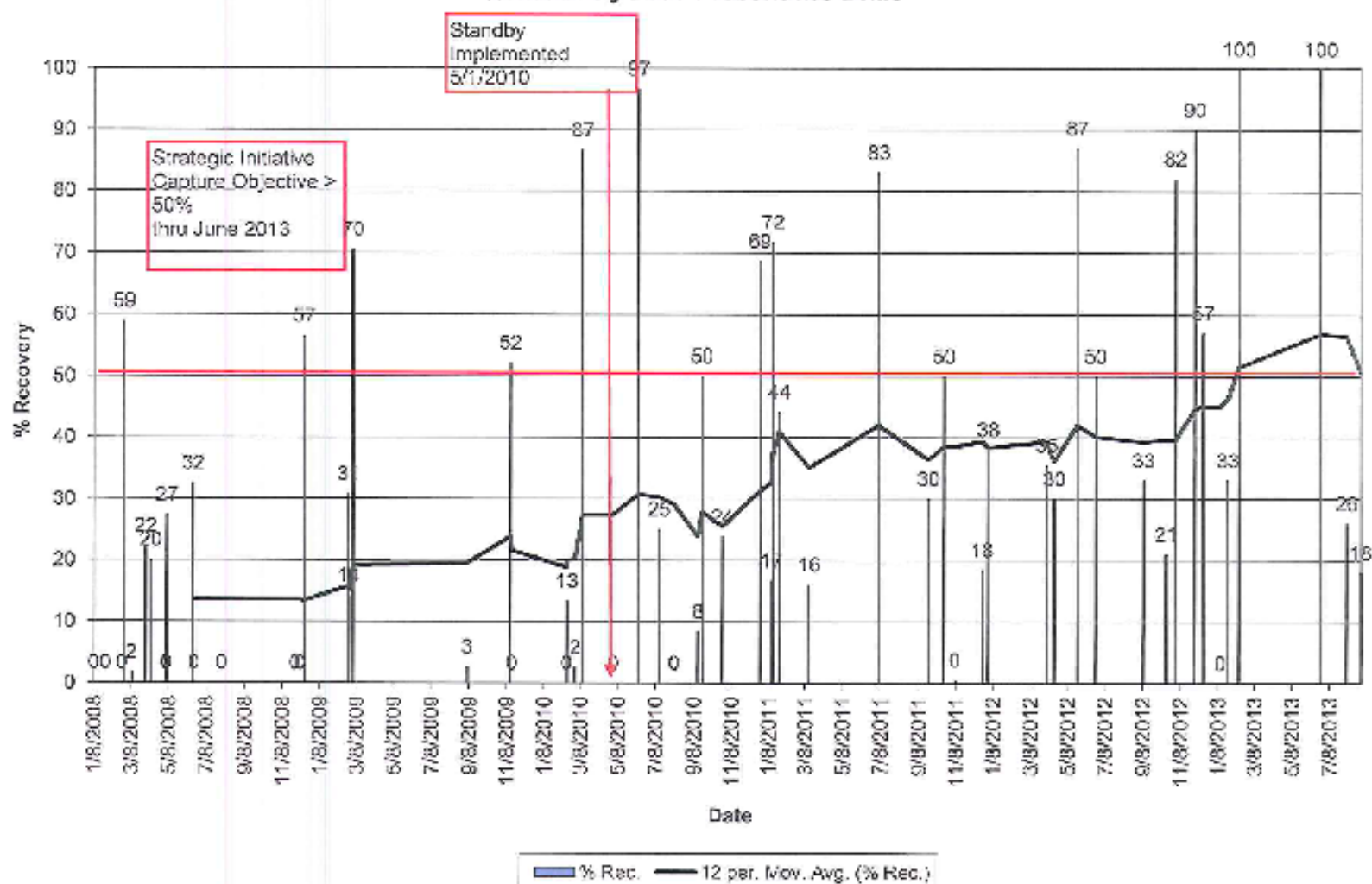
JNN

9.12.13

Glendale, California
Sanitary Sewer Overflows (SSO's) Per 100 Miles Sanitary Sewer-12 Month Moving Average
Since December 2004



% Recovery 2008-Present w/o Drills





CITY OF GLENDALE, CALIFORNIA
Public Works Department
MAINTENANCE SERVICES DIVISION

541 W. Choccy Chase Drive
Glendale, California 91204-1813
(818) 548-3950, Fax (818) 547-0637
www.ci.glendale.ca.us

APPENDIX N- Infrastructure Repair List

The following working and historical documents constitute the contents of this appendix but are Located or stored as follows:

1. Electronic copy of the master Infrastructure Repair List spreadsheet can be found at:

**G:\1-WASTEWATER\YYYY\Crew Supervisor & WW Supt. Shared \ WW
Infrastructure Repairs MM_DD_YY (date of last update).**

Note to SWRCB: This attachment sent as follow-up to the 9/10/13 meeting between SWRCB and City of Glendale shows completed spot repairs only

Street & Field Services

Street ♦ Sidewalk ♦ Forestry ♦ Sewer ♦ Storm Drains ♦ Traffic Signs ♦ Street Sweeping ♦ Parking Meters

Case Number: 100-11160

Year 12

SS Collection System Corrosion - Maintenance Services & Engineering Coordination

Downloaded At: 11:52 11 September 2009

[illegible]

58 Collection System, Chapter 22 - Maintenance Methods & Engineering Calculations

324 *Journal of Management Inquiry* 20(3)[illegible]



Los Angeles Regional Water Quality Control Board

Meeting Agenda
City of Glendale Collection System
Order Nos. R4-2006-0003-DWQ and 2008-0002-EXEC

Date: September 10, 2013

Time: 11:00 am

Item	Description	Purpose
1	Introductions	▪ Regional and State Board Staff ▪ City of Glendale Staff ▪ Review agenda
2	Overview	▪ April 30, 2012 Inspection ▪ January 25, 2013 NOV ▪ February 21, 2013 Glendale's Response to NOV
3	Current Operation	▪ Additional spills since December 15, 2012 ▪ Plans to implement CMMS in Public Works following Glendale Water and Power implementation
4	Next Steps	▪ Additional questions/concerns ▪ Review Action Items

Meeting Attendance Sheet

10 September 2013

Location: California Regional Water Quality Control Board

Los Angeles Region

320 West 4th Street, Suite 200, Los Angeles, CA 90013

Subject: Meeting with City of Glendale, WDID No. 4SSO10388

	Name	Agency/ Company/ or Resident	Email Address	Telephone
1	Russ Colby	RWQCB-LA	russ.colby@waterboards.ca.gov	(213) 620-6373
2	Hogg Hogg	"	hmarley@waterboards.ca.gov	(213) 620-6375
3	JAMES FISHER	SWRUB/OE/SIU	J.FISHER@WATERBOARDS.CA.GOV	(916) 341-5548
4	Patsy Yuen	LA-RWQCB	Patsy.yuen@waterboards.ca.gov	213-620-6369
5	Mayumi Okamoto	SWRUB/OE	Mayumi.Okamoto@waterboards.ca.gov	(916) 341-5674
6	Bobby Aldesco	COG	baldesco@ci.glendale.ca.us	(818) 548-2080
7	John N. Hicks	" "	jnhicks@ci.glendale.ca.us	(818) 550-3417
8	Dan Hardgrove	" "	dhardgrove@ci.glendale.ca.us	818-548-3950
9	MAURICA DILLATAQUANA	COG	mdillataquan@ci.glendale.ca.us	(818) 937-8219
10				
11				

Hicks, John

From: Hardgrove, Daniel
Sent: Monday, February 25, 2013 10:36 AM
To: Hicks, John
Cc: Zurr, Stephen; Fitzpatrick, April; Oillataguerre, Maurice
Subject: FW: WDID#4SSO10388

FYI - The Water Board has acknowledged receiving our response report

Dan Hardgrove
Deputy Director of Public Works
Maintenance Services

From: Hardgrove, Daniel
Sent: Monday, February 25, 2013 10:35 AM
To: 'Marley, Hugh@Waterboards'
Cc: Yuen, Pansy@Waterboards
Subject: RE: WDID#4SSO10388

Excellent. Thank you for your response.

Dan Hardgrove
Deputy Director of Public Works
Maintenance Services

From: Marley, Hugh@Waterboards [<mailto:Hugh.Marley@waterboards.ca.gov>]
Sent: Monday, February 25, 2013 10:33 AM
To: Hardgrove, Daniel
Cc: Yuen, Pansy@Waterboards
Subject: RE: WDID#4SSO10388

Thank you for your email.
I have copied Pansy on this.
Hugh

From: Hardgrove, Daniel [<mailto:DHardgrove@ci.glendale.ca.us>]
Sent: Monday, February 25, 2013 10:15 AM
To: Marley, Hugh@Waterboards
Subject: FW: WDID#4SSO10388

Mr. Marley:

As we discussed on the telephone this morning, I wanted to ensure that our response to the Notice of Violation letter made it to your office by the date requested. Since Ms. Yuen is not in today, I would greatly appreciate if you can acknowledge receiving this response report, and that you are able to access the attachments.

Sincerely,

Dan Hardgrove
Deputy Director of Public Works
Maintenance Services

Hicks, John

From: Hardgrove, Daniel
Sent: Thursday, February 21, 2013 5:50 PM
To: Yuen, Pansy@Waterboards
Cc: Fischer, Jim@Waterboards; Hicks, John; 'Aguirre, Valerie@Waterboards'; szurne@ci.glendale.ca.us
Subject: RE: WDID#MSSO10388
Attachments: SWRCB WDID 4SSO10388 Response Report.pdf; WW Resource Board Audit Report Attachments.pdf

Ms. Yuen:

Attached please find the requested Response Report (8 pages) and corresponding Attachments (37 pages) from the City of Glendale concerning WDID No. 4SSO10388. We would greatly appreciate that you acknowledge that you have received and were able to access these documents at your earliest possible convenience via email.

Should you have any questions, please feel free to contact our Wastewater Superintendent John Hicks or myself directly at (818) 548-3950. We will also give you a confirmation call next Monday, February 25, 2013 to insure that all is in order with our submittal.

Sincerely,

Don Hardgrove
Deputy Director of Public Works
Maintenance Services

From: Aguirre, Valerie@Waterboards [<mailto:Valerie.Aguirre@waterboards.ca.gov>]
Sent: Friday, January 25, 2013 9:59 AM
To: szurne@ci.glendale.ca.us; Hardgrove, Daniel
Cc: Yuen, Pansy@Waterboards; Fischer, Jim@Waterboards
Subject: WDID#4SSO10388

The California Regional Quality Control Board for the Los Angeles Region (Regional Board) provides copies of correspondence through e-mail. The attached is your copy of recent correspondence; only the addressee will receive a hard copy.

The letter is in Adobe Acrobat PDF format. You can obtain an Acrobat Reader free of charge at <http://www.adobe.com/products/acrobat/readstep2.html>.

Please contact Pansy Yuen, at (213) 620-6637 if you have any questions.

Valerie Aguirre
Staff Services Analyst
320 W. 4th Street
Los Angeles, CA 90013
(213) 576-6808
vaquirre@waterboards.ca.gov





CITY OF GLENDALE, CALIFORNIA
Public Works Department
(818) 249-3546, FAX (818) 247-1687

341 W. Cherry Chase Drive
Glendale, California 91204-1813

www.ci.glendale.ca.us

February 21, 2013

Ms. Paula Rasmussen
Assistant Executive Officer
Los Angeles Regional Water Quality Control Board
320 West 4th Street, Suite 200
Los Angeles, CA 90013

Response to Notice of Violation - City of Glendale, City of Glendale Collection System-Glendale California- dated January 25, 2013 (identified as WDID No. 4SSO10388)

Dear Ms. Rasmussen:

We are in receipt of your letter dated January 25, 2013 directing us to immediately:

1. Ensure full implementation of all required reporting requirements contained in the Amended Monitoring and Reporting Program;
2. Immediately implement corrective and preventive actions to bring the Enrollee's collection system into compliance with the Sanitary Sewer Collection System Order No. 2006-003-DWQ.
3. Submit by February 25, 2013, a report to the Regional Board detailing the corrective actions being taken to bring the Enrollee's collection system into compliance with the Sanitary Sewer Collection System Order No. 2006-003-DWQ. This report should address the violations cited in this notice as well as the "Areas of Concern" listed in the attached inspection report. The report must be submitted as a pdf via email or a compact disc to Ms. Pansy Yuen, 320 W. 4th Street, Suite 200, Los Angeles, CA 90013-2343, pyuen@waterboards.ca.gov, (213) 620-6637

The following is the requested report detailing the City of Glendale's ("Enrollee's") responses:

Violations:

A. Sanitary Sewer Overflows (SSOs):

ITEM NO. 1

Enrollee's Response:

Corrective Action

The Enrollee:

1. Has dramatically reduced its' SSO rate since implementation of the WDR (see attachment No. 1) through implementation of a focused strategy involving:
 - a. Reducing the cycle time required to clean the collection system from approximately 30 months at time of implementation to the 16-18 months currently required.
 - b. Use of the closed circuit television (CCTV) platform as part of a formal quality control program that spot-checks the effectiveness of daily cleaning operations. This use of the asset constitutes the majority of its employment during regular working hours (M-F).
 - c. Close coordination with the enrollee's Public Works Engineering Division to repair structural problems at dozens of locations since implementation.
 - d. Operator training and certification (CWEA-Collections Systems Maintenance Series) in accordance with the recommendations established by the State Water Quality Control Board and tracked in the enrollee's system data in the California Integrated Water Quality Control System (CIWQS). Virtually all of the enrollee's collections maintenance staff meets or exceeds these recommendations.
 - e. A formal program for chemical root control in portions of the collection system with historically high numbers of root related stoppages, and segments determined to have significant root in growth following post-stoppage CCTV inspection, treating approximately 20, 000 lineal feet per fiscal year.
 2. Logged the lowest total volume discharged to waters of the state during calendar year 2012, since 2007, the year of implementation of the WDR.
See attachment No. 2.
 3. Approximately doubled recovery percentage for all SSO from 25 % to 45% through establishment of formal on-call, "standby" teams for response to afterhours SSO's. See attachment No. 3.
 4. Commissioned a series of SSO transit time studies beginning in late 2011 to improve recovery from storm drains at locations downstream of overflows. At the time of this report approximately 25% of the storm system within the City has been studied with downstream recovery points and minimum transit times identified.
-
5. Conducted training for collection system workers of other agencies following the inspection which is the subject of this report at the 2012 fall meeting of the collections subcommittee, Los Angeles Basin Section of the California Water Environment Association (CWEA). Copy of presentation included as attachment No.4.

B.SSO Reporting:

ITEM NO. 1

Enrollee's Response:

Notes of Explanation:

1. The Board's Inspection Report referenced *SSO Procedures and Documentation Refresher* was a single general Wastewater Maintenance Training meeting conducted on June 22, 2010.
2. This was one of a number of general and other more specifically related WDR related training meetings conducted by Enrollee in the first few years following implementation of the WDR.
3. The Board's Inspection Report identified Item 4. from the Minutes of the June 22, 2010 meeting as a policy statement rather than a general directive for an operational objective. The directive cited by the Inspection Report reads: *"Consensus- Response Team determines if any sewage lost to storm drain system and if so how much. [Standby] Team Leader (after hours), Crew Supervisor (normal working hours) will ensure agreement. Field decisions on lost some/lost none are final."*
4. Guidance given during the referenced training assumes correct assessment of the situation in the field as a prerequisite for consensus on volume lost. The crew relieving the stoppage did not do a careful evaluation of the path which the overflow took before performing their volume estimate. Volume estimate was based on a visual assessment in the immediate vicinity of the overflowing manhole, a rate and time calculation and the assumption that the entire overflow volume reached a downstream catch basin, somewhere. Crew responding with vacuum recovery unit down the hill from the overflow location was not consulted in the field regarding their observations as to the extent of overflow, observations which in fact had revealed that overflow never reached the throat of the receiving catch basin. Wastewater Maintenance Superintendent reconvened both crews responding several days later to establish the facts. Sketch and notes shown in exhibit three (3) of the Sanitary Sewer Collection System Inspection Report April 30, 2012 are the minutes of that meeting.
5. While Enrollee's management desires to empower field crews with the training and authority to establish volume estimates in the field and report the same to authorities, it reserves the right to evaluate the accuracy of the assessment and whether true consensus was in fact ever attempted, let alone achieved.

Corrective Action

The Enrollee:

1. Has emphasized with system operators and will continue to emphasize that the priorities for SSO response are containment, relief of the blockage causing the overflow and then analyzing the overflow in preparation for regulatory reporting in that order.
2. Has rescinded the June 22, 2010 training tailgate directive quoted in Note of Explanation 3.a., above, that field determinations are final, effective February 21, 2013, and documented in attachment No. 5.

3. Will continue to review the volume estimate prepared in the field, between the time of the initial report to both the local health department and CalEMA and the time of the draft on-line C/WOS report, in order to ensure the most accurate reporting possible.

ITEM NO. 2

Enrollee's Response:

Corrective Action

The Enrollee:

1. Conducted training for all agency personnel taking customer calls and directing that the time the call received is recorded as the official start time for the SSO event to ensure consistency throughout the various steps of the documentation and reporting process. The training was conducted during the week of May 10, 2012. The memo containing the specifics of the training is included as attachment No.6. This will ensure that those responding can know early in the response and reporting process the exact clock time by which the report to Cal EMA must be made.
2. Conducted formal SSMP familiarization training for all collections maintenance field personnel and Water Department Supervision. The enrollee's overflow emergency response plan was a component of this training and reporting timeframe requirements were reiterated. Training was conducted on August 9, 2012. Documentation is included as attachment No. 7.
3. Has emphasized with system operators and will continue to emphasize that that the last step of the SSO Field Work sheet is to "Call supervisor (or his designated relief) from the field to review circumstances and reporting." This step is designed to ensure that all voice reporting requirements have been satisfied and in a timely manner.
4. Informed operators that the crew leader for the team responding first to the SSO is responsible for making sure that voice reports are made in a timely manner. This direction was given at training conducted at a morning tailgate training session on February 21, 2013 and documented in attachment No. 5.
5. Is in the process of revising the existing "wallet" card carried by all afterhours standby team leaders, listing the minimum items to be reported to the Superintendent at the call referenced in item 2. above, to also include the reporting time frame requirements required by both the local Health department and Cal EMA.

G. Operations and Maintenance:

ITEM NO. 1

Enrollee's Response:

Notes of Explanation:

1. The enrollee notes that prior to the inspection of April 30, 2012, the appendices which contain the key documents related to maintenance of the collection system were readily available to operating personnel and in fact are maintained by field personnel. Specifically,
 - a. Appendix G- Restaurant List for the City of Glendale, CA.
 - b. Appendix H- Sewer Trouble Spot Work List.
 - c. Appendix K- Sewer Line Maintenance and Inspection Forms.
 - d. Appendix L- Restaurant Run Documentation.
 - e. Appendix M- Chemical Root Control Spreadsheet.
 - f. Appendix N- Infrastructure Repair Lists.
 - g. Appendix P- City Specific Training and Certification.
 - h. Appendix Q- Operation and Maintenance of Wastewater Collection Systems Vol. I Introduction. Note: All operators own a copy of this manual.
 - i. Appendix R- Sewer Pipe Inventory.

2. The SSMP was not unavailable to operating personnel. It was readily available in the enrollee's Maintenance Services Division Office and was available for inspection during all regular working hours. The SSMP was routinely referred to during system operator training since its' implementation and some contents were used by the enrollee's field staff to submit an award application to the local Section of the California Water Environment Association (CWEA) during the fall of 2011.

Corrective Action

The Enrollee:

1. Conducted formal SSMP familiarization training for all collections maintenance field personnel and Water Department Supervision. Training was conducted on August 9, 2012. Documentation is included as attachment No.7.
2. Moved a master set of SSMP documents to the Wastewater Maintenance Shop office, where they may be inspected by any member of the field staff, and notified the staff of the new location.

D. Program Self-Assessment:

ITEM NO. 1

Enrollee's Response:

Notes of Explanation:

1. The enrollee completed an initial audit on March 22, 2012. A copy is included as attachment No.8.

Corrective Action

The Enrollee:

1. Completed a second comprehensive audit of the SSMP during the month of March 2012. Follow-up actions for that audit are complete as of the date of the Enrollee's response. A copy is included as attachment No.8. Additionally, the Enrollee's official record of changes to the SSMP documenting completion of these items is included as attachment No.10.
2. Is in the process of completing the next SSMP audit, required to be completed by the fourth anniversary of the SSMP, August 2013. This audit will document within a single report:
 - a. The follow-up actions taken for the March 2012 audit, and
 - b. Follow-up action taken for additional items identified during the inspection of April 30, 2012 but which were not called-out in the letter to the enrollee from The Regional Water Quality Control Board dated January 25, 2013 and which were completed before its arrival.

E. General Areas of Concern:

ITEM NO. 1a.

Enrollee's Response:

Corrective Action

1. Same response as for sub-item 1 under B. SSO Reporting above.

ITEM NO. 1b.

Enrollee's Response:

1. The enrollee fully recognizes the limitations inherent in the paper based record keeping system it uses for recording maintenance and inspection activities. The enrollee is in the process of commissioning an ARC-GIS compatible Computerized Maintenance Management System (CMMS) to replace its' existing CMMS that is not GIS compatible. The objective is to capture maintenance history in an electronic format that is available to operators in the field and is up to date through the immediately preceding work day. Due to the data-storage requirements inherent in maintaining a large number of CCTV records, the enrollee intends to continue with separate project and event based record keeping systems for its CCTV inspections, until the data storage requirements of an asset-based system can be assessed and developed. However, the date and any significant findings from CCTV inspections will be recorded along with other maintenance activities for individual collection system assets in keeping with the intent for cleaning history described above. The enrollee

is pursuing these initiatives in an environment of constrained funding and does not anticipate completing even this limited scope sooner than twenty-four (24) months following the date of this report.

ITEM NO. 1c.

Enrollee's Response:

1. The City's Wastewater Section met with key members of the contractor's project team on or about January 24, 2012, a full two months before the noted SSO. Attachment No. 11 is a copy of the Bypass Spill Response and Communication Plan for the sewer construction project that resulted in the back-up. Guidelines for spill reporting were spelled-out at this meeting as well as clear lines of communication and associated time frames for both normal working hours and after working hours communication. Also at this meeting, the contractor provided Wastewater Section personnel with a copy of their bypass plan. Immediately following this meeting, a Senior Wastewater Maintenance Worker commenced routine tours of the construction work with a focus on the contractor's bypass operations and readiness to respond. It should be noted that as a result of this advance communication/coordination, when operational difficulties with bypass equipment produced the back-up at Sears, the City's construction inspector assigned to the project contacted the Senior Wastewater Maintenance Worker immediately. Quick communication and response by all on the project team minimized spilled volume to 76 gallons with no damage to the retail facility and no discharge of sanitary sewage to the waters of the state.
2. Going forward the enrollee has implemented procedures to use the Public Works Engineering Division's routine pre-construction meeting as the standard venue for communicating Bypass Spill Response and Communication Plans for all sewer construction and repair projects involving contractor personnel. These procedures will incorporate specifications to be developed detailing contractor responsibilities to communicate with the enrollee's project management staff regarding key elements of SSO prevention and response.

ITEM NO. 1d.

Enrollee's Response:

1. **Crowd Control-** The enrollee's staff has been trained and receives ongoing training in regards to specific procedures contained in the Work Area Traffic Control Handbook (W.A.T.C.H. Manual), and consistently implements the vehicular and pedestrian controls specified therein for the protection and delineation of work zones or response sites. The Glendale Police Department is primarily responsible for crowd control in the event that an SSO imposes a threat to the health of a public assembly. Specific crowd control procedures would necessarily depend on the circumstances.
2. **Methods to Ensure the Public Is protected from Raw Sewage Overflows-** Wastewater Maintenance personnel are responsible for the safety of pedestrians who wander within close proximity of sanitary sewage on the public right of way. The Wastewater Section is procuring a supply of placards to post in the obvious footpaths in route to the site of an SSO.

3. The next revision of the enrollee's OERP will reflect both of the above.

Should you have any questions regarding this report, please contact Mr. John Hicks or Mr. Dan Hardgrove at (818) 548-3950.

Sincerely,



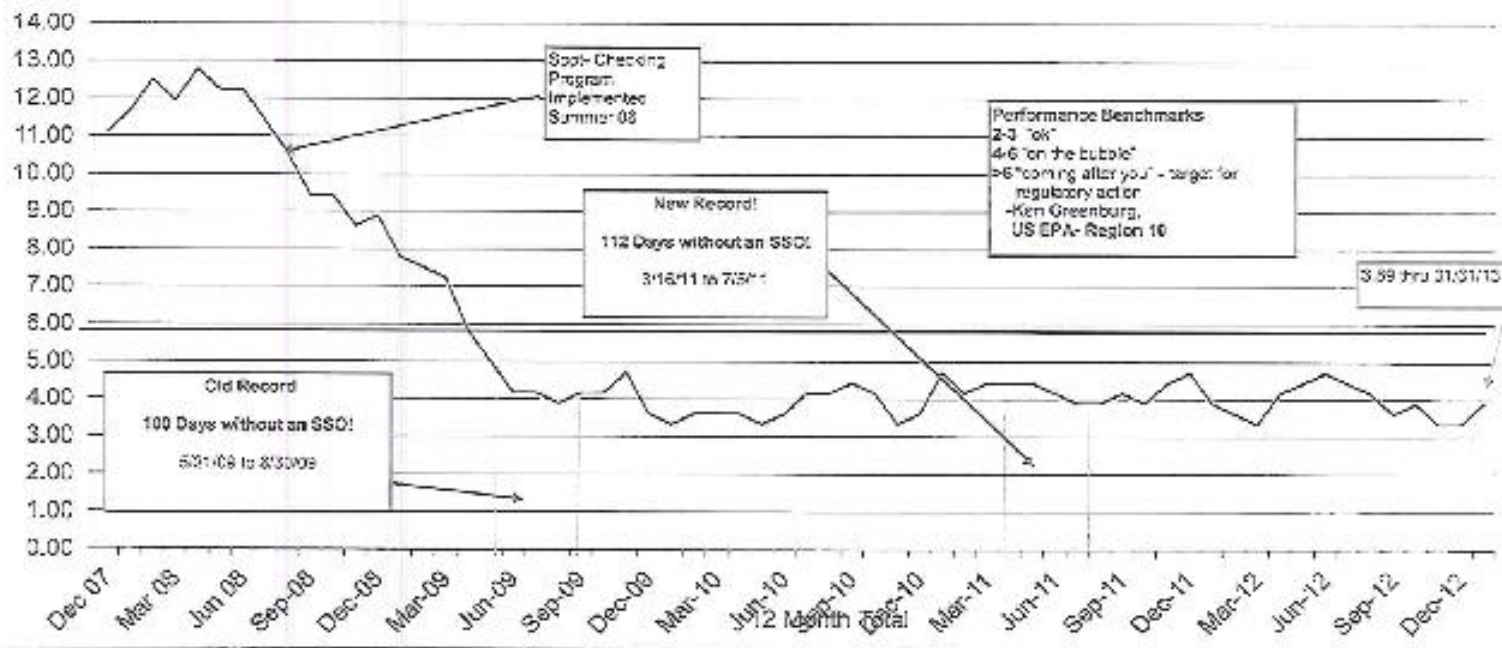
Stephen M. Zurn
Director of Public Works

Attachments

C: (via email only)
Jim Fisher, State Water Resources Control Board, Office of Enforcement
Dan Hardgrove, City of Glendale, Deputy Director of Public Works/Maintenance Services
John Hicks, City of Glendale, Wastewater Superintendent

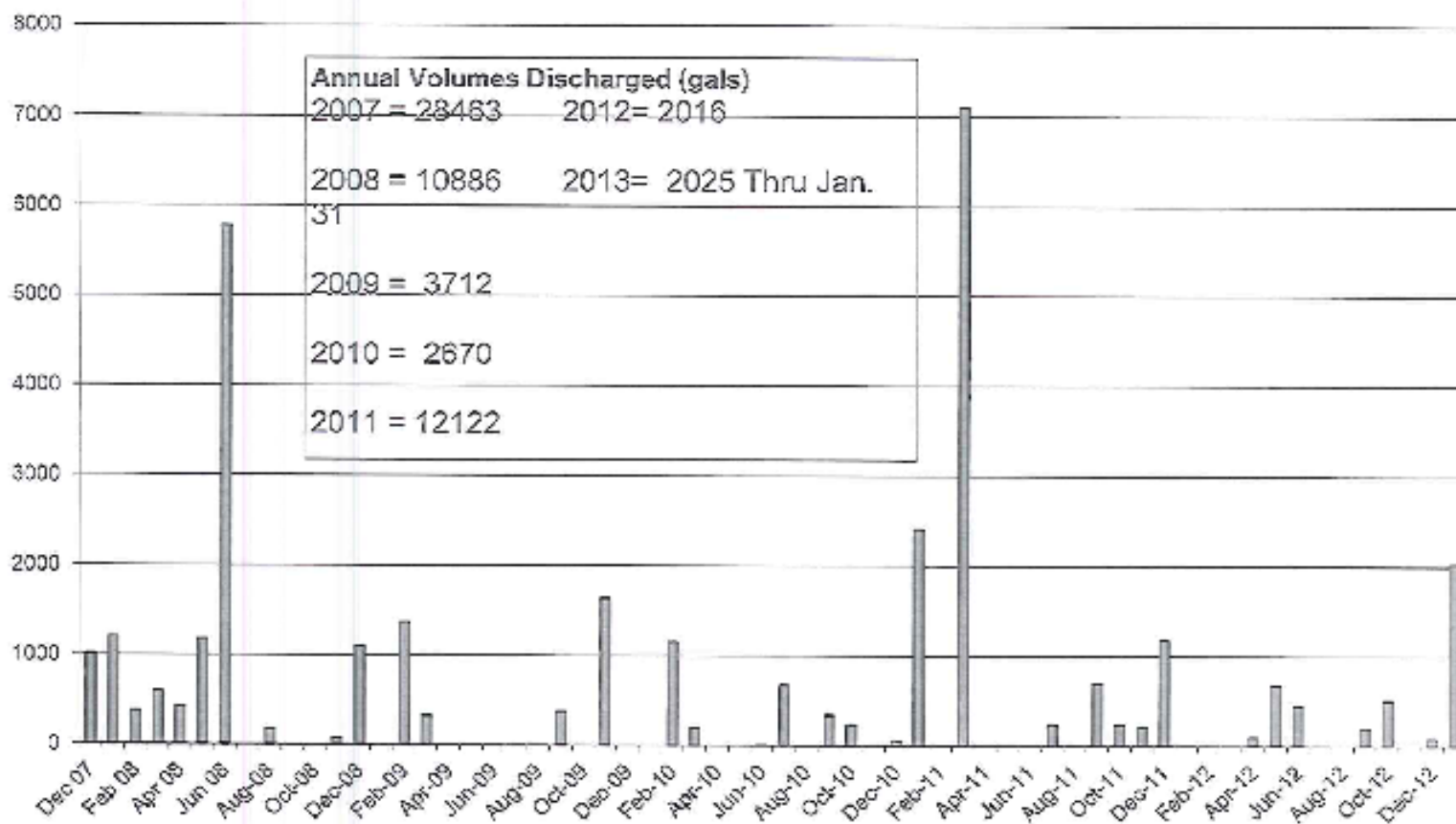
SZ:dh

Glendale, California SSO's Per 100 Miles Sanitary Sewer-12 Month Moving Average 5-Year History

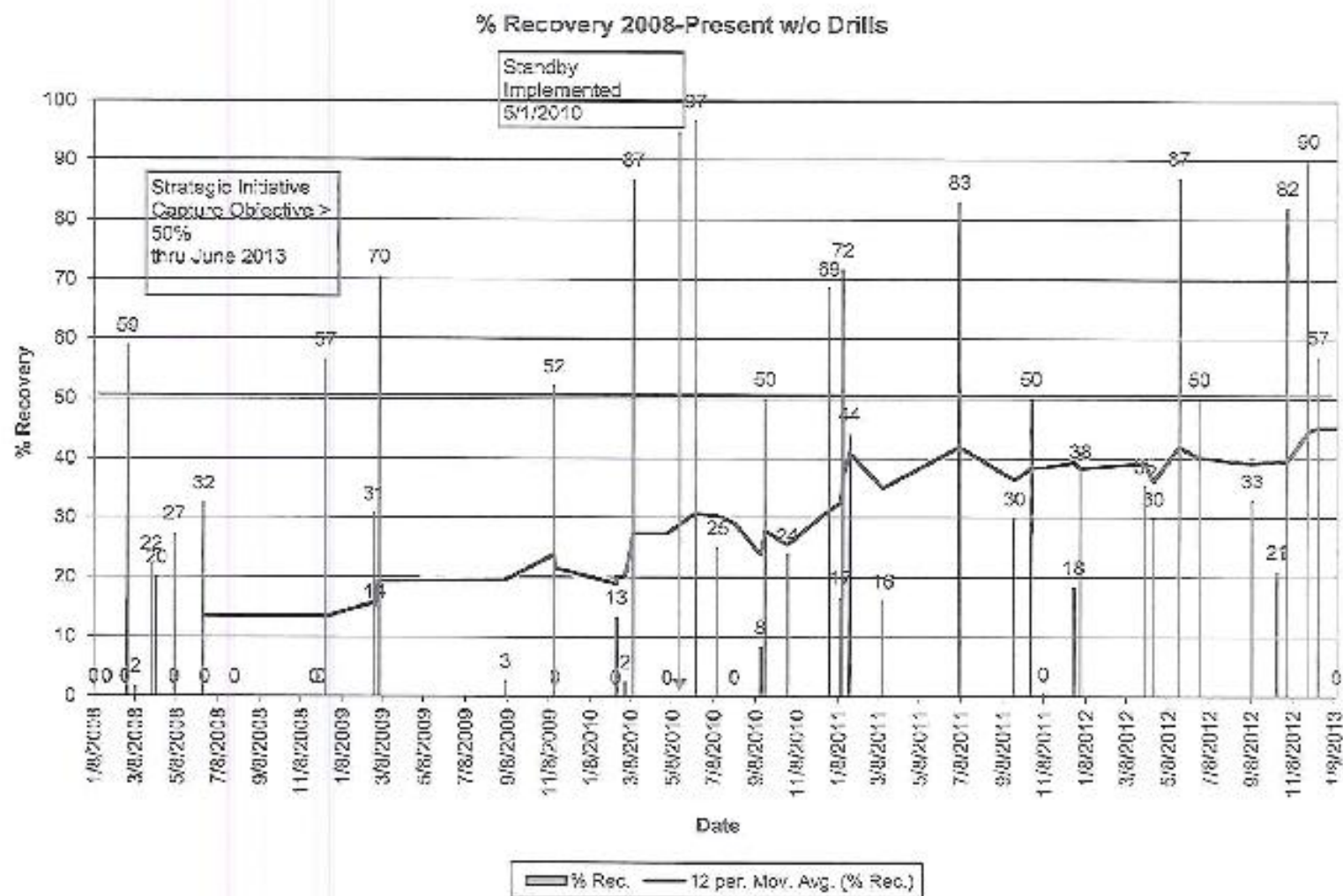


Attachment No. 1

Glendale, California
Sewage Spill Volume Discharged to Waters of the State (Gal.)
Since WDR Implemented



Attachment No. 2
2



Attachment No. 3
5

4

Your Upcoming Audit- What to Expect

CWEA LABS Collection Systems Training Day
Thursday November 8, 2012
Whittier, California
John N. Hicks
Wastewater Maintenance Superintendent
City of Glendale-Public Works Department

S/RWQCB Audit of Glendale

Agency Overview

Wastewater Section

Maintenance Services Division

Public Works Department

- Glendale a City of 193,000 residents (1/1/12)
- 360 miles of Sanitary Sewer
- 1350+ Storm Drain Catch basins
- 1 Large Sanitary Lift Station
- 2 Stormwater Lift Stations (1 large duplex, 1 small simplex)

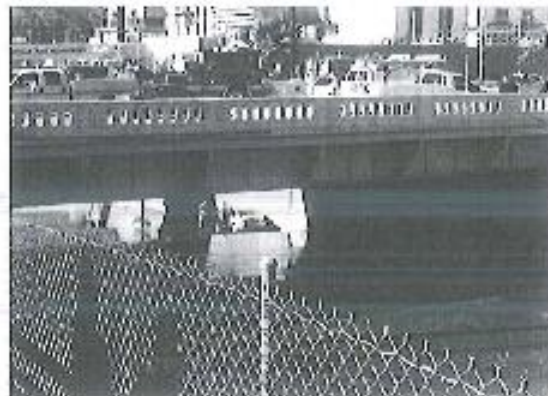
S/RWQCB Audit of Glendale

Agency Overview

Wastewater Section

• 4 Sanitary Line Cleaning Crews	7/1 Workers /Sr. Worker
• 1 Storm Drain Maintenance Crew	2 Workers
• 1 Pipeline Inspection Crew	2 Workers
• Special Projects / Floater	1 Sr. Worker
• Crew Supervisors	2 Crew Sup.'s
• <u>Program Manager</u>	<u>1 Superintendent</u>
Total	18 People

One of the More Exciting Things That Happened to Us This Year



S/RWQCB Audit of Glendale

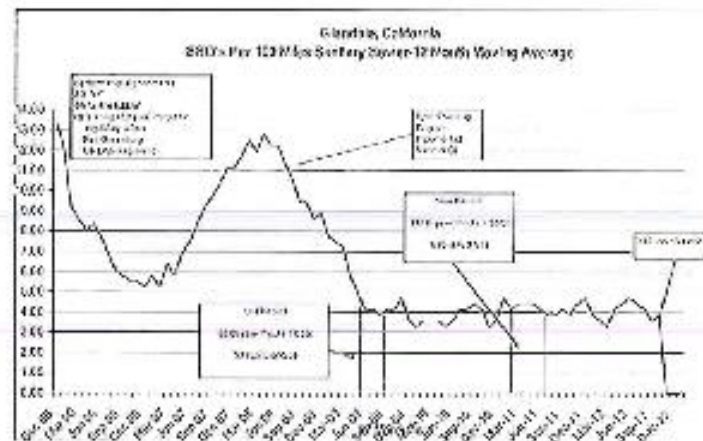
Our Perspective Going Into the Audit

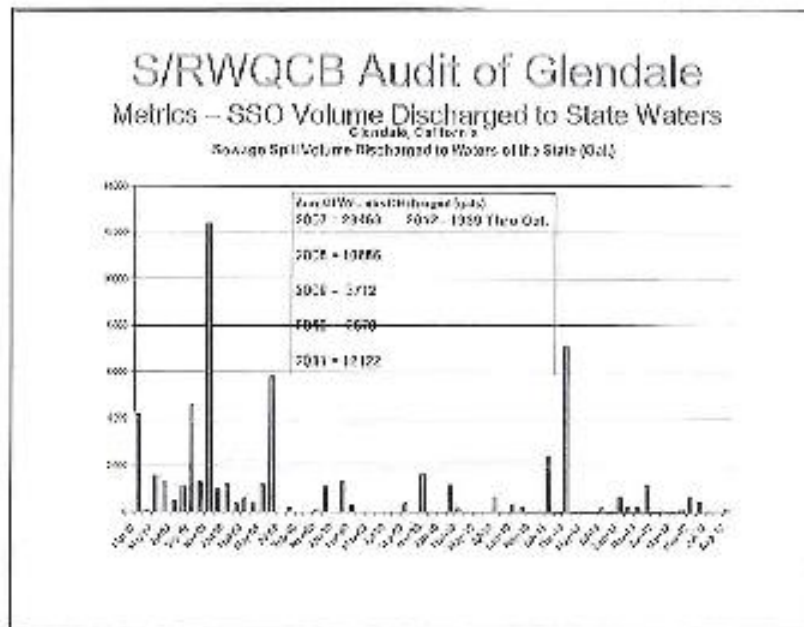
What we were doing:

- Cleaning the entire collection system every 15-16 mos.
- Inspecting 250K Lf (47 miles) of SS annually.
- SSO's under control.
- Volume discharged to State Waters trending down since WDR
- Meticulous reporting.
- Optimizing Response and Recovery Efforts.
- 100% CWEA Certified (SWRCB Guidelines our Goal)
- Awards and Recognition

S/RWQCB Audit of Glendale

Metrics – SSO's / 100 miles Sewer





S/RWQCB Audit of Glendale

Our Perspective Going Into the Audit

"Certainly, some agency needs a visit from
the regulators more than we do"

S/RWQCB Audit of Glendale

An Then When You Least Expect It.....

The Questionnaire:

- 16 page document.
- 221 items requiring response.
- Most yes/no and/or short answer.
- 30 days to respond.
- Team Effort between
 - Operations and Maintenance.
 - Engineering
 - Environmental

S/RWQCB Audit of Glendale

The Questionnaire:

In addition to completing- your opportunity to start pulling all your records together and getting organized for an audit:

- Check for missing documents.
- All records in an accessible format and location.
- File name and path for working spreadsheets.

S/RWQCB Audit of Glendale

" The Call "

- LRO received notice at 4:30 PM on a Friday afternoon that Auditors would arrive at 7:00 AM Monday.

S/RWQCB Audit of Glendale

April 30, 2012

Schedule of Events- The Morning

Time	Event	Notes
7:00 AM-7:15 AM	Audit Team Arrives	1 Rep of S/RWRCB
	Introductions	1 Consultant
	Welcome by Director of Public Works	1 Sr. Environmental Program Specialist
		1 Wastewater Supt.
7:15 AM-7:45 AM	Audit Team presents general overview for the day	To be a one(1) day visit only.

S/RWQCB Audit of Glendale

April 30, 2012

Time	Event	Notes
7:45 AM- 8:45 AM	City provides over view of collection system maintenance program	•Safety Performance •Routine Preventive Maint. •Trouble Spot Program •Restaurant Run Program •Spot Checking Program •Chemical Root and Grease Control programs •Spot Repair Program - Performance Metrics.
8:45 AM- 9:00 AM	Break	

S/RWQCB Audit of Glendale

April 30, 2012

Time	Event	Notes
9:00 AM- 9:30 AM	1. Auditor's questions for staff on program presented. 2. Identification of records to be reviewed. 3. Agency informed of desire to visit crews in the field in P.M.	•Records To Be Reviewed •Systems To Be Reviewed
9:30 AM- 10:00 AM	Travel to corporate yard for records review	All kept in the WW Maintenance Shop / Offices

S/RWQCB Audit of Glendale

April 30, 2012

- Records To Be Reviewed:
 - SSMP
 - Certified SSO Reports
 - SSO Field worksheets
 - Most recent program Audit
 - Sewer System map
 - SSO Emergency Plan
 - Training Records
 - Hot Spot Cleaning and Inspection Records
 - Log Records of Incoming Potential SSO Calls
 - Authorization of Signature Authority
 - Other:

S/RWQCB Audit of Glendale

April 30, 2012

- Systems To Be Reviewed:
 - CMMS/Work Order/Preventive Maintenance Records
 - Data system of tracking SSO events (SSO Log)
 - Storage of Records
 - Annual Collection System Questionnaire

S/RWQCB Audit of Glendale

April 30, 2012

Time	Event	Notes
10:00 AM- Noon	Auditors review records independently in WW Shop	Focus: •Consistency of SSO start time across all docs, •Volume Estimating Worksheets/Process
Noon- 1PM	Lunch	

S/RWQCB Audit of Glendale

April 30, 2012

- Consistency of SSO start time across all documentation.
 - Time must be the same on each of the following
 - Call log for your dispatch center.
 - Service request / w.o.
 - Volume estimating work sheet used by responding crew.
 - SSO field work sheet.
 - Certified CIWQS report.

S/RWQCB Audit of Glendale

April 30, 2012

- Volume Estimating Worksheets and Process
 - No pencil records.
 - All corrections to be single line-outs with initials (legible) and a date.
 - Amendment of records between field and certification of CIWQS report was an issue.
 - Thoughts:

S/RWQCB Audit of Glendale

April 30, 2012

- Volume Estimating Worksheets and Process
 - We require vol. estimate and field worksheets to done in the field.
 - A few instances of start time "creep" prior to audit.
 - When overflow involves more than overflow to gutter line and CB (simple SSO), conceptualizing can be a problem-
 - How do you handle absorption on unpaved surfaces.
 - Accounting for that portion of an overflow that enters a structure.
 - Wetted pavement and capture behind c/dike-ing.

S/RWQCB Audit of Glendale

April 30, 2012

- Volume Estimating Worksheets and Process
 - Our sheet covers all these pieces on both sides of a single sheet.
 - Our standard process going into audit:
 - Rate decision rests with the responding crew leader.
 - For more complex overflows review circumstances and assumptions in aftermath.
 - Estimate final at ready for certification step.
 - Review the more complex ones as Section Training.
 - Practice.

S/RWQCB Audit of Glendale

April 30, 2012

Schedule of Events- The Afternoon

Time	Event	Notes
1:00 PM- 1:15 PM	Reconvene- Field inquiry identified	•City' single sanitary lift station. •Any crew performing routine preventive maintenance •Responders to a recent SSO selected by the auditors (at scene).
1:15 PM- 3:30 PM	Auditor's tour lift station and interview field crews	Interviews

S/RWQCB Audit of Glendale

April 30, 2012

- PM Crew Interview Questions:
 - 1. Are you familiar with your SSMP?
 - 2. Have you been trained on your agency's sewer overflow response plan (SORP)?
 - 3. Can we see your street bleaching procedure?
- Crew Responding to a Recent SSO:
 - Independently questioned each responder to see if their stories agreed.

S/RWQCB Audit of Glendale

April 30, 2012

- SSMP Implementation Problems
 - Collections Staff not familiar with SSMP Elements.
 - Crew could not recall being trained on the SORP.
 - No Audit at 24 months.
- Why?
 - How we developed our SSMP.
 - Nearly constant use of supporting appendixes but hard copy of plan didn't reflect that.
 - How to do / document?

S/RWQCB Audit of Glendale

April 30, 2012

Time	Event	Notes
3:30 PM- 5:30 PM	Auditors continue review records independently in WW Shop	Occasional request for document or record not already presented.
5:30 PM- 6:30 PM	Auditors debrief agency on findings.	

S/RWQCB Audit of Glendale

April 30, 2012

Major Follow-up Activities:

- **Data Quality-** reviewed all records going back several years looking for instances when later start time used in volume estimating calculations.
- **Revised Notification Practices-** to get report to LACHD within 15 mins of 1st responder on scene.
- **SSMP Familiarization Training-** for all WW, Water Dept. Supervisors and Environmental Technicians.
- **Revised SORP-** to reflect practices currently followed and included in SSMP familiarization training.

S/RWQCB Audit of Glendale

April 30, 2012

Major Follow-up Activities:

- SSMP Audit- finishing our first now:
 - Need to be reviewing your SSMP on an ongoing basis if you're going to stay on top of.
 - Example: Glendale's SSMP:
 - 11 Chapters (relatively low maintenance),
 - 19 Appendices (12 of which are relatively high maintenance).
 - 30 Component Pieces
 - Don't think you're going to get to 1st day of month 24 and do anything that resembles a comprehensive audit.

S/RWQCB Audit of Glendale

April 30, 2012

- Major Follow-up Activities:
- SSMP Audit- finishing our first now:
 - A piece or two of the plan get's checked every month during audit cycle.
 - Checklist with a cover letter addressing the questions outlined in WDR section on audits.
 - Don't think one individual is going to do all this.

S/RWQCB Audit of Glendale

April 30, 2012

- Questions?
- Call me - jhicks@ci.glendale.ca.us

City of Glendale
Public Works Maintenance Services, Street Department
WASTEWATER MAINTENANCE TRAINING MEETING

5

Crew Operation: WASTEWATER (Sewers)

Location: Wastewater Shop

Subject: Near Term Pump Station Alarm SOP/SSO Reporting and Responsibility

Date: 2/21/13

Presenter: John Hicks

1. Near Term Pump Station Alarm SOP-All Standby Team Leaders- please observe the following procedure with regard to Doran Lift Station (DLS) alarms until we are the official owners of the station:
1. We tell SEMA.
2. We ask if we may be of assistance.
3. They ask us to deal with.
4. We take care of.
5. Log at station and inform them that we corrected.
2. Back in June of 2010 we established the following objective: <i>Response Team determines if any sewage lost to storm drain system and if so how much. [Standby] Team Leader (after hours), Crew Supervisor (normal working hours) will ensure agreement. Field decisions on lost some/lost none are final.</i>
3. We have rescinded the training tailgate objective quoted above, that field determinations are final, effective today.
4. Will continue to review the volume estimate prepared in the field, between the time of the initial report to both the local health department and CalEMA and the time of the draft on-line CIWQS report, in order to ensure the most accurate reporting possible.
5. The crew leader for the team responding <u>first</u> to the SSO is responsible for making sure that voice reports are made in a timely manner. Either the crew leader or his partner may do the reporting but the crew leader is responsible for making sure it happens.

Signatures of Employees Attending

John Hicks		Bryan Ortega	
Jason Badgley		Armin Reyes	
James Garcia		Roy Rodriguez	
Alfonso Herrera		Verdan Tagcsyan	
Brian Hernandez		Rod Torres	
Devo Martinez		J. Mike Urquiza	Leave of Absence
Jim Mc Closkey		Nery Villagran	
Daniel Ori			

Complete all sections and give the form to your supervisor.

Supervisor's Signature _____

Roy F. Rodriguez

6

CITY OF GLENDALE
AVOID VERBAL ORDERS

DATE: 5/10/12

TO: All Maintenance Services Personnel Taking Customer Calls

FROM: John Hicks, Wastewater Maintenance Superintendent
David Lew, Traffic Street Maintenance Superintendent

SUBJECT: **Identifying Event Start Times for Sewer Overflow Events (SE31, 32, 42)**

1. **Background:** A recent audit by the State Water Resources Control Board (SWRCB) revealed differences in event start times for sewer overflow events at various steps in the documentation and reporting process. It is very important that the event start time be clearly understood by all involved in the documentation and reporting process so that errors are not made.
2. **Direction:** Commencing immediately, we will use the time identified by the person receiving the call as the event start time. Typically this will be a member of the office staff or a Yard Attendant but could be anyone who works in the main office or a Wastewater Supervisor or Senior.
 - a. Record the time on the phone as soon as you hang-up from taking the call.
 - b. Do not delay in dispatching the call to the appropriate personnel. Yard Attendants are to move immediately to the field to mitigate the overflow after recording the time of the call. Give the on-site Standby Team Leader the start time. The W.O. can be generated upon return to the office.
 - c. All event documentation and overflow volume calculations will be based on the event start time captured as noted above unless, of course, responding personnel have credible information as to an earlier start time.
 - d. The time the call was received should always be the first statement in the problem details field of the W.O. for problem Codes SE-31, 32 and 42.
 - e. Please see the sample W.O. for training attached.
3. Should you have any questions, please contact either of us.

Z-4 FOR INTERNAL USE ONLY

C:\Users\jhhicks\Documents\Word Documents\Wastewater Organization\WDR\Region 4
Audit 043012\Sewer Overflow Event Time Stamp Direction_Spring 2012.doc

Sewer System Management Plan Overview
including
Sewer Overflow Response Plan

August 2012

Historical Background

- Prior to Y2K
- January 4, 2001-EPA Issues Notice of Proposed Rule Making for CMOM
- January 20, 2001- Incoming Bush Administration calls for "Regulatory Review Plan."
- May 2006- California Issues- Collection Systems-Waste Discharge Requirements (WDR)

Historical Background (cont.)

- May 2009- Enrolled Agencies with greater than 100K population must have a comprehensive SSMP.
- August 2009 – Glendale Certifies Its' SSMP
- Eleven years after the proposed federal rule making was halted by the Bush Administration there has been no change in the status of the SSO proposed rule which contained CMOM.

SSMP Elements

1. Program Goal
2. Organizational Structure
3. Legal Authority
4. Operations and Maintenance Program
5. Design and Performance Provisions
6. Overflow Emergency Response Plan
7. FOG Control Program
8. System Evaluation and capacity Assurance Plan

SSMP Elements (cont.)

- 9. Monitoring, Measurements and Program Modifications
- 10. SSMP Audits.
- 11. Communication Program

Responsible Parties:

PW Environmental- Public Works Administration Environmental Section

PW Engineering- Public Works Engineering Design Section

PW Wastewater- Public Works Maintenance Services Division-Wastewater Section

Legal- City Attorney

1. Program Goal

"Goal: 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 SSOs, as well as mitigate any SSOs that do occur."

2. Organizational Structure

- Name of responsible or authorized representative.
Director Public Works
Legally Responsible Officials
- Names and contact information for those responsible for implementing various portions of the SSMP.
- Chain of communication for reporting SSO's

PW Wastewater

3. Legal Authority

- Each Enrollee must demonstrate through legally binding instruments that it has authority to:
 - Prevent illicit discharges.
 - Require proper design and construction.
 - Ensure access for maintenance inspection and repairs.
 - Limit the discharge of FOG and other debris.
 - Enforce violation of its sewer ordinances.

Legal

4. Operations & Maintenance Program

- Must include the following elements as appropriate:
 - Up to date maps of the sanitary sewer system.
PW Engineering
 - Routine preventive maintenance and more frequent cleaning targeted at known problem areas.
PW Wastewater
 - Documentation of scheduled and unscheduled activities.
PW Wastewater
 - Rehabilitation and replacement program including a system for ranking the condition of sewer pipes.
PW Wastewater & Engineering
 - Capital improvement plan (CIP) emphasizing protection and management of the infrastructure assets.
PW Engineering

4. Operations & Maintenance Program (cont.)

- Must include the following elements as appropriate (cont.):
 - Ongoing training for staff.
PW Wastewater
 - Require contractors to be adequately trained.
PW Engineering
 - Equipment and replacement parts inventories.
PW Wastewater

5. Design and Performance Provisions

- Design and construction standards and specifications for new sanitary sewer systems, pump stations and for rehab and repair of existing facilities.
- Procedures and standards for inspection and testing for both new and repair.

PW Engineering

6. Overflow Emergency Response Plan

- At minimum plan must identify:
 - Procedures for timely notification of primary responders and regulatory agencies.
 - A program to ensure appropriate response.
 - Procedures for notifying authorities when public health is jeopardized.
 - Procedures to ensure staff and contractor personnel aware of and follow the plan.
 - A program to ensure reasonable steps taken to minimize discharge of sewage to waters of the State/U.S.

PW Wastewater

8. System Evaluation and Capacity Assurance Plan (SECAP)

- Enrollee shall prepare and implement a capital improvement program (CIP) that will provide the hydraulic capacity of key sewer system elements for:
 - i) Dry weather peak flow conditions, as well as
 - ii) An appropriate storm or wet weather event.
- The Plan must include:
 - **Evaluation**-where is hydraulic deficiency resulting in SSO's. PW Environmental
 - **Design Criteria**- $(d/D) \leq$
PW Environmental & Engineering

8. System Evaluation and Capacity Assurance Plan (SECAP)-cont.

- The Plan must include (cont.):
 - **Capacity Enhancement Measures**- develop a plan to fix the problems including a schedule and identification of funding.
PW Engineering
 - **Overall CIP schedule**- develop a schedule of completion dates for all portions of the CIP not for just the problems
PW Environmental & Engineering

9. Monitoring, Measurement and Program Modifications

- **Enrollee shall:**

- Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;
All Responsible Parties
- Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP
As assigned
- Assess the success of the preventative maintenance program;
PW Wastewater

9. Monitoring, Measurement and Program Modifications (cont.)

- **Enrollee shall (cont.):**

- Update program elements, as appropriate, based on monitoring or performance evaluations; and
As assigned.
- Identify and illustrate SSO trends, including: frequency, location, and volume.
PW Wastewater

10.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 SSO's-at a minimum of every two(2) years. Audit shall focus on evaluating the effectiveness of the SSMP and the Enrollee's compliance with the SSMP requirements.
 - Prepare a report and keep it on file. Report shall identify any deficiencies with the SSMP and steps to correct them.

PW Wastewater & PW Environmental

11. Communication

- The Enrollee shall communicate on a regular basis with the public on:
 - Development, implementation and performance of the SSMP.
- The communication system shall provide the public the opportunity to provide input to the Enrollee as the program is developed and implemented.

PW Wastewater & PW Environmental

Acronym Glossary

- **CMOM**-Capacity Management Operations and Maintenance
- **SSMP**-Sewer System Management Plan
- **WDR**- Waste Discharge Requirements
- **FOG**-Fats Oils and Grease

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SSMP Self-Audit Worksheet #1

- Chapter 1: Prohibitions and Provisions – No changes needed
- Chapter 2: Goals and Organizational Structure – No changes needed
- Chapter 3: Overflow Emergency Response Plan – No changes needed
- Chapter 4: Legal Authority – No changes needed
- Chapter 5: Fats, Oils, and Grease (FOG) Control Program – No changes needed
- Chapter 6: Operation and Maintenance Program – No changes needed
- Chapter 7: Design and Performance Provisions – No changes needed
- Chapter 8: System Evaluation and Capacity Assurance Plan – No changes needed
- Chapter 9: Monitoring, Measurement, and Program Modifications – No changes needed
- Chapter 10: SSMP Program Audits – No changes needed
- Chapter 11: Communication Program – No changes needed

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SSMP Audit No.1- March 2012

At the time of the first audit, Volume II of the plan, the appendices, was reviewed for documents that required revision or updating. The following are the actions to be taken as a result of that review:

1. **Appendix A- SSMP Organization**
 - a. Revise and update SSMP Development and Implementation Personnel.
 - b. Replace Division Personnel Roster dated 7/8/09 with the most updated version located at G:/Clerks/Radio Phones.xls
2. **Appendix B- Sewer Overflow Response Plan and Documentation**
 - a. Update and replace Agency Phone Numbers-p. 15.
 - b. Replace SSO Field Worksheet with the most recent version 12/15/11.
3. **Appendix F- Excerpts of the Municipal Code of the City of Glendale, CA Related to FOG.**
 - a. Insert the FOG Ordinance, City ordinance no.5667 of August 18, 2009.
4. **Appendix G- Restaurant List for the City of Glendale, CA**
 - a. Insert working list from 2011-2012 annual restaurant run list.
5. **Appendix H- Sewer Trouble Spot Work List**
 - a. Add a memo to the appendix that refers the reviewer to:
 - i. The storage location of the electronic master set of monthly work lists.
 - ii. The set of the 12 most recent work lists located on the Crew Supervisor's Office Door.
 - iii. Three(3) years of program records maintained in the Wastewater Section office.
6. **Appendix K- Sewer Line Maintenance and Inspection Form**
 - a. Insert most recent revision of the form.
7. **Appendix L- Restaurant Run Documentation**
 - a. Add a memo to the appendix that refers the reviewer to:
 - i. The complete set of field documents for the most recent annual restaurant runs maintained in the Wastewater Section Office.

SSMP Document Amendments

Date	Section Amended / Appended	Action Taken	By Whom	Notes
3/28/12	Appendix A	Revise and update SSMP Development and Implementation Personnel.	J. Hicks	Next Revision February 2013
Ongoing	Appendix A	Replace <u>Division Personnel Roster</u> dated 7/8/09	J. Hicks	most updated version located at G:/Clerks/Radio Phones.xls
April 2012	Appendix B	Replace <u>SSO Field Worksheet</u> with the most recent version 12/15/11.	J. Hicks	
May 2012	Appendix F	Insert the <u>FOG Ordinance</u> , Ch 13.34 of the Glendale Municipal code, City ordinance no.5667 of August 18, 2009.	M. Oillataguerre	
May 2012	Appendix G	<u>Restaurant List for the City of Glendale, CA</u> Insert working list from 2011-2012 annual restaurant run list.	J. Hicks	
April 2012	Appendix K	<u>Sewer Line Maintenance and Inspection Form</u> Insert most recent revision of the form.(March 2010)	J. Hicks	

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ATTACHMENT 10

Date	Section Amended / Appended	Action Taken	By Whom	Notes
6/4/12	Chapter 4 – Legal Authority	Append new document description 4.3.4 Encroachment Permit Agreement for the Operation and Maintenance of the CVWD Interceptor Sewer for the Conveyance of Wastewater in the Public Right of Way. Insert copy of document in Appendix D.	M. Oillataguerre	
6/4/12	Chapter 5 - Fats, Oils and Grease (FOG) Control Program.	Append new document description 5.3.7 "Amendment #1 to Chapter 5: Fats, Oils and Grease (FOG) Control Program." Insert copy of memo documenting Public Works Department oversight of FOG program.	M. Oillataguerre	
6/4/12	Appendix C	<u>Excerpts of the Municipal code of the City of Glendale</u> Insert "Amendment #1 to Appendix C"	M. Oillataguerre	
6/8/12	Appendix H	APPENDIX H - Sewer Trouble Spot Work List Created memo to refer reviewer to electronic master on G:\ drive and working and historical hard copy documents maintained in the Wastewater Shop Crew Office.	J. Hicks	
6/20/12	Appendix L	APPENDIX L- Restaurant Run Documentation Created memo to refer reviewer to electronic master on G:\ drive and working and historical hard copy documents maintained in the Wastewater Shop Crew Office.	J. Hicks	

[illegible]

Central Avenue Capacity Improvement Project
Bypass Spill Response and Communication Plan

(Rev. 1/24/12)

<u>Project Team</u>		<u>24 Hr. Phone</u>
Site Superintendent (Williams Pipe)	Luis Avalos	805-857-1227
Site Foreman (Williams Pipe)	Chay	805-755-3655
Construction Inspector (C of G)	Barbara Parenbangh (out Feb. 1- Feb. 14)	818-649-4337 Normal Wk. Hrs.
Project Manager (C of G)	Sam Mody	818-937-8257

Operations & Maintenance Coordinators

Sr. WW Maintenance Worker (C of G)	David Martinez, Jr.	562-335-7460
WW Maintenance Superintendent (C of G)	John Hicks	818-262-6799

Sewer System Overflows

1. Flows of raw sewage from pipes within a construction trench that do not leave the trench are NOT considered SSO's.
2. Any discharge of raw sewage from the collection system to the street, a sidewalk or right of way IS considered an SSO and must be reported to the State by the City.
3. Should an SSO occur do your best to contain it at the site to prevent entry into the storm drain system. Have an adequate supply of containment materials on site at all times.
4. Who to call:

Normal Working Hours	M-Th 6:30 AM to 4 PM Fri 6:30 AM to 3PM	David Martinez, Jr. or designated relief
After Normal Working Hours	All other times including Holidays	PW Maintenance Services Dispatch 818-548-3950



Los Angeles Regional Water Quality Control Board

January 25, 2013

Mr. Stephen M. Zum
Director of Public Works
City of Glendale
Public Works Department
633 E. Broadway, Room 209
Glendale, CA 91206

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED
Claim No. 7009 282C 0001 6537 8525

NOTICE OF VIOLATION – CITY OF GLENDALE, CITY OF GLENDALE COLLECTION SYSTEM – GLENDALE, CALIFORNIA (ORDER NOS. 2006-0003-DWQ AND 2008-0002-EXEC, WDID NO. 4SSO10368)

Dear Mr. Zum:

The City of Glendale ("Enrollee") operates a sanitary sewer collection system ("collection system"), regulated under waste discharge requirements contained in State Water Resources Control Board Order No. 2006-0003-DWQ Statewide General Waste Discharge Requirements ("WDR") for Sanitary Sewer Systems ("SSS"), adopted by the State Water Resources Control Board on May 2, 2006.

The SSS WDR contains waste discharge requirements and a monitoring and reporting program for the operation of the Enrollee's collection system referenced above. Wastewater conveyed by the Enrollee's collection system is susceptible of containing high levels of suspended solids, pathogenic organisms, toxic pollutants, nutrients, oxygen-demanding organic compounds, oil and grease, and other pollutants which can degrade water quality and impact beneficial uses of water, and which are defined as wastes under the Porter-Cologne Water Quality Control Act (CWC § 13000 et seq.).

The SSS WDR prohibits any Sanitary Sewer Overflow ("SSO") that results in a discharge of untreated or partially treated wastewater to waters of the United States. Furthermore, the Enrollee is required to report all SSOs to the statewide CIWQS SSO Online Database¹. As of January 16, 2013, the Enrollee has reported one hundred twenty-eight (128) SSOs in the CIWQS SSO Online Database to comply with the SSS WDR Amended Monitoring and Reporting Program ("Amended MRP"), since January 8, 2007 (see Exhibit 1 – attached).

On April 30, 2012, Jim Fischer, Water Resources Control Engineer with the State Water Resources Control Board's Office of Enforcement, and Craig Blett, designated inspector, under contract to the USEPA, conducted an inspection of the Enrollee's collection system to evaluate compliance with the SSS WDR. The inspector report is enclosed for your reference (see Exhibit 2 – attached).

¹ Available at:
https://ciwqs.waterboards.ca.gov/ciwqs/readOnly/PublicReportSSOServ.asp?reportAction=criteria&reportId=sec_main

You are hereby notified that the Enrollee is in violation of the Sanitary Sewer Collection System Order No. 2006-0003-DWQ and has violated California Water Code ("CWC") §§ 13350 and 13363 as follows:

A. Sanitary Sewer Overflows (SSOs):

1. SSS WDR Section C.1 prohibits any SSO that results in a discharge of untreated or partially treated wastewater to waters of the United States. The Enrollee violated this requirement by discharging untreated wastewater during sixty-eight (68) of the one hundred twenty-eight (128) SSOs reported as reaching surface waters and impacting waters of the State, as identified in Exhibit 1.
2. SSS WDR Section C.2 prohibits any SSO that results in a discharge of untreated or partially treated wastewater that creates a nuisance as defined in California Water Code Section 13050(m). The Enrollee violated Section C.2 by discharging untreated wastewater during one hundred twenty-eight (128) SSOs reported since January 8, 2007, as identified in Exhibit 1.

B. SSO Reporting:

1. Section D.13.vi of the SSS WDR requires each Enrollee to develop and implement an overflow emergency response plan. The Enrollee incorporated the *SSO Procedures and Documentation Refresher* into the Overflow Emergency Response Plan as a field reference guide. According to the *SSO Procedures and Documentation Refresher*, field determinations on sewage volume lost to storm drain system are final. The Enrollee violated Section D.13.vi by failing to correctly implement the Overflow Emergency Response Plan during the April 16, 2012 SSO at 2800 Glenoaks Boulevard by changing field determinations on sewage volume lost to a storm drain three days after the spill event.
2. Amended MRP Attachment A under the heading Notification part 1 requires notifying the California Emergency Management Agency, formerly known as the State Office of Emergency Services or OES, the local health officer or directors of environmental health with jurisdiction over affected water bodies, and the appropriate Regional Water Quality Control Board within two (2) hours after becoming aware of the discharge of sewage that results in a discharge to a drainage channel or to a surface water. The Enrollee violated this requirement for at least three SSO by failing to notify the California Emergency Management Agency within two hours of a discharge to a drainage channel or to a surface water. The three specific SSO events identified during the inspection are as follows:
 - a. On January 12, 2011, a SSO occurred at 625 Cavanagh Road which resulted in a discharge of 2,350 gallons. The Enrollee was notified of the spill at 1:05 pm and the OES was notified at 3:24 pm.
 - b. On April 4, 2012, a SSO occurred at 637 Cannon Drive which resulted in the discharge of 100 gallons to a storm sewer. The Enrollee was notified of the spill at 8:40 am and the OES was notified at 11:15 am.
 - c. On November 7, 2011, a SSO occurred at 3324 Crail Way which resulted in the discharge of 224 gallons to a storm sewer. The Enrollee was notified of the spill at 8:04 am and the OES was notified at 10:41 am.

C. Operations and Maintenance:

Section E.1 of the SSS WDR requires a copy of the general WDRs and the certified Sewer System Management Plan ("SSMP") to be available to all sanitary sewer system operating and maintenance personnel at all times. During the inspection, when two sanitary sewer system operating and maintenance field crew members were asked whether they were familiar with the SSMP and its contents, they responded that they were not familiar with the SSMP or its contents. The SSMP includes a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer system. Therefore, the Enrollee violated Section E.1 by failing to make the SSMP available to its sanitary sewer system operating and maintenance personnel.

D. Program Self-Assessment:

Section D.13.x of the SSS WDR requires the Enrollee to conduct periodic internal SSMP Program audits evaluating the effectiveness of the SSMP and the Enrollee's compliance with the SSMP requirements every two years. In addition, a report identifying deficiencies in the SSMP and steps taken to correct them must be prepared and kept on file, as identified in subsection D.13 of the SSS WDR. During the inspection, the Enrollee was unable to produce any evidence including a report to indicate a formal audit was conducted by its staff. Therefore, the Enrollee violated Section D.13.x for failure to conduct a formal audit of the SSMP and to have the required report on file.

E. General Areas of Concern:

Section D.8 of the SSS states that the Enrollee shall properly manage, operate, and maintain all parts of the sanitary sewer system owned or operated by the Enrollee, and shall ensure that the system operators including employees, contractors, or other agents are adequately trained and possess adequate knowledge, skills and abilities. During the inspection, it was noted that:

- a. The volume of the sewage spill that reached surface water, drainage channel, or not recovered from the storm drain documented in the *SSO Field Worksheet* by the field crew at the 2800 Glenoaks Boulevard spill location on April 18, 2012 was revised three days after the spill event by a Wastewater Maintenance Supervisor. Field notes with major findings such as sewage spill volume discharging into the storm drain, drainage channel, or sewage spill that reached surface water are final and should not be revised after leaving the spill location.
- b. The Enrollee's uses a paper-based recording system for its daily collection system cleaning operations. Information from the paper-based records was not transferred to the City's Computerized Maintenance Management System. As a result, if cleaning history or Closed Circuit Television (CCTV) information were needed during an emergency, a physical search of the paper files must be conducted to locate the paper-based records and related CCTV video.
- c. A contractor hired by the Enrollee caused a backup onto a private property at a Sear's retail store located at 211 West California Avenue on March 28, 2012. No evidence was presented during the inspection which demonstrated the contractor was trained on the Overflow Emergency Response Plan or the Operation and Maintenance programs within the SSMP. In addition, the SSMP does not include procedures to ensure that contractor personnel are appropriately trained for an overflow emergency.

Mr. Stephen M. Zurn
City of Glendale

- 4 -

January 25, 2013

- d. The Overflow Emergency Response Plan does not include procedures to address crowd control or identify methods to ensure the public is protected from raw sewage overflows.

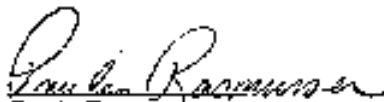
You are required to Immediately:

1. Ensure full implementation of all required reporting requirements contained in the Amended Monitoring and Reporting Program;
2. Immediately implement corrective and preventative actions to bring the Enrollee's collection system into compliance with the Sanitary Sewer Collection System Order No. 2008-0003-DWQ;
3. Submit, by **February 25, 2013**, a report to the Regional Board detailing the corrective actions being taken to bring the Enrollee's collection system into compliance with the Sanitary Sewer Collection System Order No. 2008-0003-DWQ. This report should address the violations cited in this notice as well as the 'Areas of Concern' listed in the attached inspection report. The report must be submitted as a pdf via email or a compact disc to Ms. Pansy Yuen, 320 W. 4th Street, Suite 200, Los Angeles, CA 90013-2343, pyuen@waterboards.ca.gov, (213) 620-5367.

Pursuant to CWC § 13350, subdivision (e), the Enrollee is subject to penalties of up to \$5,000 for each day in which a violation occurs or \$10 for each gallon of waste discharged, but not both. Pursuant to CWC § 13385, the Enrollee is subject to penalties of up to \$10,000 for each day in which a violation occurs plus \$10 multiplied by the number of gallons by which the volume discharged but not cleaned up exceeds 1,000 gallons. The Regional Water Quality Control Board, Los Angeles Region ('Regional Board') may refer this matter to the Attorney General for judicial enforcement. The Regional Board reserves its right to take any enforcement actions authorized by law.

If you have any questions regarding this matter, please call Ms. Pansy Yuen at (213) 620-6637/ pyuen@waterboards.ca.gov or Mr. Hugh Marley at (213) 620-6375/ hmarley@waterboards.ca.gov.

Sincerely,



Paula Rasmussen
Assistant Executive Officer

Enclosures:

- Exhibit 1 – City of Glendale SSOs
- Exhibit 2 – April 30, 2012 Sanitary Sewer Collection System Inspection Report

cc: [via e-mail only]
Mr. Jim Fischer, State Water Resources Control Board, Office of Enforcement;
Mr. Dan Hardgrove, City of Glendale Public Works Department Maintenance Services
[dhardgrove@ci.glendale.ca.us]

EXHIBIT 1:
City of Glendale - Glendale Collection System SSOs
(as reported on CIWQS as of 1/16/2013)

Event ID	SSO Category	Start Date and Time	SSO Address	City	Volume of SSO (gallons)*	Volume of SSO Recovered (gallons)*	Volume of SSO Reaching Surface Water (gallons)*
645268	Category 1	1/6/2007 13:55:00	1134 Chevy Chase Drive	Glendale	100	0	100
645450	Category 2	1/10/2007 10:45:00	1134 Chevy Chase Highway	Glendale	5	0	0
645861	Category 2	1/15/2007 19:45:00	315 Louise Street	Glendale	5	0	0
646135	Category 1	1/8/2007 8:00:00	1935 Carrinito de la Estrella	Glendale	200	0	0
647671	Category 1	3/4/2007 11:00:00	170 Cedar Street	Glendale	3,000	500	2,500
648101	Category 1	3/17/2007 14:54:00	133 Chevy Chase Dr. Drive	Glendale	100	0	100
648236	Category 1	3/20/2007 11:00:00	300 Kenneth Road	Glendale	1,350	0	1,350
648237	Category 1	3/21/2007 11:00:00	3018 Paddington Road	Glendale	300	0	300
649817	Category 1	4/23/2007 12:05:00	337 Riverdale Avenue	Glendale	100	50	50
650180	Category 1	5/3/2007 1:00:00	1547 Vanderbilt Place	Glendale	900	0	900
650736	Category 1	5/6/2007 15:35:00	1122 Commercial Drive	Glendale	100	10	90
651075	Category 1	5/26/2007 11:15:00	3101 San Gabriel Avenue	Glendale	800	200	600
652336	Category 1	6/16/2007 12:50:00	536 Luten Drive	Glendale	200	100	100
652528	Category 1	6/19/2007 14:10:00	1101 Flower Street	Glendale	2,375	1,125	1,250
654493	Category 2	7/17/2007 9:25:00	1351 Columbia	Glendale	250	30	0
654966	Category 1	7/28/2007 11:45:00	3251 Buckingham Road	Glendale	500	100	500
655231	Category 1	8/2/2007 10:30:00	510 Cavanagh Road	Glendale	100	0	100
655670	Category 1	8/7/2007 9:15:00	1515 Ard Levin Avenue	Glendale	10	0	10
655947	Category 1	8/16/2007 8:50:00	3524 Saint Elizabeth Road	Glendale	925	175	750
656090	Category 1	8/18/2007 12:30:00	367 Chevy Chase Drive	Glendale	150	0	150
656775	Category 1	9/2/2007 13:55:00	1671 Inn Drive	Glendale	500	100	400
656905	Category 1	8/14/2007 9:00:00	2935 St. Gregory Road	Glendale	300	150	150
657497	Category 2	9/12/2007 11:30:00	1859 Verdugo Loma Drive	Glendale	200	0	0
657700	Category 1	9/16/2007 12:00:00	2100 Broadview Drive	Glendale	4,500	500	4,000
704497	Category 1	10/1/2007 11:15:00	1355 Cordova Drive	Glendale	200	10	190
706007	Category 1	10/24/2007 8:00:00	508 Isabel Street	Glendale	200	0	200
706615	Category 1	10/25/2007 10:05:00	1600 Royal Boulevard	Glendale	900	0	900
707450	Category 2	4/18/2007 5:15:00	140 North Isabel Street	Glendale	990	0	0
707617	Category 1	11/10/2007 9:30:00	2301 Holister	Glendale	1,750	125	1,625
707816	Category 1	11/15/2007 21:00:00	500 Colorado Street	Glendale	12,000	2,000	10,000
707827	Category 1	11/16/2007 7:30:00	1312 Oberlin Drive	Glendale	750	0	750
707936	Category 1	6/24/2007 13:30:00	220 Glendale Avenue	Glendale	7,500	7,500	0
708113	Category 2	11/23/2007 16:35:00	1721 Marion Drive	Glendale	100	0	0
708941	Category 1	12/10/2007 20:30:00	641 Canyon Drive	Glendale	700	200	500
709646	Category 1	12/16/2007 11:00:00	3041 Chevy Chase Drive	Glendale	508	0	508
709901	Category 2	5/25/2007 11:00:00	1736 Alamo Drive	Glendale	10	0	0
709903	Category 2	5/25/2007 14:58:00	1550 Melwood Drive	Glendale	50	0	0
709938	Category 2	5/31/2007 9:00:00	500 Arch Place	Glendale	10	0	0
709941	Category 2	9/10/2007 18:00:00	1329 Elm Avenue	Glendale	100	0	0
710149	Category 2	7/20/2007 8:53:00	1440 Melwood Drive	Glendale	50	0	0
710453	Category 2	12/24/2007 15:00:00	445 Mt. Carmel Drive	Glendale	700	700	0
710894	Category 1	1/18/2008 15:15:00	1117 Alen Avenue	Glendale	750	0	750
711523	Category 2	1/19/2008 16:00:00	3877 Glenwood Road	Glendale	100	0	0
711998	Category 1	1/27/2008 11:00:00	4527 San Fernando Road	Glendale	450	0	450
712181	Category 1	1/30/2008 9:40:00	1600 Inn Drive	Glendale	45	0	45
712309	Category 2	2/1/2008 13:02:00	1708 Las Flores Drive	Glendale	5	0	0

EXHIBIT 1:
City of Glendale - Glendale Collection System SSOs
(as reported on CIWQS as of 1/16/2013)

Event ID	SSO Category	Start Date and Time	SSO Address	City	Volume of SSO (gallons)*	Volume of SSO Recovered (gallons)*	Volume of SSO Reaching Surface Water (gallons)*
712227	Category 2	1/29/2008 21:30:00	544 Olmstead Drive	Glendale	274	0	0
713802	Category 1	2/23/2008 11:30:00	1631 Moreland Drive	Glendale	370	0	340
714280	Category 1	2/26/2008 10:18:00	1900 Sherer Lane	Glendale	85	50	35
714741	Category 1	3/9/2008 11:30:00	1300 Irving Avenue	Glendale	600	20	580
715480	Category 2	3/24/2008 22:15:00	1600 Del Valle Avenue	Glendale	50	0	0
715693	Category 1	4/1/2008 20:30:00	1517 Ridgeway Drive	Glendale	450	100	350
715843	Category 2	4/3/2008 6:00:00	1554 Almond Road	Glendale	20	0	0
716067	Category 2	4/2/2008 16:00:00	Nesmith Road	Glendale	180	0	0
716097	Category 1	4/9/2008 21:00:00	2738 Buell Lane	Glendale	100	20	80
716956	Category 1	5/4/2008 18:15:00	3041 Chevy Chase Drive	Glendale	1,000	0	1,000
717012	Category 1	5/5/2008 9:45:00	2229 Glen Oaks Boulevard	Glendale	94	0	94
717024	Category 1	5/5/2008 8:00:00	3200 Verdugo Road	Glendale	110	30	80
717193	Category 2	4/28/2008 9:00:00	Roads End	Glendale	50	0	0
718102	Category 1	5/29/2008 11:10:00	1420 Central Avenue	Glendale	12,748	12,748	0
718994	Category 2	6/2/2008 9:00:00	1871 Oakmont	Glendale	5	0	0
719441	Category 1	6/17/2008 16:45:00	300 Verdugo Road	Glendale	1,700	2,500	5,200
719951	Category 1	6/13/2008 8:44:00	Kenneth Road	Glendale	1,250	675	575
724196	Category 1	3/2/2008 9:25:00	400 Kempton Road	Glendale	175	0	175
725877	Category 2	8/30/2008 10:46:00	1300 1420 Allen Avenue	Glendale	15	0	0
727685	Category 2	10/8/2008 11:00:00	3500 Clifton Place	Glendale	20	20	0
727744	Category 2	10/8/2008 8:40:00	2815 Chevy Chase Drive Drive	Glendale	20	15	0
728963	Category 2	10/26/2008 12:50:00	3151 San Gabriel Avenue	Glendale	240	240	0
730094	Category 1	11/29/2008 17:00:00	1240 Crescent Drive	Glendale	75	0	75
730310	Category 2	12/5/2008 15:00:00	614 Glenendale Terrace	Glendale	14	14	0
730362	Category 1	12/8/2008 15:50:00	550 Arden Avenue	Glendale	5	0	5
730597	Category 1	12/14/2008 18:30:00	3524 St. Elizabeth Road	Glendale	2,500	1,413	1,087
731067	Category 2	12/23/2008 12:00:00	721 Glen Avenue	Glendale	800	0	0
733923	Category 2	1/10/2009 23:00:00	2900 Graceland Way	Glendale	20	0	0
734105	Category 1	2/24/2009 7:15:00	2100 Broadview Drive	Glendale	1,700	522	1,178
734413	Category 1	2/25/2009 16:00:00	4240 Lauderdale Avenue	Glendale	225	32	193
734550	Category 1	3/3/2009 8:54:00	408 Spencer Street	Glendale	1,100	775	325
738087	Category 2	5/21/2009 11:40:00	535 Broadway Boulevard	Glendale	100	0	0
744277	Category 2	8/30/2009 21:15:00	819 Harrington Road	Glendale	20	0	0
744480	Category 1	9/5/2009 9:00:00	1400 Valerie Drive	Glendale	385	10	375
746309	Category 2	10/20/2009 13:00:00	1300 Wabasso Way	Glendale	3	0	0
746588	Category 2	10/29/2009 13:30:00	1100 Elm Avenue	Glendale	15	15	0
746633	Category 2	10/29/2008 12:08:00	1521 Grandview Avenue	Glendale	15	0	0
746796	Category 2	11/11/2009 11:00:00	2301 Hollister Terrace	Glendale	3	0	0
746848	Category 1	11/15/2009 9:20:00	871 Verdugo Road A	Glendale	3,064	1,234	0
746859	Category 1	11/17/2009 11:10:00	1019 Dolores Avenue	Glendale	175	0	0
749404	Category 1	2/14/2010 21:00:00	3128 Dragonfly Street	Glendale	500	0	0
749412	Category 1	2/15/2010 11:00:00	1700 Bo Aire Drive	Glendale	300	40	0
749583	Category 1	2/28/2010 17:50:00	3767 Lockenbie Lane	Glendale	405	10	0
750607	Category 2	3/12/2010 13:00:00	130 Chevy Chase Drive	Glendale	1,300	1,300	0
753416	Category 1	6/11/2010 9:15:00	1368 Bruce Avenue	Glendale	150	145	0
755037	Category 1	7/14/2010 20:20:00	1700 Cielito Drive	Glendale	900	225	0

EXHIBIT 1:
City of Glendale - Glendale Collection System SSOs
(as reported on CIWQS as of 1/16/2013)

Event ID	SSO Category	Start Date and Time	SSO Address	City	Volume of SSO (gallons)*	Volume of SSO Recovered (gallons)*	Volume of SSO Reaching Surface Water (gallons)*
755355	Category 2	7/20/2010 8:50:00	700 E. Lynn Drive	Glendale	247	247	0
755922	Category 1	8/8/2010 8:50:00	1601 Ridgewood Drive	Glendale	2,625	0	0
756876	Category 1	9/15/2010 6:30:00	1900 Glencrags Blvd. Boulevard	Glendale	180	15	165
757150	Category 1	9/22/2010 18:20:00	Canada Boulevard	Glendale	350	175	175
758198	Category 1	10/25/2010 11:09:00	1111 Air Way	Glendale	315	75	240
758123	Category 2	10/31/2010 11:45:00	9456 St. Elizabeth Road	Glendale	640	0	0
759053	Category 1	12/25/2010 9:45:00	1400 N. Modera Drive	Glendale	175	120	55
761203	Category 1	1/12/2011 10:00:00	675 Cavanagh Road	Glendale	2,350	390	1,960
761405	Category 1	1/15/2011 14:55:00	631 Alexander Street	Glendale	265	190	75
761990	Category 1	1/25/2011 7:10:00	605 Kenneth Road	Glendale	680	300	380
762563	Category 2	1/25/2011 1:50:00	1415 Edinburgh Lane	Glendale	70	70	0
763117	Category 2	2/12/2011 10:00:00	3575 Chevy Chase Drive	Glendale	200	195	0
764430	Category 2	3/12/2011 12:15:00	3100 Glencrest Drive	Glendale	25	25	0
764439	Category 1	3/15/2011 7:15:00	1014 Linden Avenue	Glendale	11,700	1,900	7,100
768202	Category 1	7/6/2011 7:55:00	1059 Raymond Avenue	Glendale	1,500	1,250	250
770280	Category 2	8/20/2011 13:41:00	1110 Catalina Drive	Glendale	5	0	0
771475	Category 2	9/23/2011 9:15:00	408 Spencer Street	Glendale	10	0	0
771473	Category 1	9/25/2011 18:45:00	1400 Mountain Street	Glendale	1,000	300	700
771534	Category 2	9/14/2011 10:15:00	1539 Moreno Drive	Glendale	375	0	0
772503	Category 1	10/20/2011 17:50:00	1302 Golf Club Drive	Glendale	500	250	250
772892	Category 1	11/7/2011 8:04:00	3324 Grail Way	Glendale	225	1	224
774438	Category 2	11/6/2011 10:35:00	750 Kenneth Road	Glendale	415	415	0
774568	Category 1	12/21/2011 8:03:00	1200 Columbus Avenue	Glendale	890	182	808
775748	Category 1	12/31/2011 14:00:00	Pacific Avenue	Glendale	600	225	0
775945	Category 2	1/10/2012 12:50:00	1400 Del Monte Drive	Glendale	23	23	0
779477	Category 2	3/28/2012 12:50:00	200 California Avenue	Glendale	75	75	0
779577	Category 1	4/4/2012 8:40:00	637 Canyon Drive	Glendale	155	50	0
780220	Category 1	4/16/2012 9:25:00	2300 Glencrags Boulevard	Glendale	135	40	0
780903	Category 2	4/25/2012 20:30:00	3100 Dragonfly Street	Glendale	5	5	0
781684	Category 1	5/24/2012 8:31:00	2840 Glencrags Boulevard	Glendale	5,300	1,620	650
782597	Category 1	6/23/2012 13:00:00	100 Colorado Boulevard	Glendale	900	450	450
786096	Category 1	9/9/2012 10:00:00	3354 Thelma Street	La Crescent	375	125	250
787328	Category 1	10/16/2012 13:25:00	536 Grove Place	Glendale	73	15	58
787835	Category 1	10/31/2012 9:13:00	1100 Allen Avenue	Glendale	2,450	2,000	450
788775	Category 1	12/1/2012 9:30:00	275 Kenneth Road	Glendale	250	225	25
789153	Category 1	12/15/2012 14:30	1647 Canyon Drive	Glendale	120	38	52
TOTALS					118,115	48,224	55,972

April 30, 2012

Sanitary Sewer Collection System Inspection Report

Exhibit 2

EPA Region IX and California Water Resources Control Board

Sanitary Sewer Collection System Inspection Report

Collection System Name and Location City of Glendale Collection System 553 E. Broadway Rm 209 Glendale, CA 91205		Entry Date 4/30/2012	Permit Effective Date 5/2/2008
Order Number 2008 0001 DWQ & 2009-0002-EXEC	WQID Number 4SS010063		Permit Expiration Date
Name(s) & Title(s) of On-Site Representative(s) Maurice Ollataguerre (Sr. Env. Prgm Specialist) John Hicks (Wastewater Maintenance Supervisor)	Contact Information Phone: (818) 937-8218 Email: molataguerre@cityofglendale.ca.us	Notified of Inspection? ☒ Yes ☐ No	
Name, Title & Address of Responsible Official Dan Hardgrove (PW, Maint. Services Administrator) 641 W. Chesebrough Drive Glendale, CA 91204	Contact Information Phone: (818) 548-3050 Email: dhardgrove@cityofglendale.ca.us	Official Contacted? ☐ Yes ☒ No	
Inspector(s) Primary: Craig Bels (PG Environmental, LLC) Others: Jim Fisher (State Water Resources Control Board)		Presented Credentials? ☒ Yes ☐ No	
Weather Conditions at the Time of the Inspection: Sunny, no recent precipitation		Receiving WWTP Information Name: Hyperion Wastewater Treatment Plant and Glendale Water Reclamation Plant NPDES No.: CA0109931 and CA0053953 respectively	
Overview of Areas Evaluated During Inspection S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated			
SSO History: L SSO Reporting & Documentation: L Legal Authority: S Storm System Mapping: S		Operations & Maintenance: M Overflow Emergency Response Plan: M FOG Control Program: S Program Self-Assessment: U	
Prepared By: Craig Bels (PG Environmental, LLC) on 5/8/2012 Reviewed By: Max K. Kiser (PG Environmental, LLC) on 5/22/2012			

Narrative

On April 30, 2012 a USEPA contractor inspected the Glendale City Collection System in Glendale, CA. Discharges from the City's collection system are regulated by the Sanitary Sewer System Waste Discharge Requirements (SSSWDR; 2006-0003-DWQ) and its accompanying Amended Monitoring Plan Order No. 2008-0002-EXEC (hereafter Amended MRP). The primary on-site representative was Maurice Ollataguerre (Senior Environmental Program Specialist) and the additional on-site representative was John Hicks (Wastewater Maintenance Supervisor).

The primary goals of this inspection were to gather necessary information for compliance and enforcement purposes as stated in the Compliance and Enforcement Plan for the Sanitary Sewer Overflow Reduction Program posted on the Sanitary Sewer Overflow Reduction Program website and to evaluate the effectiveness of controls used by the City to prevent discharges as prohibited by the Clean Water Act (CWA). The inspection encompassed on-site inspections and subsequent review of pertinent sewer system information, including review of Sewer System Management Plans (SSMPs); maintenance, operations, and management activities; Sewer Use Ordinance; financial information; and other areas needed to verify the Discharger's compliance with all requirements of the SSSWDR, including efforts to eliminate, reduce and/or mitigate sanitary sewer overflows (SSOs).

The State Water Resources Control Board (State Water Board), Office of Enforcement and participating Regional Water Quality Control Board (Los Angeles Water Board) are conducting Compliance Inspections of sewer collection systems. The inspections are being conducted as part of the combined Water Boards' enforcement response to verify compliance with "Waste Discharge Requirements for Sanitary Sewer Systems," Water Quality Order No. 2006-0003-DWQ, and its incorporated amended Monitoring and Reporting Program (hereafter referred to as SSSWDR (the acronym for the term Sanitary Sewer Systems Waste Discharge Requirements in Water Board vernacular) and amended MRP).

The collection system is regulated under the SSSWDR (2006-0003-DWQ) and associated amended MRP (2008-0002-EXEC), which requires all public agencies that own or operate a sanitary sewer system comprised of more than one mile of pipes that convey wastewater to a publicly owned treatment facility to apply to the State Water Board for coverage under the SSSWDR. Applicable public agencies were required to file a Notice of Intent (NOI) for each individual sanitary sewer collection system owned or operated by the public city by November 2, 2006. State Water Board records show that the City of Glendale filed an NOI with the State Water Board to enroll "Glendale City - Glendale City Collection System," which was assigned WDID #4SSO10388 by the State Water Board, effective on April 7, 2008.

No prior inspection of the collection system has been conducted by either the State Water Board, or the Los Angeles Water Board.

System Overview

The City of Glendale (City) owns and operates the Glendale City Collection System, a medium-sized sanitary sewer collection system that serves the entire area of the City of Glendale, Los Angeles County, California. Sewage is conveyed by the collection system to the City of Los Angeles and is ultimately treated at the Hyperion Wastewater Treatment Plant which is owned and operated by the City of Los Angeles or the Glendale Water Recreation Facility which is jointly owned by the City of Glendale and the City of Los Angeles.

According to the City's "Collection System Questionnaire" required by the SSSWDR, last updated by the City on November 10, 2011, and confirmed during the inspection, the collection system serves an estimated population of approximately 207,000 residents, and contains 390 miles of gravity sewers, no force mains (pressurized sewers), and 33,000 lateral sewer service connections. The City does not have ownership or maintenance responsibilities of the laterals other than the points of connection to the main sewers. The City's collection system has reportedly experienced historic and periodic SSOs, some of which are violations of the SSSWDR, where untreated or partially treated sewage reached surface waters, based on information certified by City in the California Integrated Water Quality System (CIWQS).

Inspection Timeline

Time	Inspection Activity/Task
7:00 AM	Introductions and Opening Statements at Opening Conference
7:30 AM	Collection System Overview at the Administration Building
10:30 AM	Maintenance Shop Records Review
1:30 PM	Field Activities
4:00 PM	Additional Records Review at the Maintenance Shop
4:30 PM	Closing Meeting at the Maintenance Shop
8:10 PM	Exited the Inspection

Major Findings

SSO History

1. State Water Board Order 2006-0003-DWQ, Part C.1 stated that the discharge of untreated or partially treated wastewater to waters of the United States is prohibited. Based on a review of the SSO Public Report generated from the CIWQS online reporting system, on five occasions between April 30, 2011 and April 30, 2012 untreated wastewater was discharged by the City to waters of the United States. Refer to Exhibit 1 for the CIWQS Violations Report which gives details of the SSO discharges. The City reported discharges to surface waters of 250 gallons on July 6, 2011; 700 gallons on September 25, 2011; 250 gallons on October 20, 2011; 224 gallons on November 7, 2011, and 608 gallons on December 21, 2011.
2. State Water Board Order 2006-0003-DWQ, Part C.2 prohibits the discharge of untreated or partially treated wastewater that creates a nuisance as defined in California Water Code Section 13053(m). Based on a review of the SSO Public Report generated from the CIWQS online reporting system, on ten occasions between April 30, 2011 and April 30, 2012 untreated wastewater was discharged by the City from the collection system creating a nuisance such as to be potentially injurious to health and to be offensive to the senses. Refer to Exhibit 1 for the CIWQS Violations Report which gives details of the SSO discharges.

SSO Reporting & Documentation

1. State Water Board Order 2006-0003-DWQ, Part D.13.vi requires that each Enrollee shall develop and implement an overflow emergency response plan. The City developed an overflow emergency response plan and prepared field forms and standard procedures to implement that plan. According to interviews with the primary on-site representative and field crews, the plan and procedures were not followed in documenting an SSO that occurred on April 16, 2012 when there was a blockage in a sewer main at 2808 Genoa Ave. The responding field crew originally reported that the spill volume was 136 gallons and that no wastewater was captured and returned to the sewer. The field crew also reported that the wastewater entered a storm

sewer catch basin and was not recovered. The inspectors and the City representatives made a site visit to the location of the spill. The responding field crew was met at the spill location and interviewed regarding the details of the spill and their subsequent response. One field crew member, Mr. Dave Ulrich, stated that the spilled wastewater had entered the storm sewer catch basin confirming the information in his original field report made at the time of the spill. Based on a review of the field report, the field report was revised by the Wastewater Maintenance Supervisor three days after the spill had occurred. The report was changed from the field crew's on-site determination of wastewater entering a catch basin to a conclusion that no wastewater entered the catch basin and furthermore that 41 gallons of wastewater was captured and returned to the sewer (refer to Exhibit 2). According to the Wastewater Maintenance Supervisor, the revisions were made by him. The Wastewater Maintenance Supervisor based his revisions on assumptions of flow path, rate and distance of flow. He documented the revised calculation in an undated and unsigned sketch (refer to Exhibit 3). According to the Wastewater Maintenance Supervisor, Mr. Ulrich had 'changed his story' when questioned by the inspectors. Note that training information in a field crew guide collected during the inspection indicates that the response team (field crew) shall determine if any sewage is lost to a storm drain and the field decisions on lost some/lost none are final (refer to Exhibit 4).

2. State Water Board Order 2003-0003-DWQ Amended VRP, Attachment A (Notification) requires that for any discharges of wastewater that results in a discharge to a drainage channel or a surface water, the Discharger shall, as soon as possible but not later than two (2) hours after becoming aware of the discharge, notify the State Office of Emergency Services. On at least three occasions, the City failed to report a discharge to a drainage channel or a surface water within two (2) hours. The specific SSO events are presented in the following paragraphs:

On January 12, 2011 an SSO occurred at 325 Cavanagh Road which resulted in a discharge of 2,350 gallons. The City was notified of the spill at 1:05 PM and the OES was notified at 3:24 PM (refer to Exhibit 5, Page 1 of 3).

On April 4, 2012 an SSO occurred at 637 Cannon Drive which resulted in the discharge of 100 gallons to a storm sewer. The discharge to the storm sewer was not captured and returned to the sanitary sewer system. The City was notified of the spill at 8:40 AM and the OES was notified at 11:15 AM (refer to Exhibit 5, Page 2 of 3).

On November 7, 2011 an SSO occurred at 3324 Crail Way which resulted in the discharge of 224 gallons to a storm sewer. The discharge to the storm sewer was not captured and returned to the sanitary sewer system. The City was notified of the spill at 8:04 AM and the OES was notified at 10:41 AM (refer to Exhibit 5, Page 3 of 3).

The primary on-site representative stated that containing the spill and recovering the wastewater is the City's highest priority and therefore at times the notification is delayed if it interferes with spill response.

Operations & Maintenance

1. State Water Board Order 2008-0003-DWQ Part E.1 requires a copy of the general WDRs and the certified SSMP shall be available to sanitary sewer system operating and maintenance personnel at all times. Two field crew members were asked whether they were familiar with the SSMP and its contents. They responded that they were not familiar with the SSMP or its contents.

Program Self-Assessment

1. State Water Board Order 2006-0003-DWQ, Part D.13.x requires the Enrollee to conduct periodic internal SSMP Program audits every two years and requires that a report must be prepared and kept on file. The City did not conduct a formal audit of the SSMP to evaluate the effectiveness of the SSMP and did not have the required report on file. The primary on-site representative stated that an informal audit had been conducted, however, no record was made of the audit.

Areas of Concern

Operation and Maintenance

1. Collection system cleaning operations use a paper-based recording system with field crews recording each day's cleaning activities and results on a single sheet of paper that is then placed in a paper file system. Information from the paper-based records is not transferred to the City's Computerized Maintenance Management System (CMMS) and there is no automated retrieval or searchable system for reviewing cleaning history and no method to allow for a cross reference to CCTV information. If cleaning history is needed, a physical search of the paper files must be conducted.

SSO Emergency Response Plan

1. A contractor working for the City on a City owned sewer line caused a backup onto private property at 211 W. California (Sears retail store) on March 26, 2012. There was no discussion of training contractors in the SSMP and there was no evidence presented that demonstrated that a contractor had been trained on SSO emergency response or O&M programs.
2. The SSO Emergency Response Plan was reviewed as a component of this inspection. The SSO Emergency Response Plan does not address crowd control or have information to ensure the public is protected from the spilled wastewater.

Attachments:

Photo Log
Exhibit Log

COLLECTION SYSTEM INFORMATION:

INSPECTED ITEM	RESPONSE
1. Sanitary Sewer System Category	Municipal
2. Population served by agency's sanitary sewer system <i>The population estimate was provided on a Pre-inspection Questionnaire and was based on the 2010 Census. The City reported a population of 207,000 residents in the 2011 Annual Collection System Questionnaire in CIWQS.</i>	191,719
3. Approximate size of the service area served by the sewer collection system	28 square miles
4. Miles of sanitary sewer in the collection system a. Gravity b. Force main	362 0
5. Number of pump stations in the collection system	1
6. Average monthly household user fee for sewage collection only	\$17
7. Budget for operation and maintenance sanitary sewer system facilities a. Last fiscal year b. Current fiscal year c. Following fiscal year <i>Budget information is based on information collected during the inspection.</i>	\$2,432,871 \$3,362,927 \$3,036,514
8. Number of staff (FTEs) that conduct sewer operation and maintenance tasks	16
9. Collection system maintenance equipment owned by the agency a. Combination vacuor truck(s) (hydro flush/vacuum) b. Mechanical molder(s) c. Closed-circuit television (CCTV) inspection trucks d. Standalone CCTV camera units	3 1 1 N
10. Method for assigning and tracking work orders for sewer system maintenance <i>The City uses a computerized maintenance management system (CMMS) for assigning work orders. Cleaning operations use a paper-based recording system with field crews recording each day's cleaning activities and results on a single sheet of paper that is then placed in a paper file system. Information from the paper-based records are not transferred to the CMMS system.</i>	CMMS and Paper-Based Systems
11. Budget for capital expenditures for sanitary sewer system facilities a. Last fiscal year b. Current fiscal year c. Following fiscal year <i>The rapid escalation of capital expenditures from last year to the current year was not discussed during the inspection.</i>	\$607,994 \$18,100,400 \$26,865,000

COLLECTION SYSTEM INFORMATION:

INSPECTED ITEM	RESPONSE
12. Portion of sewer service laterals that agency is responsible for	<i>Connection at Main</i>
13. Number of sewer service lateral connections <i>The City reported 33,000 sewer service laterals in the 2011 Annual Collection System Questionnaire in CIWQS.</i>	<i>33,750</i>
14. Number of wastewater treatment plants (WWTPs) that ultimately receive wastewater from this collection system: WWTP Name(s): <u>Hyperion Wastewater Treatment Plant and Glendale Water Reclamation Plant</u> WDID No(s): <u>N/A</u>	<i>2</i>
15. Does this collection system discharge into any other collection systems? Collection System Name: <u>City of Los Angeles</u> WDID No: <u>N/A</u>	<i>Yes</i>
16. Do any upstream collection systems greater than 25,000 gallons/day (gpd) discharge into this collection system? Collection System Name: <u>City of Los Angeles</u> WDID No: <u>N/A</u> <i>According to the Pre-inspection Questionnaire, 16 million gallons per day (mgd) are discharged from the City of Los Angeles to the City's collection system.</i>	<i>Yes</i>
17. Percentage of flow in the collection system from the following sources: a. Residential b. Commercial c. Industrial d. Institutional	<i>80% 10% 10% 0</i>
18. Has the agency developed standard and emergency operating procedures for each asset (e.g., pump stations, WWTP process units, and collection system force mains) in the event of a power and/or pumping failure?	<i>Yes</i>
19. Are pump stations in the collection system connected to a supervisory control and data acquisition (SCADA) system or an auto dialer system to detect pump failures or high/low wet well levels? If yes, how many? <i>The single pump station is connected to an auto dialer system.</i>	<i>Yes</i>
20. Other:	
Notes:	

SSO HISTORY:

OVERALL RATING: U

INSPECTED ITEM	EVALUATION
1. Number of SSOs that occurred during the past twelve months that: a. Discharged to waters of the United States: <u>0</u> b. Entered a storm sewer system and discharged to waters of the United States: <u>5</u> c. Entered a storm sewer system but were contained prior to discharge to waters of the United States: <u>0</u> d. Discharged to private residences/buildings: <u>2</u> <i>1b. According to the CIWQS Violation Report, during the last twelve months, the City reported five SSO's where wastewater discharged to a storm sewer system and discharged to waters of the United States. Spill reports were confirmed by reviewing spill records that included the SSO Field Worksheets and Stoppage Follow-up and Documentation Check Sheets. Select SSO files for the period of January 2011 through April 2012 were reviewed. Refer to the 'Major Findings - SSO History' section of this report for details.</i> <i>1d. A subset of SSO records from the previous twelve months were reviewed during the inspection. Two discharges to buildings were identified based on the review.</i>	
2. Does the agency hold post-SSO briefings with collections staff, management and others involved, to evaluate root cause of SSOs and document service changes necessary to prevent the recurrence of the SSO and be prepared in responding to SSOs in the future?	Yes
3. Provide a description of steps taken by the agency to mitigate largest (by volume) SSO event which occurred during previous 12 months: <i>A 990 gallon spill occurred at 1200 N. Columbus Avenue on December 21, 2011. The spill was due to a blockage caused by grease and roots. The City investigated the source of the spill by CCTVing the line segment and observed roots and grease in the line. The City has a regular preventative maintenance program to clean sewer lines of roots and grease.</i>	S
4. Other:	N
Notes: <i>This section was rated "unsatisfactory" due to checklist item 1b.</i>	

SSO REPORTING & DOCUMENTATION:

OVERALL RATING: U

INSPECTED ITEM	EVAL
1. Has the Enrollee obtained an SSO Database account by registering through the California Integrated Water Quality System (CIWQS) [Part G.3]?	Yes
2. Has the Enrollee updated the 'Collection System Questionnaire' in the SSO Database at least every 12 months [Part G.3]?	S
a. When was the questionnaire last updated? <u>November 2011</u>	
3. Have all Category 1 SSOs been reported in the Online SSO Database within 3 days of the Enrollee becoming aware of the SSO [Part A.4]?	S
4. Have all Category 2 SSOs been reported in the Online SSO Database within 30 days of the Enrollee becoming aware of the SSO [Part A.5]?	S
5. What is the Enrollee's policy on reporting private lateral sewage discharges in the Online SSO Database [Part A.6]?	N
<i>The City does not report private lateral sewage discharges in CIWQS.</i>	
6. Do field forms/processes used by the Enrollee to document the occurrence of SSOs ensure that all information identified in Part A.9, A.10, and A.11 is recorded and able to be reported in the Online SSO Database?	M
<i>On April 16, 2012 there was a blockage in a sewer main at 2800 Glenoaks Boulevard. According to the field form, the City recovered 41 gallons of spilled wastewater. According to CIWQS, the City reported that 40 gallons of spilled wastewater was recovered.</i>	
7. Has the Enrollee maintained individual SSO records for a period of at least five years from the date of the SSO occurrences [Part B.1]?	S
8. Does the agency require crews to take photographs of SSOs?	S
<i>The City does not require field crews to take photographs.</i>	
9. Does the SSMP identify 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 [Part D.13(ii)(c)]?	S
10. Provide description of program/process used by the Enrollee for receiving, documenting, addressing, and tracking sanitary sewer complaints:	U
<i>The City has developed a process to document and track sanitary sewer complaints. On April 16, 2012, there was a blockage in a sewer main at 2800 Glenoaks Boulevard. Based on a review of the SSO event file, the SOPs and training information prepared by the City were not followed. Refer to the 'Major Findings - SSO Reporting and Documentation' section of this report for details.</i>	
11. Other: <i>SSO Reporting to DES</i>	U
<i>At least three Category 1 SSOs which reached a surface water were not reported within two hours as required by the Amended MRP. Refer to the 'Major Findings - SSO Reporting and Documentation' section of this report for details.</i>	
Notes:	
<i>This section was rated "unsatisfactory" due to checklist items 10. and 11.</i>	

LEGAL AUTHORITY:

OVERALL RATING: S

INSPECTED ITEM	EVAL
1. Does the SSMP identify the name of the responsible or authorized representative [Part D.13(ii)(a)]? a. If so, is the current information up-to-date? <u>Yes</u>	S
2. Does the SSMP identify the names and telephone numbers for management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP program [Part D.13(ii)(b)]? a. If so, is the current information up-to-date? <u>Yes</u>	S
3. Has the Enrollee adopted a sewer use ordinance? a. If so, when was it adopted and last updated? <u>A detailed review of the sewer use ordinance was not conducted.</u>	S
4. Has the Enrollee established the necessary legal authority to [Part D.13(iii)]: a. Prevent illicit discharges into its sanitary sewer system (examples may include I/I, stormwater, chemical dumping, unauthorized debris and cut roots, etc.) [Part D.13(iii)(a)] b. Require that sewers and connections be properly designed and constructed [Part D.13(iii)(b)] c. Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the Public Agency [Part D.13(iii)(c)] d. Limit the discharge of fats, oils, and grease and other debris that may cause blockages [Part D.13(iii)(d)] e. Enforce any violation of its sewer ordinances [Part D.13(iii)(e)]	S S S S S
f. Other:	N
Notes: <i>This section was rated "satisfactory" because all checklist items reviewed were rated satisfactory.</i>	

SEWER SYSTEM MAPPING:

OVERALL RATING: S

INSPECTED ITEM	EVAL
1. Has the Enrollee developed and maintained an up to date <u>map</u> of the sanitary sewer system [Part D.13 (iv)(a)]? a. When was the map last updated? <u>The map is continuously updated as revisions are required.</u> b. Does the Enrollee have a program or policy for maintaining its sewer system map up-to-date? If so, provide brief description. <u>Corrections are made based on information collected during normal O&M activities.</u>	S
2. Does the map identify all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable stormwater conveyance facilities [Part D.13 (iv)(a)]?	S
3. What format is the map maintained in? Provide brief description. <u>The map is maintained in electronic format.</u>	S
4. Other:	N
Notes: <u>This section was rated "satisfactory" because all checklist items reviewed were rated satisfactory.</u>	

OPERATIONS & MAINTENANCE:

OVERALL RATING: **M**

INSPECTED ITEM	EVAL
1. Does the SSMP describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas [Part D.13 (iv)(b)]? If so, how often is it adjusted to reflect the changing needs of the system? <i>The O&M program described in the SSMP is a dynamic program designed to meet the changing needs of the collection system.</i>	S
2. Does the Enrollee have a system to document scheduled and conducted activities, such as work orders [Part D.13 (iv)(b)]? If so, provide brief description of system. <i>The City uses a computerized work order system called CASS WORKS. CASS WORKS is a proprietary program used to produce and track work orders. Cleaning activities are documented on daily cleaning sheets and stored in paper format. The method limits access to historic cleaning data. Refer to the 'Areas of Concern - Operations and Maintenance' section of this report for details.</i>	M
3. Has the Enrollee established performance standards or sewer system cleaning/inspection goals? If so, provide brief description. <i>According to the primary onsite representative, the City has established a goal of cleaning the entire sewer system on a sixteen month cycle. The sewer system is divided into twelve zones and cleaning in each zone is completed before moving to the next zone.</i>	S
4. Sewer cleaning and inspection activities: a. Total gravity sewer collection system cleaning production (hydro flushing, mechanical and hand rodding) over the <u>past</u> 12 months (miles): <u>Approximately 250 miles</u> b. Total gravity sewer collection system cleaning production scheduled (hydro flushing, mechanical and hand rodding) for the <u>next</u> 12 months (miles): <u>Approximately 250 miles</u> c. Total CCTV inspection production in the <u>past</u> 12 months (miles): <u>Approximately 50 miles</u> d. Total CCTV inspection production scheduled for the <u>next</u> 12 months (miles): <u>Approximately 50 miles</u> <i>Note: The Enrollee's collection system comprises 360 miles of sewer.</i>	S
5. Does the agency retain contract service(s) for sewer collection system maintenance, operations, and/or management? a. If collection system cleaning activities are performed by outside contractors, does the agency require video (CCTV) inspections before and after cleaning to measure the effectiveness of these activities? <u>Not reviewed</u>	S
6. Does the agency inspect pipes with CCTV video after all SSO(s)? <i>Based on the subset of records reviewed during the inspection, it appears that the City inspects pipes with CCTV after all SSOs.</i>	S
7. Has the Enrollee identified focused problem areas ("SSO hot spots") located throughout the collection system? a. Total number of identified hotspots. <u>There are approximately 150 hot spots which are cleaned on a monthly cycle.</u>	S

OPERATIONS & MAINTENANCE:

OVERALL RATING: **M**

INSPECTED ITEM	EVAL
8. Does the SSMP include a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency [Part D.13 (iv)(c)]?	S
9. Does the agency have a program in place to identify areas with inflow & infiltration (I/I)? a. Total number of sewer miles identified by this program: <u>N/A</u> b. Are there plans in place for eliminating the identified I/I issues? <u>N/A</u> <i>The primary on-site representative stated that infiltration and inflow (I/I) was not a major concern and that the system has capacity to handle I/I. I/I was investigated during the preparation of a 1998 Sewer System Master Plan. The Master Plan was updated in 2007.</i>	S
10. Does the SSMP include information for providing training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be appropriately trained [Part D.13 (iv)(d)]? <i>The SSMP includes information for providing training on the contents of the SSMP; however, interviews with some field crew members identified a general lack of knowledge regarding the contents of the SSMP. Refer to the 'Major Findings - Operations and Maintenance' section of this report for details.</i>	U
11. Does the SSMP include design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations and other appurtenances, and for the rehabilitation and repair of existing sanitary sewer systems [Part D.13 (v)(a)]?	S
12. Does the SSMP include procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects [Part D.13 (v)(b)]? <i>The SSMP does not include procedures and standards for inspection and testing of new sewer systems as required. The SSMP references the City's Sanitary Sewer Manual and Standards and the Standard Specifications for Public Works Construction (Greenbook), Public Works Standards, Inc., 2006 but does not make reference to whether the required procedures and standards for inspection and testing of new sewer systems are present in those documents or whether the procedures must be followed, if they do exist. The referenced standards were not reviewed as a component of this inspection.</i>	M
13. Has the Engineer prepared and implemented a capital improvement plan (CIP) that will provide hydraulic capacity of key sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design storm or wet weather events [Part D.13(vii)]? a. When was the CIP last updated? <u>2007</u> <i>The City has developed a 10 year CIP for the 2007-2017 period.</i>	S
14. Other:	N
Notes: <i>This section was rated "marginal" due to checklist items 2, and 12., and because the inspector did not believe that checklist item 10. was significant enough to down grade rate the overall rating to "unsatisfactory".</i>	

OVERFLOW EMERGENCY RESPONSE PLAN:

OVERALL RATING: M

INSPECTED ITEM	EVAL
1. Has the Enrollee developed and implemented an Overflow Emergency Response Plan that identifies measures to protect public health and the environment [Part D.13 (vi)]?	S
2. Does the agency provide initial and recurrent training to appropriate staff (including outside contractor(s)) regarding your agency's SSO Emergency Response Plan and O&M programs? a. What percentage of applicable staff was trained during the past 12 months? <i>A contractor working for the City on a City owned sewer line caused a backup onto private property at 211 W. California (Sears retail store) on March 26, 2012. There was no discussion of training contractors in the SSMP and there was no evidence presented that demonstrated this contractor had been trained on SSO emergency response or O&M programs. Refer to the 'Areas of Concern - Overflow Emergency Response Plan' section of this report for details.</i>	M N
3. For contracted sewer services, do the contracting specifications contain specific language requiring initial and recurrent training of contractor staff regarding your agency's SSO Emergency Response Plan and O&M programs?	N
4. Does the Overflow Emergency Response Plan include the following [Part D.13(vi)]: a. Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner [Part D.13(vi)(a)] b. Program to ensure an appropriate response to all overflows [Part D.13(vi)(b)] c. Procedures 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 the waters of the State in accordance with the VRP [Part D.13(vi)(c)] d. Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained [Part D.13(vi)(d)] e. Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities [Part D.13(vi)(e)] 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 as erected or additional monitoring as may be necessary to determine the nature and impact of the discharge [Part D.13(vi)(f)]. <i>4d. This checklist item was accounted for in checklist item 2. above.</i> <i>4e. The SSO Emergency Response Plan does not address crowd control or have information to ensure the public is protected from the spilled wastewater. Refer to the 'Areas of Concern - Overflow Emergency Response Plan' section of this report for details.</i>	S S S S M M S
5. Other:	N

Notes:

This section was rated "marginal" due to checklist items 2. and 4e.

FOG CONTROL PROGRAM:

OVERALL RATING: S

INSPECTED ITEM	EVAL
1. Has the Enrollee evaluated its service area to determine whether a FOG control program is needed [Part D.13(vii): a. If so, what was the result of the evaluation? <i>The City inspects restaurant grease interceptors, conducts regular system cleaning, occasionally uses degreasing agents and cleans known FOG hot spots.</i>	S
2. If the Enrollee has determined that a FOG control program is necessary, has the Enrollee developed and implemented the FOG control program? a. What sources of FOG does the program address? <u>Commercial</u> b. Approximately how many commercial food service establishments (FSEs) are subject to FOG control? <u>Not reviewed</u>	S
3. Does the FOG Control Program Plan include the following [Part D.13(vii): b. An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG [Part D.13(vii)(a)] c. A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area [Part D.13(vii)(b)] d. The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG [Part D.13(vii)(c)] e. 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 [Part D.13(vii)(d)] f. Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the FOG ordinance [Part D.13(vii)(e)] g. An identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section [Part D.13(vii)(f)] h. Development and implementation of source control measures for all sources of FOG discharged to the sanitary sewer system for each section identified in (f) above [Part D.13(vii)(f)]	S S S S S S S
4. Other:	N

Notes:

This section was rated "satisfactory" because all checklist items reviewed were rated satisfactory.

PROGRAM SELF-ASSESSMENT:

OVERALL RATING: U

INSPECTED ITEM	EVAL
1. Has the Enrollee assessed the success of the preventive maintenance program [Part D.13 (ix)(c)]? a. If so, provide a brief description of assessment results. <i>The City conducts a periodic review of SSO events and makes adjustments to the preventative maintenance program. Additionally, the City uses CCTV to determine the effectiveness of the sewer cleaning program.</i>	S
2. Has the Enrollee updated SSMP program elements, as appropriate, based on monitoring or performance evaluations [Part D.13 (ix)(d)]? a. When was the SSMP last updated? <i>The SSO Field Worksheet was last updated December 15, 2011.</i> <i>Certain aspects of the FOG control program, including grease interceptor inspections, were switched from the fire department to the public works department. At the time of the inspection, the SSMP had not been updated to reflect this change in responsibility.</i> <i>The FOG inspections are conducted under the Industrial Waste Pretreatment Program.</i>	M
3. Has the Enrollee identified and illustrated SSO trends, including frequency, location, and volume [Part D.13 (ix)(e)]? a. If so, provide a brief description of identified trends. <i>The City is tracking SSO frequency and spill capture percentages.</i>	S
4. Has the Enrollee conducted periodic internal audits of the SSMP [Part D.13(x)]? <i>There was no evidence that a formal audit of the SSMP had been conducted. Refer to the 'Major Findings - Program Self-Assessment' section of this report for details</i> 5. Have the audits occurred at least every two years? a. When was the last audit conducted? <i>N/A</i> b. Provide a brief description of major changes made to the program as a result of the last audit. <i>N/A</i> <i>This checklist item is accounted for in checklist item 4. above.</i>	U
6. Other:	N
Notes: <i>This section was rated "unsatisfactory" due to checklist items 4. and 5.</i>	

City of Glendale Collection System (2006-0003-DWQ & 2008-0002-EXEC) Exhibit Log
 Inspected by: Craig Blett (PG Environmental, LLC) and Jim Fisher (State Water Board)

Page 1 of 1	
SSO Public Report - Detail Page For information only. This report is not intended to be used for legal purposes. It is intended for informational purposes only. SSO PUBLIC REPORT - 2012-2013 1. SSO Public Report - 2012-2013 2. SSO Public Report - 2012-2013 3. SSO Public Report - 2012-2013 4. SSO Public Report - 2012-2013 5. SSO Public Report - 2012-2013 6. SSO Public Report - 2012-2013 7. SSO Public Report - 2012-2013 8. SSO Public Report - 2012-2013 9. SSO Public Report - 2012-2013 10. SSO Public Report - 2012-2013 11. SSO Public Report - 2012-2013 12. SSO Public Report - 2012-2013 13. SSO Public Report - 2012-2013 14. SSO Public Report - 2012-2013 15. SSO Public Report - 2012-2013 16. SSO Public Report - 2012-2013 17. SSO Public Report - 2012-2013 18. SSO Public Report - 2012-2013 19. SSO Public Report - 2012-2013 20. SSO Public Report - 2012-2013 21. SSO Public Report - 2012-2013 22. SSO Public Report - 2012-2013 23. SSO Public Report - 2012-2013 24. SSO Public Report - 2012-2013 25. SSO Public Report - 2012-2013 26. SSO Public Report - 2012-2013 27. SSO Public Report - 2012-2013 28. SSO Public Report - 2012-2013 29. SSO Public Report - 2012-2013 30. SSO Public Report - 2012-2013 31. SSO Public Report - 2012-2013 32. SSO Public Report - 2012-2013 33. SSO Public Report - 2012-2013 34. SSO Public Report - 2012-2013 35. SSO Public Report - 2012-2013 36. SSO Public Report - 2012-2013 37. SSO Public Report - 2012-2013 38. SSO Public Report - 2012-2013 39. SSO Public Report - 2012-2013 40. SSO Public Report - 2012-2013 41. SSO Public Report - 2012-2013 42. SSO Public Report - 2012-2013 43. SSO Public Report - 2012-2013 44. SSO Public Report - 2012-2013 45. SSO Public Report - 2012-2013 46. SSO Public Report - 2012-2013 47. SSO Public Report - 2012-2013 48. SSO Public Report - 2012-2013 49. SSO Public Report - 2012-2013 50. SSO Public Report - 2012-2013 51. SSO Public Report - 2012-2013 52. SSO Public Report - 2012-2013 53. SSO Public Report - 2012-2013 54. SSO Public Report - 2012-2013 55. SSO Public Report - 2012-2013 56. SSO Public Report - 2012-2013 57. SSO Public Report - 2012-2013 58. SSO Public Report - 2012-2013 59. SSO Public Report - 2012-2013 60. SSO Public Report - 2012-2013 61. SSO Public Report - 2012-2013 62. SSO Public Report - 2012-2013 63. SSO Public Report - 2012-2013 64. SSO Public Report - 2012-2013 65. SSO Public Report - 2012-2013 66. SSO Public Report - 2012-2013 67. SSO Public Report - 2012-2013 68. SSO Public Report - 2012-2013 69. SSO Public Report - 2012-2013 70. SSO Public Report - 2012-2013 71. SSO Public Report - 2012-2013 72. SSO Public Report - 2012-2013 73. SSO Public Report - 2012-2013 74. SSO Public Report - 2012-2013 75. SSO Public Report - 2012-2013 76. SSO Public Report - 2012-2013 77. SSO Public Report - 2012-2013 78. SSO Public Report - 2012-2013 79. SSO Public Report - 2012-2013 80. SSO Public Report - 2012-2013 81. SSO Public Report - 2012-2013 82. SSO Public Report - 2012-2013 83. SSO Public Report - 2012-2013 84. SSO Public Report - 2012-2013 85. SSO Public Report - 2012-2013 86. SSO Public Report - 2012-2013 87. SSO Public Report - 2012-2013 88. SSO Public Report - 2012-2013 89. SSO Public Report - 2012-2013 90. SSO Public Report - 2012-2013 91. SSO Public Report - 2012-2013 92. SSO Public Report - 2012-2013 93. SSO Public Report - 2012-2013 94. SSO Public Report - 2012-2013 95. SSO Public Report - 2012-2013 96. SSO Public Report - 2012-2013 97. SSO Public Report - 2012-2013 98. SSO Public Report - 2012-2013 99. SSO Public Report - 2012-2013 100. SSO Public Report - 2012-2013	

Exhibit 1: CWSOS Violation Report for Category 1 and Category 2 SSOs (April 30, 2011 through April 30, 2012).

City of Glendale Collection System (2006-0003-DWQ & 2008-0002-EXEC) Exhibit Log
 Inspected by: Craig Blett (PG Environmental, LLC) and Jim Fisher (State Water Board)

SSO Field Worksheet (page 2)

Spill response activities (Check all that apply):

- ☒ Clean up (mitigated effect of spill)
- ☒ Covered all or a portion of spill
- ☒ Spilled material going to City or local waterways
- ☒ Restored flow
- ☒ Re-entered all or a portion of the spill to the sanitary sewer system
- ☐ Other (Specify):

Answer the following three questions about this event:

#1. Is the spill volume greater than or equal to 1,000 gals? Yes/No

#2. Did the spill discharge to a drainage channel or surface water? Yes/No

#3. Did the spill discharge to a storm drain pipe that was not fully captured and returned to the sanitary sewer system? Yes/No

Did you answer "yes" to any of the above questions? Yes/No

If Yes SSO is: _____

If No SSO is: _____

Spill destination (Check all that apply):

- ☐ Drifting or stream
- ☐ Other moved surface
- ☒ Storm drain
- ☐ Street/curb and gutter
- ☐ Surface water
- ☐ Unimproved surface
- ☐ Other (Specify):

Estimated total spill volume: (Attach calculations) A. 135 gallons

Estimated volume of spill recovered: B. 0 gallons

Estimated volume of spill that reached surface water, drainage channel, or not recovered from storm drain: C. 135 gallons

Did you answer yes to either question #2 or #3 above? Yes/No

If Yes call OES within 2 hrs of time agency notified or discovered spill.

OES Control # 12-2255 OES Phone # 1-800-852-7550

Time OES notified: 6/16/12 10:14
 MONTH/YR Time 24 hr

Call supervisor to review circumstances and reporting.

Supervisor called: _____ VM/DD/YY Time 24 hr

Special Circumstances/Comments: Spill 1.45 gal not recovered from SSO pipe.
of OES on location

Attach this Worksheet to the Spillage Report Package for This Event

City of Glendale Wastewater Division & PG&E used following Program Manual Summary
 1.0.0.0 System and Maintenance SSO Field Worksheet

Exhibit 2: SSO Field Worksheet for SSO on April 16, 2012 at 2800 Glenoaks Boulevard showing original field crew estimates of 135 gallons that reached surface water (or was not recovered) and zero gallons recovered. Values were changed on April 19, 2012 by the Wastewater Maintenance Supervisor to state that 41 gallons were recovered and zero gallons reached surface water.

City of Glendale Collection System (2006-0003-DWD & 2008-0002-EXEC) Exhibit Log
 Inspected by: Craig Blott (PG Environmental, L.L.C) and Jim Fisher (State Water Board)

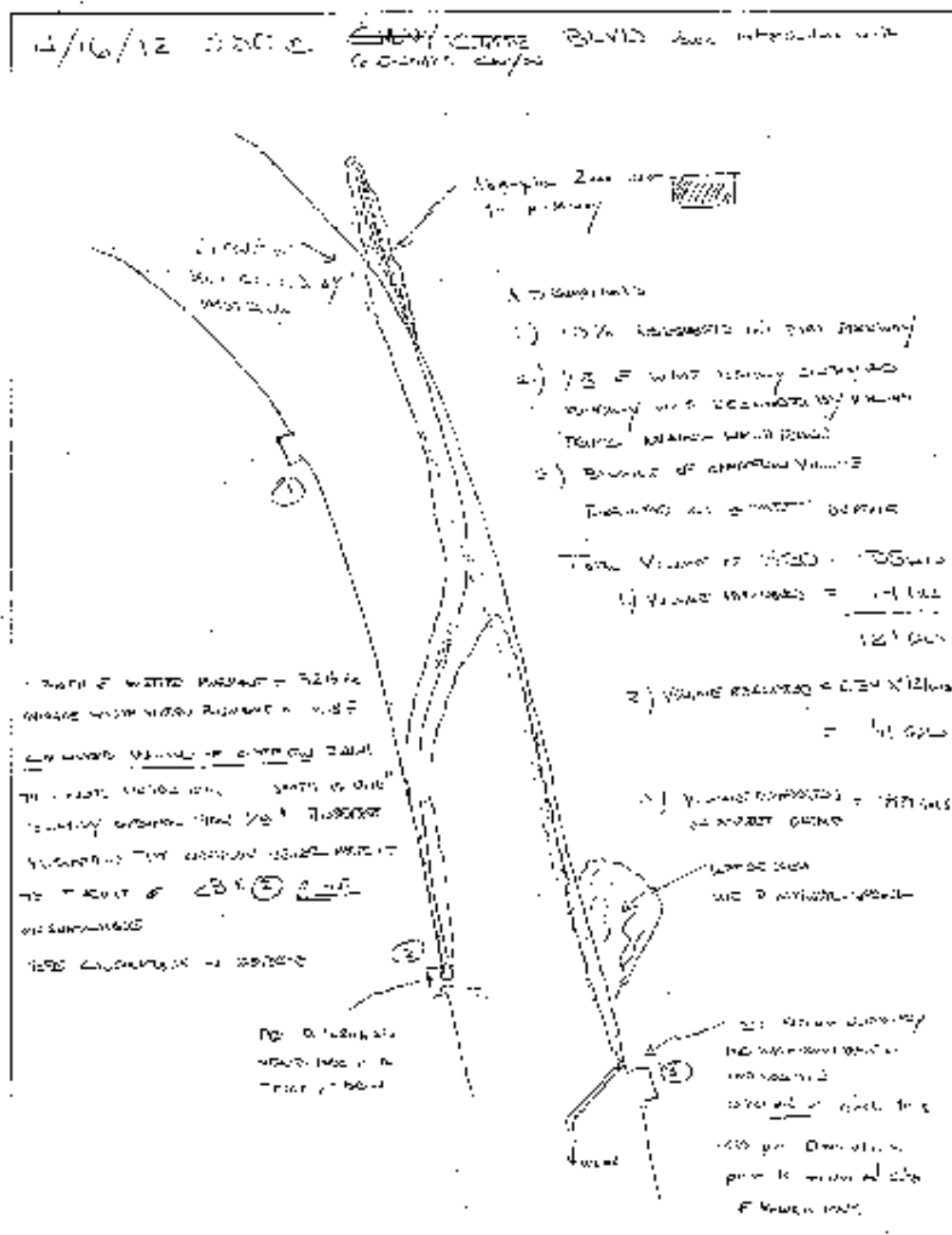


Exhibit 3: Unsigned and undated (date at top of page refers to spill date) sketch used to justify changing reported volumes for spill on April 16, 2012 at 2300 Glendale Boulevard.

Inspected by: Craig Blott (P/G Environmental LLC) and Jim Fisher (State Water Board)

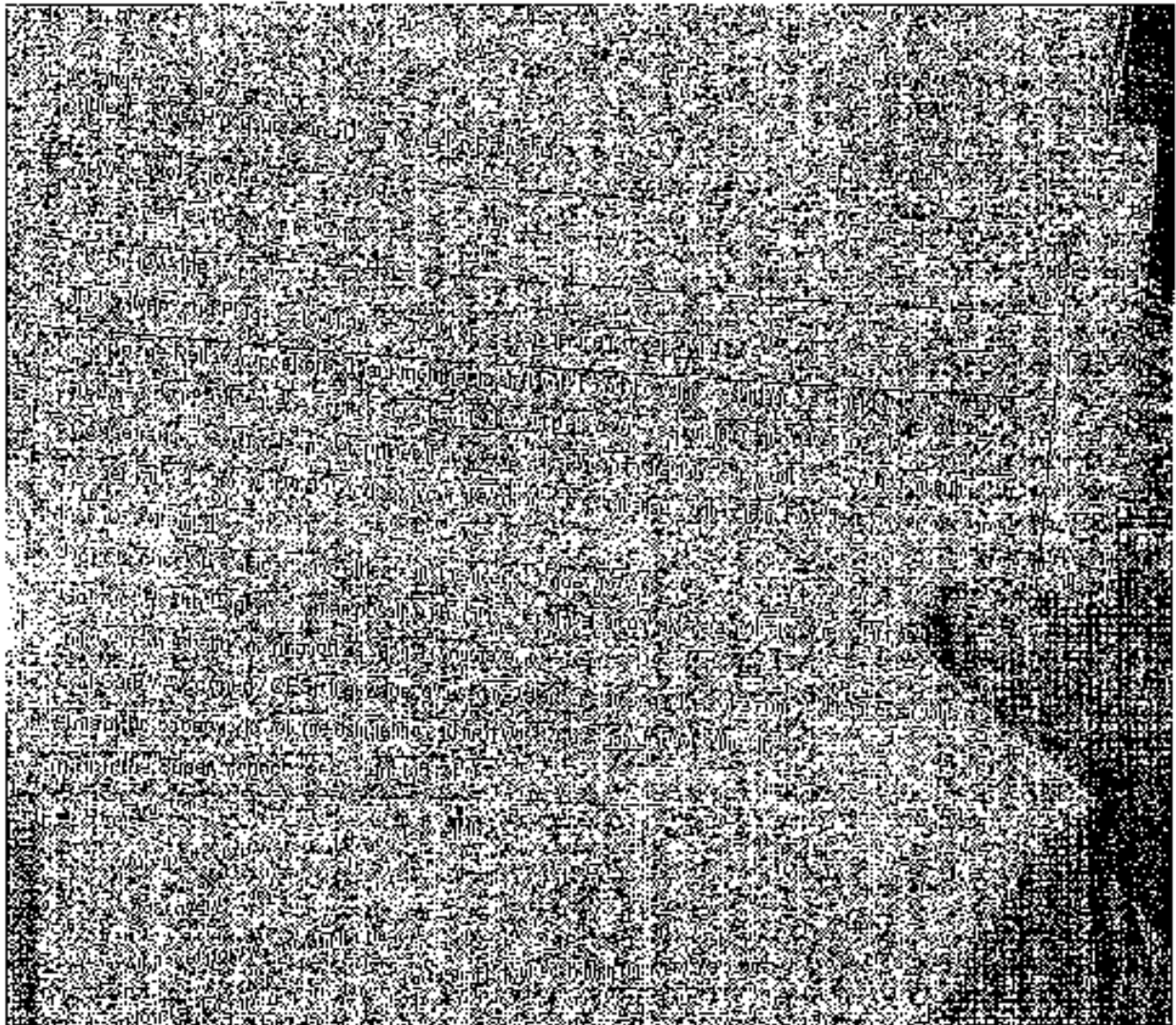


Exhibit 4: Photograph of a field crew guide for responding to and reporting SSOs. Item 4, states: "Consensus-Response team determines if any sewage lost to storm drain system and if so how much. Team Leader (after hours), Crew Supervisor (normal working hours) will ensure agreement. Field decisions on lost/some/lost none are final." Also note in Item 7., the CalEMA (formerly OCS) 2 hour notification is stated as a "goal", not a requirement.

City of Glendale Collection System (2008-0003-DWQ & 2008-0002-EXEC) Exhibit Log
Inspected by: Craig Blell (PG Environmental, LLC) and Jim Fisher (State Water Board)

City of Glendale California
Wastewater Maintenance Section
Rev. 8/11/09
SSO Field Worksheet

Location of SSO: 625 Canyon Rd, Malibu
(nearest street address to overflow area) (if not on street)

Length: 1.05 miles
(handheld GPS distance) (if not on street)

Latitude: N 34° 00' 00" E 118° 50' 00" W
(if not on street)

Date and time sanitary sewer system agency or maintenance service was notified or discovered spill: 11/2/11 1:05
MM/DD/YY Time 24 hr

Estimated spill start date/time: 11/2/11 10:00 a.m.
(specify time in local time zone or time in Pacific Standard Time) MM/DD/YY Time 24 hr

Estimated operator arrival date/time: 11/2/11 1:15 p.m.
MM/DD/YY Time 24 hr

Estimated spill volume: (Attach Calculations) a. 2350 gallons

Estimated volume of spill recovered: b. 390 gallons

Estimated volume of spill that reached surface water, drainage channel, or not recovered from storm drain: c. 1960 gallons

Did you answer yes to either question #2 or #3 above?..... (Yes) No

If Yes call OES within 2 hrs of time agency notified or discovered spill.

OES Phone # 1-800-852-7550

OES Control # 11-0228 Time OES notified: 1/2/11 3:24
MM/DD/YY Time 24 hr

Call supervisor to review circumstances and reporting.

Supervisor called: _____ MM/DD/YY Time 24 hr

Special circumstances/Comments: _____

Attach This Worksheet to The Stoppage Report Package for This Event

Exhibit 5: SSO Field Worksheet for SSO on January 12, 2011 at 625 Cavanagh Road. According to this record, the City was aware of the spill at 1:05 PM (Glendale Department of Water and Power notification time) and OES was notified at 2:24 PM, exceeding the Amended MRP requirement of 2 hours. (Page 1 of 5)

City of Glendale California
 Wastewater Maintenance Section
 Rev. 12/15/11
SSO Field Worksheet

Location of SSO: 4377 Canyon Blvd. / Canyon Blvd. / Canyon Blvd.
 (closest street to spill location)

Date and time sanitary sewer system agency (Time that agency was notified or discovered spill):
4/4/12 8:40 AM
 MM/DD/YY Time 24 hr

Estimated spill start date/time:
 (Same as time immediately above unless you know it is different)
4/4/12 8:40 AM
 MM/DD/YY Time 24 hr

Estimated operator arrival date/time:
4/4/12 9:00 AM
 MM/DD/YY Time 24 hr

Spill appearance point (Check one):

Estimated total spill volume: (Attach Calculations) A. 155 gallons

Estimated volume of spill recovered: B. 55 gallons

Estimated volume of spill that reached surface water, drainage channel, or not recovered from storm drain: C. 100 gallons

Did you answer yes to either question #2 or #3 above?..... Yes No

If Yes call OES within 2 hrs of time agency notified or discovered spill.

OES Phone # 1-800-852-7550

OES Control # 12-1998 Time OES notified: 4/4/12 11:55 AM
 MM/DD/YY Time 24 hr

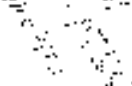
Call supervisor to review circumstances and reporting. 4/4/12 8:50 AM
 Supervisor called: 12 MM/DD/YY Time 24 hr

Special circumstances/Comments: 12

Attach This Worksheet to The Stoppage Report Package for This Event

Exhibit 5 (Cont.): SSO Field Worksheet for SSO on April 4, 2012 at 637 Canyon Drive Spill started at 8:40 AM and OES was notified at 11:15 AM, exceeding the Amended WRP requirement of 2 hours. (Page 2 of 3)

City of Glendale Collection System (2006-0003-DWQ & 2008-0002-EXEC) Exhibit Log
 Inspected by: Craig Bots (PG Environmental, LLC) and Jim Fisher (State Water Board)



City of Glendale California
Waterworks Maintenance Section
 Rev. 8/11/07

SSO Field Worksheet

Location of SSO: 3524 Craig Way 1 ASPHALT PAVEMENT
(Road or other surface to be cleaned or sealed)

Latitude: _____
(Obtain GPS or other device)

Longitude: _____
(Obtain GPS or other device)

Latitude of Spill: Min. Sec.
(Obtain GPS or other device)

Longitude of Spill: Min. Sec.
(Obtain GPS or other device)

Date and time sanitary sewer system agency (or other responsible parties) was notified or discovered spill: 11-7-11

Time 24 hr
8:45 AM

Estimated spill start date/time: 11-7-11

(Start of time interval above which the spill is likely to have occurred)

Time 24 hr
8:45 AM

Estimated operator arrival date/time:

Time 24 hr
8:45 AM

Estimated spill volume: (Approximate calculation)

3.0 gallons

Estimated volume of spill recovered:

0.0 gallons

Estimated volume of spill that reached surface water, drainage channel, or not recovered from storm drain:

3.0 gallons

Did you answer yes to either question #2 or #3 above? Yes No

If Yes call OES within 2 hrs of time agency notified or discovered spill.

OES Control # 0-512-0

Time OES notified: 11-7-11

Time 24 hr
10:47 AM

Call supervisor to review circumstances and reporting.

Supervisor called: _____

Time 24 hr
10:47 AM

Special circumstances/Comments: _____

Attach This Worksheet to The Stoppage Report Package for This Event

Exhibit 5 (Cont.): SSO Field Worksheet for SSO on November 7, 2011 at 3524 Craig Way. Spill started at 9:04 AM and OES was notified at 10:47 AM, exceeding the Amended VRR requirement of 2 hours. (Page 3 of 3)

15 DECLARATION

INSTRUCTIONS: Please print this page, sign it, and mail the original of this page to:

State Water Resources Control Board
Office of Enforcement, Special Investigations Unit
1001 I Street, 15th Floor, Sacramento, CA 95814

I, MAURICE ONYIAWAGHA the approved Legally Responsible Official (LRO) of collection system
(name and Waste Discharge ID#) 955010388, CITY OF GLENDALE certify under penalty of law
that based on my inquiry of the person or persons who manage this system, or those persons directly responsible
for gathering the information, the information in this Pre-Inspection Questionnaire (Version 1.0) is, to the best of
my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for
submitting false information, including the possibility of a fine or imprisonment, for knowing violations.



LRO Signature

4/3/2012

Date

April 2, 2012

Mr. James Fischer, P.E., Acting Chief
State Water Resources Control Board
Office of Enforcement, Special Investigations Unit
1001 I Street, 16th Floor, Sacramento, CA 95814

Dear Mr. Fischer:

Pursuant to your "Request for Information" correspondence, dated March 12, 2012, I am submitting the requested information in the attachments to this letter on a CD. The City of Glendale has a long history of maintaining and operating a state of the art sanitary sewer system. More recently, the City has embarked on an aggressive capital improvement program to identify and replace hydraulically deficient sewer lines. It is important to note that in 2006 the City contracted with Kennedy Jenks Consultants to complete an updated hydraulic analysis of the sewer system (an update to the original 1998 Sewer System Master Plan). The 2006 update includes revised design criteria to minimize wet weather overflows: pipes up to 18" in diameter are designed to be flowing at 0.50 d/D in the year 2030 (at buildout), while pipes greater than 18" have a 0.67 d/D design criteria.

In addition, last year we began an on-call/standby pay system for the wastewater crew to ensure staff availability during off-hours in the case of an overflow. This system includes unscheduled drills to measure the effectiveness of response times. Further, two years ago an incentive program was created to pay sewer crew members extra money if they pass CWA certification exams (Grades 1-4). Here are a few other important highlights worth mentioning:

Doran Pump Station Upgrades: The City's only wastewater pump station has been the topic of interest for over a decade due to its location near the confluence of the Verdugo Wash and Los Angeles River. After years of study, it was decided that the best design option was to completely gut and rebuild the interior of the structure (i.e., pumps, electrical, emergency power backup, etc.). In addition, a permanent bypass pipe and independent pump system was installed to allow bypassing the pump station entirely in the event of a catastrophic failure (i.e., earthquake, natural disaster, etc.). This \$2.0 million project is expected to be completed by the end of this year.

Palmer Sewer Capacity Enhancement: During the intense rainstorms of 2005, we experienced wet weather overflows in one portion of the sewer system. Upon further investigation, it was revealed that the source of the overflows was a City of Los Angeles sewer line that enters Glendale's sewer system upstream, near the City boundary. After speaking with Los Angeles and verifying the extreme inflow and/or infiltration problem in their line, it was decided to immediately upsize this sewer line to prevent any further SSOs. It is important to note the City of Glendale took this action prior to the SSSWDR. More importantly, rather than wait for the City of Los Angeles to study why so much rainwater and/or groundwater was entering their

system, the City of Glendale took immediate action and overdesigned the new pipe to ensure adequate wet weather capacity. The cost of this \$5 million sewer upgrade was borne entirely by the City of Glendale.

Fairmont/Victory Truck Capacity Enhancement: Despite having plenty of capacity in the old sewer line, the City proactively installed a much larger, new sewer line to accommodate future growth in this part of the City. This \$7 million project was completed two years ago.

Public Works Engineering and Maintenance Services Hot Spot Program: Several years ago wastewater managers began meeting with their engineering counterparts on a routine basis to identify locations in the City's sewer collection system where point repairs were necessary. This program allows for expedited repairs to be made to the sewer system on an as needed basis. Over 80 point repairs have been completed since the program's inception.

Wastewater Rate Study: The City recently completed an updated Wastewater Rate Study which identified future funding needs of the wastewater utility. It will also ensure that each user class of the system continues to pay its fair share (i.e., commercial, residential, etc.) as required by State and Federal Law.

Analysis of the City/County Flood Control System: Recently, the wastewater crew began studying the storm drain system within the City of Glendale. This project has taken a lot more time than initially thought due to the vast nature and interconnectivity of the Los Angeles County Flood Control District system. The goal is to identify key locations where berms/dikes can be implemented during overflows to capture sewage that entered upstream catch basins.

These examples are indicative of the importance the City of Glendale places on its wastewater collection system and its obligation to protect human health and the environment. Please feel free to contact me at (818) 548-3900 if you have any additional questions or would like more information.

Sincerely,

Maurice Oillataguerre, Sr. Env. Prgm. Specialist
City of Glendale Legally Responsible Official

cc: Stephen M. Zurn, Director of Public Works
Jake Amar, Environmental Program Administrator
Daniel Hardgrove, Maintenance Services Administrator
John Hicks, Wastewater Superintendent

City of Glendale Answers to Questionnaire

1 Documentation

- 1.1 Included in the attached CD
- 1.2 Included in the attached CD
- 1.3 Included in the attached CD
- 1.4 Included in the attached CD
- 1.5 Included in the attached CD
- 1.6 Included in the attached CD
- 1.7 Included in the attached CD

2 Basic Information

2.1 City of Glendale, WDID#: 4SSO10388

2.2

Maurice Oillataguerre, Sr. Env. Prgm. Specialist
633 E. Broadway, #209
Glendale, CA 91206
moillataguerre@ci.glendale.ca.us
(818) 937-8219

Jake Amar, Env. Prgm. Administrator
633 E. Broadway, #209
Glendale, CA 91206
ramar@ci.glendale.ca.us
(818) 937-8285

Dan Hardgrove, P.W. Maintenance Services Administrator
541 W. Chevy Chase Drive
Glendale, CA 91204
dhardgrove@ci.glendale.ca.us
(818) 548-3950

John Hicks, Wastewater Maintenance Superintendent

541 W. Chevy Chase Drive
Glendale, CA 91204
jhicks@ci.glendale.ca.us
(818) 550-3413

2.3 Municipal

2.4 191,719 (2010 Census)

2.5 \$1.74 million

2.6 \$15,206,976.18

2.7 (2)

2.8 (11)

2.9 (2)

2.10 (1)

2.11 Grade 1 Collection System Maintenance (3)

2.12 Grade 2 Collection System Maintenance (10)

2.13 Grade 3 Collection System Maintenance (1)

2.14 Grade 4 Collection System Maintenance (2)

2.15- (As per Wastewater System Master Plan Table ES-1)

Diameter of sewer pipe	Gravity Sewers (miles)	Force Mains (miles)
6 inches or less	1.3	0
8-18 inches	347.81	0
19-36 inches	12.47	0
> 36 inches	<1	0
Unknown Diameter		0
Totals	361.58	0

2.16 NONE

2.17 N/A

2.18 33,750

2.19 Approximately 36 miles

2.20 33.8 miles (estimate)

2.21 See item 8.6

2.22 No

2.23 N/A

2.24 City of L.A. Hyperion Treatment Plant, and City of L.A.-Glendale Water Reclamation Plant

2.25 Glendale owns 50% of the LAGWRP

2.26 Yes

2.27 City of Los Angeles

2.28 Yes

2.29 City of Los Angeles

2.30

Average Daily Dry Weather Flow (MGD)	Peak Daily Wet Weather Flow (MGD)
16	18
Outfall Flow Monitoring Data	Outfall Flow Monitoring Data

2.31 One (1)

2.32 Approximately 1,000 feet.

2.33 Zero (0)

2.34 Zero (0)

2.35 Three (3)

2.36 Specify the percentage of piping and the number of pump stations constructed:

(note: total percentage must equal 100%)

See Wastewater System Master Plan Table ES- not too specific on before 1930's and after 2000!

Age	Source of Age Info. (records, estimated, etc.)	Gravity & Pressure (%)	Pump Stations 25k gal/day & Over (number of stations)	Pump Stations Under 25k Gal/day (number of stations)
2000-Present			0	0
1980-1999	WW Master Plan	6%	1 (Doran overhaul, 1982)	0
1960-1979	WW Master Plan	29%	0	0
1940-1959	WW Master Plan	8%	1 (Doran overhaul, 1950s)	0
1930-1939	WW Master Plan	4%		0
Pre 1930	WW Master Plan	54%		0
1900-1919		Unknown	0	0
Before 1900		Unknown	0	0
Unknown Age				
Totals		101%		0

3. Organization

3.1 Yes

3.2 www.ci.glendale.ca.us/mgmt-svcs/city_council.asp

3.3 Laura Friedman, Mayor
Rafi Manoukian, Council Member
Ara Najarian, Council Member
Frank Quintero, Council Member
Dave Weaver, Council Member

3.4 No

3.5 N/A

4 Sewer System Assets

4.1 Official Census Data, 2010

4.2 27.6 square miles

4.3 Varies, the majority of the city is flat but there is a fair amount of hilly terrain.

4.4 80% from residential, 20% from commercial/industrial (see 2012 Rate Study)

4.5 No

4.6 Yes

4.7 Yes

4.8 7,885

4.9 Yes

4.10 7,550

4.11 No

4.12 No

4.13 10

4.14 9

4.15 Yes

4.16 No

4.17 Zero- Planned upgrade (coming in the next year) will include redundant piping.

4.18 One (1)

4.19 Yes

4.20 Yes

4.21 Yes

4.22 Yes

4.23 One (1)

4.24 One (1)

4.25 Zero (0)

4.26 One (1)

4.27 Zero- Planned upgrade (coming in the next year) will include a SCADA unit.

4.28 Zero- Planned upgrade (coming in the next year) will include a SCADA unit will have this capability).

- 4.29 One (1)
- 4.30 Yes
- 4.31 One (1)
- 4.32 None- But we have an Emergency Diesel Generator for back up unit. (Already stated in 4.18)
- 4.33 Zero (0)
- 4.34 N/A
- 4.36 N/A
- 4.37 N/A

5 Financial Information

- 5.1 Yes
- 5.2 \$15 million
- 5.3 \$60 million
- 5.4 \$2.30 per month fixed rate tied to every electric meter, plus variable rates for each user class (Single-Family Residential, Multi-Family Residential, Low/Med/High Industrial-Commercial), sewer connection charges, and sewer permit fees for new construction.
- 5.5 33,750
- 5.6 Approximately 80,000 (number of electric meters charged the flat rate of \$2.30/mo.)
- 5.7 \$17 per month
- 5.8 Winter Water Usage (water usage during the winter months)
- 5.9 No
- 5.10 \$2,432,871
- 5.11 \$1,282,218

6 Local Sewer Use Ordinance

- 6.1 Yes
- 6.2 May 31st, 2011
- 6.3 Annually
- 6.4 Yes
- 6.5 N/A
- 6.6 Yes
- 6.7 Yes
- 6.8 Yes
- 6.9 No
- 6.10 Yes
- 6.11 Yes
- 6.12 Yes
- 6.13 Yes
- 6.14 Yes
- 6.15 Yes
- 6.16 Yes

6.17 Yes
6.18 Yes
6.19 None
6.20 Yes
6.21 None
6.22 Yes
6.23 None
6.24 Yes
6.25 None

7 Capital Improvement Plan

7.1 July 1st, 2011
7.2 No
7.3 N/A
7.4 July 1st, 2012

8. Operations and Maintenance Program

8.1 Yes
8.2 Yes
8.3 No
8.4 No
8.5 No
8.6- March 11 thru Feb 12 - 338 Miles per Year
8.7- March 12 thru Feb 13 - 308 Miles per Year
8.8- March 11 thru Feb 12 - 50 Miles per Year
8.9- March 12 thru Feb 13 - 47 Miles per Year
8.10 N/A
8.11 130
8.12 N/A
8.13 N/A
8.14 N/A
8.15 N/A
8.16 Unknown
8.17 Unknown
8.18 Yes
8.19 3
8.20 Zero (0)
8.21 No
8.22 Yes
8.23 Yes
8.24 Yes

- 8.25 No
- 8.26 N/A
- 8.27 No
- 8.28 N/A
- 8.29 Yes
- 8.30 No
- 8.31 N/A
- 8.32 Yes
- 8.33 Chemical root control and mechanical root saw.
- 8.34 Metam sodium
- 8.35 Yes
- 8.36 N/A
- 8.37 Yes
- 8.38 Glendale Municipal Code, 13.34.010 – 13.34.100
- 8.39 Approximately 700
- 8.40 Approximately 400
- 8.41 3 (they also perform other duties in addition to FOG inspections)
- 8.42 Approximately 700
- 8.43 None
- 8.44 Approximately 700
- 8.45 No
- 8.46 N/A
- 8.47 Yes
- 8.48

Contractor Name	Description (cleaning, root control, repairs, etc.)	Frequency of Contract	Budget (annual \$)
FloSystems	Pump Station Maint.	4 times annually	7,780.00
Pacific Sewer Maintenance	Chemical Root Control	2-3 times annually	18,000.00
Golden Bell	Roach Suppression	2 times annually	10,000.00

9 SSO Emergency Response Plan

- 9.1 Yes
- 9.2 Yes
- 9.3 Yes
- 9.4 The City of Glendale utilizes a Motorola trunked radio system operating in the UHF T-band. There are 14 channels involved. If the exact details are needed, please contact the Glendale Radio Shop at 818-548-4804.
- 9.5 Yes
- 9.6 Yes
- 9.7 Yes

9.8 No

10 SSO Reduction Performance and Monitoring Program

10.1 Yes

10.2 Yes

11 Collections Staffing and Training.

11.1 Four (4) cleaning crews, one (1) CCTV crew, (1) full time storm drain cleaning crew.

11.2 Two (2)

11.3 Yes

11.4 Yes

11.5 No

11.6 Yes

11.7 Yes

11.8 15

11.9 N/A

12 Major Equipment Inventory

12.1 Three (3)

12.2 Three (3)

12.3 Two (2)

12.4 One (1)

12.5 One (1)

12.6 Eight (8)

12.7 Nine (9)

12.8 Six (6)

12.9 Yes

13 External Communications Programs

13.1 No

13.2 Yes

13.3 No

13.4 No

14 Notification, Reporting and Record Keeping

14.1 Yes

14.2 Yes

14.3 Yes

14.4 Yes

14.5 No
14.6 Yes
14.7 Yes
14.8 Yes
14.9 Yes
14.10 N/A

15 SSO Prevention and Mitigation

15.1 Yes
15.2 No
15.3 No
15.4 Yes
15.5 Yes
15.6 No
15.7 Yes
15.8 Unknown
15.9 One (1)

Hicks, John

From: Ollataguerre, Maurice
Sent: Monday, March 19, 2012 9:56 AM
To: Hicks, John; Ambayed, Dennis
Cc: Galanian, Roubik; Hardgrove, Daniel; Amar, Jake; Zurn, Stephen
Subject: FW: DATA REQUEST: PRE-INSPECTION QUESTIONNAIRE & INFO

Importance: High

Attachments: Preinspection.Questionnaire.Highlighted..pdf



Preinspection.Ques
tionnaire.Hi...

Gentlemen:

The City received a Request for Information from the State Water Board and I need your assistance in answering all of the questions. I have highlighted the questions that I need you to answer in yellow and the ones I need Dennis's help with in pink.

Dennis: Since you only have a few to answer, let me know if you can get me the info by this Friday, March 23rd.

John: You have a lot more questions, let me know if you can get me the info by next Wednesday, March 28th.

I apologize for the short timeframe but we have to submit our documents by April 5th. Taking into account I will need at least a few days to compile everything (and Steve will need time to review all of the documents), we are on a very tight schedule.

Thanks and feel free to call me if you have any questions, comments or concerns.

-Maurice-

-----Original Message-----

From: Zurn, Stephen
Sent: Monday, March 12, 2012 4:24 PM
To: Hicks, John; Ollataguerre, Maurice
Cc: Hardgrove, Daniel; Amar, Jake
Subject: FW: DATA REQUEST: PRE-INSPECTION QUESTIONNAIRE & INFO
Importance: High

Please respond accordingly.

Stephen M. Zurn
City of Glendale

Director Public Works
(818) 348-3900

-----Original Message-----

From: SBSSO [mailto:SBSSO@waterboards.ca.gov]

Sent: Monday, March 12, 2012 4:23 PM

To: SBSSO

Cc: Julie Berrey; Jim Fischer

Subject: DATA REQUEST: PRE-INSPECTION QUESTIONNAIRE & INFO

Importance: High

** High Priority **

Dear Selected Legally Responsible Official (LRO) - The attached information request is being sent to you for your agency, DOB BY April 6, 2012.

PLEASE REPLY TO THIS EMAIL ADDRESS (SBSSO@waterboards.ca.gov) TO CONFIRM YOUR RECEIPT OF THIS INFORMATION REQUEST.

For questions, please contact Jim Fischer, Office of Enforcement, by phone at (818) 341-3548 or via email at jfischer@waterboards.ca.gov

Thank You.

State Water Board, Office of Enforcement staff



Sewer Collection System PRE-INSPECTION QUESTIONNAIRE

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PART 1 — DESCRIPTION

This Sewer Collection System Pre-Inspection Questionnaire (Questionnaire) includes mandatory questions specific to the requirements in the Sanitary Sewer System Waste Discharge Requirements Water Quality Order (No. 2006-0001) (QWQ) (hereafter SSSWOR), and its accompanying Amended Sanitary Plan Order (No. 2008-0002) (SLP) (hereafter Amended MRP).

All of the questions in this Questionnaire must be answered by the Enrollee (one Questionnaire for each collection system only) to demonstrate how the agency is complying with the SSSWOR and the Amended MRP. All responses provided in the Questionnaire along with the documentation required to be submitted by each Enrollee (see Part 3, Section 1) will be used by the Water Boards to prioritize inspection and enforcement activities statewide for the SSSWOR.

PART 2 — INSTRUCTIONS

1. Complete all questions in the Questionnaire.
2. Save an electronic copy of the completed Pre-Inspection Questionnaire (in MS Word), and the other documentation required for your collection system (see Part 3, Section 1). Print the last page of this Questionnaire and sign it in ink. Submit the electronic copy (e.g., CD) and the original completed last page to:

State Water Resources Control Board
Office of Enforcement, Special Investigations Unit
1001 I Street, 16th Floor, Sacramento, CA 95814

PART 3 — REQUIRED INFORMATION

1 DOCUMENTATION

Please mail an electronic copy (e.g., CD) of the following documents to:

State Water Resources Control Board
Office of Enforcement, Special Investigations Unit
1001 I Street, 16th Floor, Sacramento, CA 95814

- 1.1 Sewer System Management Plan (SSMP) (Sanitary Sewer System General Waste Discharge Requirements (SSSWOR), Sect. D.13) and any documents referenced within the SSMP. Also include documentation showing approval of the SSMP by your agency's local governing board (e.g., Board Resolution or other documentation).
- 1.2 SSMP Program Audit¹ [SSSWOR, Sect. D.13(x)], if not contained within your agency's SSMP
- 1.3 Sewer System Area Map [SSSWOR, Sect. D.13(iv)], if not contained within your agency's SSMP
- 1.4 Local Sewer Use Ordinance [SSSWOR, Sects. D.13(iii) and D.13(vi)], if not contained within your agency's SSMP
- 1.5 Evidence of Agency's SSO Field Response Documentation [SSSWOR, Amended MRP, B.5], if not contained within your agency's SSMP

¹ To satisfy SSSWOR, Sect. D.13(x), the SSMP Audit must occur at least every two years following the original approval date of the agency's SSMP by the local governing board. The SSMP Audit must measure the effectiveness and compliance of an Enrollee's SSMP.

- 1.6 Rehabilitation and Replacement Plan [SSSWDR, Sect.D.13(iv)(c)], if not contained within your agency's SSMP
- 1.7 Capital Improvement Plan (CIP) Schedule for System Evaluation and Capacity Assurance Plan (SECAP) [SSSWDR, Sect.D.13(viii)], if not contained within your agency's SSMP

2. Basic Information

2.1 Collection System Waste Discharge ID number (WCID) and Collection System Name: _____

2.2 Collection System Main Point[s] of Contact [name, title, address, email, and telephone number]: _____

2.3 Type of Sanitary Sewer System (select ONE of the following: Municipal, Park, School, Military, Hospital, Prison, Airport, Port, Other)

2.4 What is the population served by your agency's sanitary sewer system?

2.5 What is this fiscal year's budget for operation and maintenance sanitary sewer system facilities?

2.6 What is this fiscal year's budget for capital expenditures for sanitary sewer system facilities?

For questions 2.7 - 2.10, please identify the total number of employees (technical and mechanical) for your agency's sanitary sewer system (including pump station operations) working within the different classifications listed below.

2.7 Entry Level (Less than 2 years experience)

Number of agency employees?

2.8 Journey Level (Greater than or equal to 2 years experience)

Number of agency employees?

2.9 Supervisory Level

Number of agency employees?

2.10 Managerial Level

Number of agency employees?

For questions 2.11 - 2.14, please identify the total number of employees who hold CWA Certification for Collection System Maintenance for your agency's sanitary sewer system (including pump station operations) for the various Certificates and Grades levels listed below.

2.11 Grade I

Number of certified (Grade I Collection System Maintenance) agency employees:

Number of certified (Grade I Plant Maintenance Technologist) agency employees:

2.12 Grade II

Number of certified (Grade II Collection System Maintenance) agency employees:

Number of certified (Grade II Electrical/Instrumentation Technologist) agency employees:

Number of certified (Grade II Mechanical Technologist) agency employees:

2.13 Grade III

Number of certified (Grade III Collection System Maintenance) agency employees:

Number of certified (Grade III Electrical/Instrumentation Technologist) agency employees:

Number of certified (Grade III Mechanical Technologist) agency employees:

2.14 Grade IV

Number of certified (Grade IV Collection Systems Maintenance) agency employees:

Number of certified (Grade IV Electrical/Instrumentation Technologist) agency employees:

Number of certified (Grade IV Mechanical Technologist) agency employees:

2.15 Estimated Size Distribution of Assets

Diameter of sewer pipe	Gravity Sewers (miles)	Force Mains (miles)
6 inches or less	[# or ENTER ZERO]	[# or ENTER ZERO]
8 inches	[# or ENTER ZERO]	[# or ENTER ZERO]
9 - 18 inches	[# or ENTER ZERO]	[# or ENTER ZERO]
19 - 36 inches	[# or ENTER ZERO]	[# or ENTER ZERO]
> 36 inches	[# or ENTER ZERO]	[# or ENTER ZERO]
Unknown Diameter	[# or ENTER ZERO]	[# or ENTER ZERO]
Totals	[# or ENTER ZERO]	[# or ENTER ZERO]

2.16 For which portion of sewer service laterals is your agency responsible?

(If None, skip question 2.17.)

2.17 Estimated total miles of sewer service laterals (upper and lower) for which your agency is responsible?

2.18 Number of sewer service lateral connections?

2.19 Estimated total miles of easements within your sanitary sewer system?

2.20 What is your total easement sewer system cleaning production in miles/year?

2.21 What is your total gravity sewer system cleaning production in miles/year?

2.22 Does your agency own any separately enrolled collection systems? (Y/N)

2.23 If yes to question 2.22, which collection system(s) does your agency own?

Collection System name(s):

Collection System WDID(s):

2.24 Which wastewater treatment plant(s) (WWTPs) ultimately receive wastewater from this collection system?

Receiving Treatment Plant name(s):

Receiving Treatment Plant WDI(s):

2.25 For question 2.24, does your agency own this/these WWTP(s)? [Y/N]

2.26 Does this collection system discharge into any other collection system(s)? [Y/N]

2.27 If yes to question 2.26, which collection system(s) does your agency discharge into this collection system?

Receiving Collection System name(s):

Receiving Collection System WDI(s):

2.28 Do any upstream collection systems greater than 25,000 gallons/day (gpd) discharge into this collection system? [Y/N]

2.29 If yes to question 2.28, which collection system(s) discharge into this collection system?

Upstream Collection System name(s):

Upstream Collection System WDI(s):

2.30 Estimated Collection System Flow Characteristics for this collection system:

Average Daily Dry Weather Flow (MGD)	Peak Daily Wet Weather Flow (MGD)
(# or Unknown)	(# or Unknown)
Enter description here how info. is derived (based on EDUs measured, etc.)	Enter description here how info. is derived (based on EDUs measured, etc.)

2.31 How many pump stations are there throughout the sewer collection system?

2.32 How many feet of above ground gravity pipelines are there throughout the sewer collection system?

2.33 How many feet of above ground pressurized pipelines are located throughout the sewer collection system?

2.34 How many air relief valves (ARVs) are located throughout the sewer collection system?

2.35 How many siphons are there throughout the sewer collection system?

2.36 Specify the percentage of piping and the number of pump stations constructed:
(note: total percentage must equal 100%)

Age	Source of Age Info. (records, estimated, etc.)	Gravity & Pressure Sewers (%)	Pump Stations ² 25k Gal/day & Over (number of stations)	Pump Stations ¹ Under 25k Gal/day (number of stations)
2000 - Present		(%)	(# or ENTER ZERO)	(# or ENTER ZERO)

1980 - 1999		[%]	[# or ENTER ZERO]	[# or ENTER ZERO]
1960 - 1979		[%]	[# or ENTER ZERO]	[# or ENTER ZERO]
1940 - 1959		[%]	[# or ENTER ZERO]	[# or ENTER ZERO]
1920 - 1939		[%]	[# or ENTER ZERO]	[# or ENTER ZERO]
1900 - 1919		[%]	[# or ENTER ZERO]	[# or ENTER ZERO]
Before 1900		[%]	[# or ENTER ZERO]	[# or ENTER ZERO]
Unknown Age		[%]	[# or ENTER ZERO]	[# or ENTER ZERO]
Totals		[%]	[# or ENTER ZERO]	[# or ENTER ZERO]

² For pump stations, flow categories are the maximum flow rate occurring over a 24-hr period based on annual operating data. Age is date asset was originally constructed.

3 ORGANIZATION

Local Governing Board Information

- 3.1 [SSSWDR, Sect.D.13(i)]: Is/are your agency's Legally Responsible Official(s) and Data Submitter(s) registration information up to date with the State Water Board? (Y/N)
- 3.2 [SSSWDR, Sect.D.13(ii)]: If your local governing board has an internet website, please specify the internet address here: _____
- 3.3 [SSSWDR, Sect.D.13(ii)]: Please list the names and titles of each of your agency's current governing board members: _____

Sewer System Management Plan Information

- 3.4 [SSSWDR, Sect. E.]: Is your agency's SSMP available on your agency's website? (Y/N)
- 3.5 [SSSWDR, Sect. E.]: If yes to question 3.4, please provide the internet address here: _____

4 SEWER SYSTEM ASSETS

General System Information

- 4.1 [SSSWDR, Findings 2 & 3]: Please specify the basis for the population estimate in question 2.4 (e.g., official census data, estimated by agency, etc.)?

- 4.2 [SSSWDR, Sects. D.8, D.10]: What is the approximate size of the service area served by the sewer collection system for your agency, in square miles? [# or Unknown]
- 4.3 [SSSWDR, Sects. D.8, D.10]: Please describe the terrain within your agency's sewer service area (Mountainous, Hilly, Flat, Valley, etc.)?
- 4.4 [SSSWDR, Sects. D.8, D.10]: Please specify what percentage of the collection system's flow comes from residential, commercial, industrial, and institutional sources. [0% OR 1% OR 2% OR Unknown]

Asset Mapping

- 4.5 [SSSWDR, D.13(iv)]: Has your agency identified and mapped all the gravity sewer line segments, public access points (manholes, lamp holes, rod holes, etc.), pumping facilities, pressure pipes and valves, and stormwater-related facilities? [Y/N]
- 4.6 [SSSWDR, D.13(iv)]: Does your agency currently have sewer system assets mapped in a Geographic Information System (GIS)? [Y/N]
- 4.7 [SSSWDR, D.13(iv)]: Does your agency currently have stormwater-related facilities mapped in GIS? [Y/N]
- 4.8 [SSSWDR, D.8 and D.10]: What is the estimated number of gravity sewer line pipe segments located throughout the collection system? [# or Unknown]
- 4.9 [SSSWDR, D.13(iv)]: Does your agency have a formal review process in place to ensure that any mapping issues noted by field staff or others are addressed? [Y/N]
- 4.10 [SSSWDR, D.13(iv)]: Please indicate the total number of public access points (manholes, lamp holes, rod holes, etc.) located within your sewer collection system. [# or Unknown]

Sewer Service Laterals [SSSWDR, D.8, D.13(iv)]

- 4.11 Has your agency ever historically owned or maintained any portion of sewer service laterals? [Y/N or Unknown]
- 4.12 Does your agency have a voluntary sewer service lateral incentive program in place? [Y/N]
- 4.13 How many incoming complaints did your agency receive for privately-owned sewer service lateral problems in the previous fiscal year? [# or Unknown]
- 4.14 How many service calls did your agency respond to in the field for privately-owned service lateral problems in the previous fiscal year? [# or Unknown]

Pumping Facility Assets

For questions 4.15 – 4.22 refer to your pump station assets from question 2.31 (above)

- 4.15 [SSSWDR, D.8, D.13(iv)]: Has your agency mapped each pump station's actual GPS coordinates? [Y/N]
- 4.16 [SSSWDR, D.8, D.13(iv)]: Has your agency conducted a risk assessment for each asset? [Y/N]
- 4.17 [SSSWDR, D.8 and D.10]: How many of these assets have redundant pipelines installed? [#]
- 4.18 [SSSWDR, D.8 and D.10]: How many have dedicated emergency stand-by power generators located onsite? [#]
- 4.19 [SSSWDR, D.8 and D.10]: Has your agency developed standard and emergency operating procedures for each asset in the event of a power and/or pumping failure? [Y/N]
- 4.20 [SSSWDR, D.8 and D.10]: Has your agency determined the lowest hydraulic overflow point(s) and calculated the longest possible holding time(s) for each asset? [Y/N]
- 4.21 [SSSWDR, D.6(iii) and (vi), D.8 and D.10]: Has your agency identified critical spare parts for each asset? [Y/N]

- 4.22 [SSSWDR, D.8(iii) and (vi), D.8 and D.10]: For question 4.21, does your agency maintain the spare parts identified for each asset? [Y/N]
- 4.23 [SSSWDR, D.8 and D.10]: How many facilities are located within 100 feet of a surface water, creek or drainage channel? [#]
- 4.24 [SSSWDR, D.8 and D.10]: How many are located within 20 feet of a storm drain inlet? [#]
- 4.25 [SSSWDR, D.8 and D.10]: How many pump stations are equipped with audible and/or visual alarms located in public view to expedite notification to your agency in the event of an SSO? [#]
- 4.26 [SSSWDR, D.8 and D.10]: How many pump stations are equipped with an Auto Dialer Alarm System(s) for detecting pump failure and/or high wet well levels? [#]
- 4.27 [SSSWDR, D.8 and D.10]: How many have a supervisory, control and data acquisition system (SCADA) installed and operational? [#]
- 4.28 [SSSWDR, D.8 and D.10]: For question 4.27, how many can be remotely operated? [#]
- 4.29 [SSSWDR, D.8 and D.10]: How many pump stations display emergency notification signage, including agency contact information, in public view to expedite notification to your agency in the event of an SSO? [#]
- 4.30 [SSSWDR, D.8 and D.10]: Does your agency implement vandalism control efforts to discourage unauthorized access and/or vandalism to these assets? [#]
- 4.31 [SSSWDR, D.8 and D.10]: How many pump stations have built-in pumping bypass capability for emergency use? [#]
- 4.32 [SSSWDR, D.8 and D.10]: How many have electrical power connections installed to allow for the use of portable emergency generators? [#]

Force Main Sewer Assets

- 4.33 [SSSWDR, D.8, D.13(iv)]: How many sewer force mains are owned by your agency? [#]
- 4.34 [SSSWDR, D.8, D.13(iv)]: For the assets in question 4.33, has your agency conducted a risk assessment for each asset? [Y/N]
- 4.35 [SSSWDR, D.8 and D.10]: For the assets in question 4.33, how many have a dedicated corrosion protection system(s) installed? [#]
- 4.37 [SSSWDR, D.8 and D.10]: For the assets in question 4.33, what is the total number of air relief valves installed? [#]

5 FINANCIAL INFORMATION

Funding Sources and Revenues [SSSWDR, D.9]

- 5.1 Does your agency utilize an Enterprise Fund for services provided to the public? [Y/N]
- 5.2 If yes to question 4.1, what are the total estimated annual revenues generated from this fund? [#]
- 5.3 If yes to 4.1, what is the current fund balance? [#]
- 5.4 Please provide a brief description of all sewer collection system funding source(s) (e.g., user fees, annual budget allocation, property taxes, etc.).
- 5.5 What is your agency's total number of billed sewer connections? [# OR Unknown]
- 5.6 What is your agency's total number of billed customers for sewer service? [# OR Unknown]
- 7 What is your agency's current average monthly household user fee for sewage collection only? [\$ or Unknown]

- 5.8 For the answer in 4.7, what is your agency's sewer fee rate basis (e.g., measured flow, calculated flow, flat fee, etc.)
- 5.9 Has your local governing board approved any future sewer use fee increase(s)? [Y/N]

Operations, Maintenance and Capital Funds and Expenditures [SSSWDR, Sects. D.9]

5.10 How much did your agency spend in the last fiscal year for operations and maintenance activities (O&M) of sewer assets? [5]

5.11 How much did your agency spend in the last fiscal year on capital expenditures for sewer assets (e.g., new pipelines or equipment)? [5]

6 LOCAL SEWER USE ORDINANCE [SSSWDR, D.13(iii) and/or D.13(vii)]

6.1 Does your agency have an adopted sewer use ordinance [Ordinance]? [Y/N]

If no to question 6.1, skip to question 7.1

6.2 Specify the date of last update/change of your agency's local Ordinance approved by your agency's local governing board. [DATE]

6.3 Specify the time frequency in which the Ordinance is reviewed. [FREQ]

6.4 Does your agency have legal authority within the Ordinance to limit and enforce illicit discharges from upstream public and/or private satellite collection system(s)? [Y/N]

6.5 If no to question 5.4, does your agency have service agreements or other procedures to limit and enforce illicit discharges from upstream public and/or private satellite collection system(s)? [Y/N]

6.6 Does the Ordinance ban inflow from stormwater sources? [Y/N]

6.7 Does the Ordinance specify who owns and/or maintains the sewer service lateral from the building foundation to the property line (upper lateral portion)? [Y/N]

6.8 Does the Ordinance specify who owns and/or maintains the sewer service lateral from the property line to the sewer main line (lower lateral portion)? [Y/N]

6.9 Does the Ordinance require testing and/or inspection of the sewer service lateral upon remodeling, renovations and/or transfer of property/residence? [Y/N]

6.10 Does the Ordinance prohibit illicit discharges from service connections into the sewer? [Y/N]

6.11 Does the Ordinance require sewers and connections to be properly designed and constructed? [Y/N]

6.12 Does the Ordinance require proper maintenance, inspection and repairs of laterals? [Y/N]

6.13 Does the Ordinance limit the discharge of fats, oils and grease (FOG) and other debris that may cause blockages? [Y/N]

6.14 Does the Ordinance give your agency the authority to inspect grease producing facilities? [Y/N]

6.15 Does the Ordinance reference the Uniform Building Code? [Y/N]

6.16 Does the Ordinance reference the California Plumbing Code? [Y/N]

6.17 Does the Ordinance give your agency the authority to inspect, maintain and repair assets located within sewer easements? [Y/N]

6.18 Does the Ordinance provide your agency with the proper authority to issue notices of violation (NOVs)? [Y/N]

6.19 If yes to question 6.18, how many NOVs has your agency issued in the past 3 years? [# or Unknown]

6.20 Does the Ordinance provide your agency with the proper authority to issue enforcement penalties for violators? [Y/N]

6.21 If yes to question 6.20, how many enforcement penalties has your agency issued in the past 3 years? [# or Unknown]

6.22 Does Ordinance provide your agency with the proper authority to ban connections and/or disconnect services for violators? [Y/N]

6.23 If yes to question 6.22, how many actions has your agency undertaken in the past 3 years? [Y/N]

- 6.24 Does the Ordinance provide your agency with the authority to limit future development and/or building? [Y/N]
 6.25 If yes to question 6.24, how many actions has your agency undertaken in the past 3 years? [# or Unknown]

7 CAPITAL IMPROVEMENT PLAN

- 7.1 [SSSWDR, D.8]: What is the approval date of your Sewer Capital Improvement Plan (Sewer CIP) by your agency's local governing board? [M/D/Y]
 7.2 [SSSWDR, D.8 and D.13(iv)]: For question 7.1, is your Sewer CIP available on the internet for public review? [Y/N]
 7.3 [SSSWDR, D.8 and D.13(iv)]: If yes to question 7.2, please specify the internet address:
 7.4 [SSSWDR, D.8 and D.13(iv)]: What is the projected date of your next Sewer CIP update? [M/D/Y]

8 OPERATIONS AND MAINTENANCE PROGRAM

Computerized Maintenance Management System (CMMS)

- 8.1 [SSSWDR, D.8 and D.13(iv)]: Does your agency use a computerized maintenance management system (CMMS) to generate work orders and track sewer maintenance, operations and management information? [Y/N]
 8.2 [SSSWDR, D.7 and D.13(iv)]: If yes to question 8.1, is CMMS data used for ongoing strategies to eliminate/reduce SSOs? [Y/N]
 8.3 [SSSWDR, D.7 and D.13(iv)]: If yes to question 8.2, is the CMMS data used to evaluate cleaning production rates? [Y/N]
 8.4 [SSSWDR, D.7, D.13(iv) and D.13(x)]: If yes to question 8.2, does your agency use the CMMS information to provide data for tracking system trends, problems and/or performance? [Y/N]
 8.5 [SSSWDR, D.7, D.13(iv) and D.13(x)]: If no to question 8.1, does your agency have a different method in place to provide data for tracking system trends, problems and/or performance? [Y/N]

Inspections, Operations and Management Activities

- 8.6 [SSSWDR, D.8, D.13(iv)]: What was your agency's total gravity sewer collection system cleaning production (hydro flushing, mechanical and hand rodding) over the past 12 months (miles per year)? [# or Unknown]
 8.7 [SSSWDR, D.8, D.13(iv)]: What is your agency's total gravity sewer collection system cleaning production scheduled (hydro flushing, mechanical and hand rodding) for the next 12 months (miles per year)? [# or Unknown]
 8.8 [SSSWDR, D.8, D.13(iv)]: What was your agency's total video (CCTV) inspection production in the past 12 months (miles)? [# or Unknown]
 8.9 [SSSWDR, D.8, D.13(iv)]: What is your agency's total video (CCTV) inspection production scheduled for the next 12 months (miles)? [# or Unknown]
 8.10 [SSSWDR, D.8, D.13(iv)]: Does your agency have a method in use for reviewing and analyzing force main sewers and their components? [Y/N]
 8.11 [SSSWDR, D.7 and D.13(iv)]: What is the total number of focused problem areas ("SSO hot spots") located throughout the collection system? [# or Unknown]
 8.12 [SSSWDR, D.8 and D.10]: Does your agency have a program to inspect and maintain air relief valves (ARVs)? [Y/N/ n/a]
 8.13 [SSSWDR, D.8 and D.10]: How many ARVs are not accessible for inspection/maintenance? [# or n/a]
 8.14 [SSSWDR, D.7 and D.13(iv)]: What was the total number of ARVs exercised and cleaned in past 12 months? [# or Unknown]

- 8.15 [SSSWDR, D.7 and D.13(iv)]: What is the total number of ARVs planned to be exercised and cleaned in the past 12 months? (# or Unknown)
- 8.16 [SSSWDR, D.13(iv)]: What is the total number of public access points (manholes, lamp holes, rod holes, etc.) inspected in the past 12 months? (# or Unknown)
- 8.17 [SSSWDR, D.13(iv)]: What is the total number of public access points (manholes, lamp holes, rod holes, etc.) scheduled to be inspected in the next 12 months? (# or Unknown)
- 8.18 [SSSWDR, D.13(iv)]: Does your agency check pipeline routes at least annually, and after major storms, earthquakes or other events that could damage these assets, to check for sink holes or leaks along force main(s)? [Y/N]
- 8.19 [SSSWDR, D.13(iv)]: How many above ground crossings (if applicable) were inspected in the past 12 months? (#, N/A or Unknown)
- 8.20 [SSSWDR, D.13(iv)]: How many siphons (if applicable) were inspected in the past 12 months? (#, N/A or Unknown)
- 8.21 [SSSWDR, D.13(iv)]: Does your agency have a process to identify areas subject to excess hydrogen sulfide corrosion? [Y or N]
- 8.22 [SSSWDR, D.13(iv)]: Does your agency have a formal pipe grading process in place to identify pipe discontinuities? [Y or N]
- 8.23 [SSSWDR, D.13(vi)]: Does your agency require video (CCTV) inspections before and after cleaning to measure the effectiveness of these activities? (#)
- 8.24 [SSSWDR, D.13(iv)]: Does your agency video (CCTV) inspect pipes after all SSO(s)? [Y/N]
- 8.25 [SSSWDR, D.13(iv)]: Does your agency conduct smoke, dye or other tests to check for illicit connections? [Y/N]
- 8.26 [SSSWDR, D.13(iv)]: If yes to question 8.25, how many miles of sewer system were tested in the past 12 months? (# or Unknown)
- 8.27 [SSSWDR, D.13(iv)]: Does your agency use video (CCTV) to monitor discharger compliance for illicit connections? [Y/N]
- 8.28 [SSSWDR, D.13(iv)]: If yes to question 8.27, list the total number of miles of video (CCTV) inspection conducted for this purpose in the past 12 months. (# or Unknown)
- 8.29 [SSSWDR, D.13(iv) and D.13(viii)]: Does your agency have formal agreements in place to increase resources through established mutual assistance agreements with other agencies/contractors for wet weather episodes or for SSO response activities? [Y/N]
- 8.30 [SSSWDR, D.13(iv) and D.13(viii)]: Does your agency have a program in place to identify areas with inflow and infiltration (I/I)? [Y/N]
- 8.31 [SSSWDR, D.13(iv) and D.13(viii)]: If yes to question 8.30, estimate the total number of miles identified by this program. (# or Unknown)
- 8.32 [SSSWDR, D.13(iv)]: Does your agency have an active root control program in place? [Y/N]
- 8.33 [SSSWDR, D.13(iv)]: If yes to question 8.32, please list the type(s) of control efforts in place (e.g., chemical, mechanical, etc.).
- 8.34 [SSSWDR, D.13(iv)]: If your agency uses chemical(s) for root control, please list chemical(s) used. (N/A if no chem. root program)

Fats, Oils and Grease (SSSWDR, D.13(iv) and D.13(viii))

- 8.35 Does your agency have a commercial FOG program in place? [Y/N]
- 8.36 If no to question 8.35, has your agency justified in its SSMP why a FOG program is not needed? [Y/N]
- 8.37 If yes to question 8.35, does your agency have a FOG Ordinance separate from the sewer use ordinance? [Y/N]
- 8.38 If yes to question 8.37, please list the FOG Ordinance citation number:
- 8.39 If yes to question 8.35, approximately how many food service establishments (FSEs) such as restaurants, schools, hospitals, jails, and convalescent homes are subject to FOG control. (#)

- 8.40 If yes to question 8.35, what is the total number of FSE permits issued for FOG control? [0]
- 8.41 If yes to question 8.35, what is the total number of dedicated FSE FOG inspectors? [0]
- 8.42 If yes to question 8.35, how many FSE FOG inspections were conducted in past 12 months? [0]
- 8.43 If yes to question 8.35, how many FSE FOG enforcement action(s) were initiated in the past 12 months?
- 8.44 If yes to question 8.35, how many FSE FOG inspections are planned for the next 12 months? [0]
- 8.45 Does your agency have a residential FOG program in place? [Y/N]
- 8.46 If yes to question 8.45, briefly describe the program: _____

Sewer Contract Services

- 8.47 (SSSWDR, D.8 and D.13(iv)): Does your agency retain contract service(s) for sewer collection system maintenance, operations, and/or management? [Y/N]
- 8.48 (SSSWDR, D.8 and D.13(iv)): If yes to question 8.47, for services in excess of \$10,000/year, please provide some basic information about these services in the table below:

Contractor Name	Description (clearing, root control, repairs, etc.)	Frequency of Contract	Budget (annual \$)

9 SSO EMERGENCY RESPONSE PROGRAM (SSSWDR, D.13(vi))

- 9.1 Does your agency's SSO Emergency Response Plan incorporate procedures for pump stations/force main sewers? [Y/N]
- 9.2 Does your agency have a dispatcher(s) within your agency to handle, dispatch and document incoming complaints from your sewer system customers? [Y/N]
- 9.3 If yes to 9.2, does your agency utilize a dispatch radio system for notifying collection crews who respond to SSOs? [Y/N]
- 9.4 If yes to 9.3, please list the frequency(s) in use for the dispatch radio system: _____
- 9.5 Does your agency have standard operating procedures (SOPs) in place to test and document, at least once per year, the performance of its after-hours emergency notification system(s)? [Y/N]
- 9.6 Does your agency provide and document any scenario-based SSO emergency response simulation training for collections staff at least on an annual basis to ensure staff are properly trained and prepared in the event of an SSO? [Y/N]
- 9.7 If yes to 9.6, does this training include practical exercises including researching SSO start times and calculating the SSO volume spilled and recovered? [Y/N]
- 9.8 Do your emergency operating procedures (EOPs) include requirements to determine the impact of an SSO, including accelerated or additional environmental monitoring? [Y/N]

10 SSO REDUCTION PERFORMANCE AND MONITORING PROGRAM (SSSWDR, D.13(ix))

- 10.1 Does your agency have a process in place to collect data to monitor performance of its SSMP and efforts in reducing SSOs? [Y/N]
- 10.2 If yes to question 9.1, does your agency use the data collected to update SSMP program elements? [Y/N]

1 COLLECTIONS STAFFING AND TRAINING

- 11.1 [SSSWDR, D.9]: What is the total number of dedicated sewer maintenance crews in place at your agency? [H]
- 11.2 [SSSWDR, D.9]: For question 11.1, how many staff are typically in each maintenance crew? [H]
- 11.3 [SSSWDR, D.9 and D.11(b)(3)]: Does your agency have a program in place to identify and document the competencies/capabilities of collections staff at least on an annual basis (examples include sewer line training, pump repairs, video [CCTV] inspection, pump station maintenance, excavation, utility line locating, etc.)? [Y/N]
- 11.4 [SSSWDR, D.9]: If yes to question 11.3, does this program identify gap(s) in competencies/capabilities of collections staff? [Y/N]
- 11.5 [SSSWDR, E]: Does your agency require collections staff to review the SSSWDR and the agency's SSMP at least annually? [Y/N]
- 11.6 [SSSWDR, D.9]: Does your agency use a workforce planning/retention program to ensure adequate future collections staff? [Y/N]
- 11.7 [SSSWDR, D.8 and D.13(iv) and (v)]: Does your agency provide initial and recurrent training to appropriate staff (including outside contractor(s)) regarding your agency's SSO Emergency Response Plan and O&M programs? [Y/N]
- 11.8 [SSSWDR, D.8 and D.13(iv) and (v)]: If yes to 11.7, what is the total number of individuals trained in the past 12 months. [H]
- 11.9 [SSSWDR, D.8 and D.13(iv) and (v)]: For contracted sewer services, do your contracting specifications contain specific language requiring initial and recurrent training of contractor staff regarding your agency's SSO Emergency Response Plan and O&M programs? [Y/N]

12 MAJOR EQUIPMENT INVENTORY [SSSWDR, D.4, D.7, D.8, D.13(iv)]

- 12.1 How many combination truck(s) (hydro flush/vacuum models) are owned and/or leased by your agency? [H]
- 12.2 For question 11.1, how many have a dedicated logbook(s) to document fieldwork activities? [H]
- 12.3 How many hydro flusher(s) are owned and/or leased by your agency? [H]
- 12.4 How many mechanical rodder(s) are owned and/or leased by your agency? [H]
- 12.5 How many video (CCTV) inspection vehicle(s) are owned and/or leased by your agency? [H]
- 12.6 How many utility truck(s) are owned and/or leased by your agency? [H]
- 12.7 How many portable sewage pump(s) are owned and/or leased by your agency? [H]
- 12.8 How many portable generator(s) are owned and/or leased by your agency? [H]
- 12.9 Does your agency own equipment designed to block the storm drain system, in an emergency, to prevent untreated or partially treated wastewater from reaching surface waters? [Y/N]

13 EXTERNAL COMMUNICATIONS PROGRAM

- 13.1 [SSSWDR, D.13(xi)]: Does your agency have a program in place for communicating on a regular basis with the public regarding the development, implementation, and performance of its SSMP?
- 13.2 [SSSWDR, D.13(xi)]: Does your agency have a program in place for communicating with upstream or downstream satellite sewer system(s) connected to its collection system? [Y/N or N/A]
- 13.3 [SSSWDR, D.11]: Does your agency participate in responding to Underground Service Alert(s) (USA) or other similar organizations to identify and mark sewer lines? [Y/N]
- 13.4 [SSSWDR, D.7, D.13(iv), G, and Amended MRP]: Does your agency's communication program give the public the opportunity to provide input as your SSMP is being implemented? [Y/N]

14 NOTIFICATION, REPORTING AND RECORD KEEPING

- 14.1 [SSSWDR, Amended MRP, B(5)]: Are all the records required in the Amended MRP, B(5) ("Record Keeping") readily available for review by the Water Boards? [Y/N]
- 14.2 [SSSWDR, Amended MRP, B(5)]: Does your agency maintain a list and description of all sewer-related complaints from customers for the past 3 years, including calls received after normal working hours? [Y/N]
- 14.3 [SSSWDR, Amended MRP, B(5)]: If yes to question 14.2, does this include information regarding privately owned sewer laterals? [Y/N]
- 14.4 [SSSWDR, G, and Amended MRP]: Does your agency have a quality assurance/quality control (QA/QC) procedure in place for review of technical information collected by field staff prior to certification of the SSO report(s) in the Water Board's online reporting system (CIWQS) by the Legally Responsible Official(s)? [Y/N]
- 14.5 [SSSWDR, G and Amended MRP]: Does your agency require crews to take photos of all SSOs? [Y/N]
- 14.6 [SSSWDR, G and Amended MRP]: If no to question 14.5, does your agency at least require crews to take photos of SSOs that result in backups into structures? [Y/N]
- 14.7 [SSSWDR, G and Amended MRP]: Does your agency have a procedure(s) in place for collecting field information to assist in determining the actual SSO start time? [Y/N]
- 14.8 [SSSWDR, G and Amended MRP]: Does your agency use SOPs to estimate SSO volume spilled, recovered and not recovered, including estimation of cleanup water used? [Y/N]
- 14.9 [SSSWDR, G and Amended MRP]: Does your agency regularly update initial reports given to the California Emergency Management Agency, local health department, and Regional Board as information develops regarding SSOs requiring notification? [Y/N]
- 14.10 [Amended MRP, B.6]: Does your agency maintain water quality monitoring records as required by the Amended MRP, section B(6)?

15 SSO PREVENTION AND MITIGATION

- 15.1 [SSSWDR, D.13(k)]: Does your agency generate SSO reduction performance metric(s) for its collection system for use in future planning? [Y/N]
- 15.2 [SSSWDR, D.13(x)]: Does your agency have a program in place to conduct periodic video (CCTV) inspections of areas throughout the collection system that have never been evaluated by video (CCTV) to date? [Y/N or N/A]
- 15.3 [SSSWDR, D.13(x)]: Does your agency document meetings between O&M and source control staff, if applicable? [Y/N or N/A]
- 15.4 [SSSWDR, 8 and D.6]: Does your agency document meetings between O&M and engineering staff to discuss system problem areas and projects, if applicable? [Y/N or N/A]
- 15.5 [SSSWDR, 8 and D.6]: Does your agency hold post-SSO briefings with collections staff, management and others involved, to evaluate root cause of SSOs and document service changes necessary to be prepared in responding to SSOs in the future? [Y/N]
- 15.6 [SSSWDR, 8 and D.6]: Does your agency pursue investigation of upstream satellite(s) or potential illicit dischargers as part of the SSO cause determination process? [Y/N]
- 15.7 [SSSWDR, 8 and D.6]: Does your agency adjust sewer collection system cleaning interval(s) for problem areas based on review and analysis of each past SSO? [Y/N]

15.8 [SSSWDR, 8 and D.6]: How many of the SSOs over the past 12 months were preventable through more proactive maintenance? [If OR Unknown]

15.9 [SSSWDR, 8 and D.6]: How many of the SSOs over the past 4 years occurred at repeat locations? [If OR Unknown]