

Sewer System Management Plan SELF AUDITS



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Bay Area Clean Water Agencies (December 8, 2011)



- 1. Review of SSMP Self Audit requirements**
- 2. How SSMP Self Audits are used by Water Boards**
- 3. Response to noncompliance**
- 4. Summary of what we've seen so far**
- 5. Sample SSMP Audits**
- 6. Changes to Audit requirements being considered**
- 7. Contact Information**



1. Review of Audit Requirements

1. Review of Audit Requirements, cont.



WHY discharger must do SSMP Self Audit:

1. San Francisco Regional Water Board (Region 2) letter issued 5/7/2005 requires it annually for collection systems >10,000 population in Region 2
2. Statewide General WDR issued 5/2/2006 requires it at a minimum every 2 years (post-SSMP adoption) for all systems (not just those in Region 2)



1.a. Region 2 Requirements

1.a. Review of Audit Requirements, cont.



Annual SSMP Audit required for systems serving population >10,000 (since 7/7/2005)

 **California Regional Water Quality Control Board**
San Francisco Bay Region

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 Arnold Schwarzenegger
Governor

Date: July 7, 2005
File No. 1210.57 (MTC)

TO: Sewer System Authorities (attached list)

SUBJECT: New Requirements for Preparing Sewer System Management Plans

This letter is to notify you, as a Sanitary Sewer Collection System Agency, that you are required to prepare a Sewer System Management Plan (SSMP) pursuant to Section 13267 of the California Water Code. The enclosed SSMP Development Guide should be used to develop your plan, which will contain the following ten elements:

1.a. Review of Audit Requirements, cont.



Region 2: Accelerated SSMP timelines

Region 2

Required Schedule for SSMP Elements

SSMP Item	Required Completion Date
<ul style="list-style-type: none"> Goals Organization Emergency Response Plan FOG Control Program 	August 31, 2006
<ul style="list-style-type: none"> Legal Authority Measures and Activities Design and Construction Standards 	August 31, 2007
<ul style="list-style-type: none"> Capacity Management Monitoring, Measurement, and Program Modifications SSMP Audits 	August 31, 2008

General WDR

Sewer System Management Plan (SSMP) Time Schedule

Task and Associated WDR Section	Completion Date			
	Population > 100,000	Population Between 100,000 and 10,000	Population Between 10,000 and 2,500	Population < 2,500
SSMP Development Plan and Schedule (a) Specific Section	August 2, 2007	November 2, 2007	February 2, 2008	May 2, 2008
Goals Section D 13 (i)	November 2, 2007	November 2, 2007	May 2, 2008	May 2, 2008
Organization Section D 13 (ii)				
Legal Authority Section D 13 (iii)	November 2, 2008	May 2, 2009	November 2, 2009	February 2, 2010
Operation and Maintenance Program Section D 13 (iv)				
Overflow Emergency Response Program Section D 13 (v)				
FOG Control Program Section D 13 (vi)				
Design and Performance Provisions Section D 13 (v)	May 2, 2009	August 2, 2009	May 2, 2010	August 2, 2010
System Evaluation and Capacity Assurance Plan Section D 13 (viii)				
Monitoring and Program Modifications Section D 13 (ix)				
Program Audits Section D 13 (x)				
Communication Program Section D 13 (xi)				

1.a. Review of Requirements, cont.



Region 2: Developed SSMP Audit Guidelines

- “SSMP Development Guide” issued in July 2005
- Developed jointly by Region 2 and Bay Area Clean Water Agencies (BACWA)
- Guidelines only; no approved Audit format developed

SAN FRANCISCO BAY REGIONAL WATER QUALITY CONTROL BOARD
in cooperation with
BAY AREA CLEAN WATER AGENCIES

Sewer System Management Plan (SSMP) Development Guide



1.a. Review of Requirements, cont.



Region 2 “SSMP Development Guide” contents

10. SSMP Audits

Requirement: Each wastewater collection system agency shall conduct an annual audit of their SSMP which includes any deficiencies and steps to correct them (if applicable), appropriate to the size of the system and the number of overflows, and submit a report of such audit.

This section can be waived for collection systems serving a population of 10,000 or less.

1.a. Review of Requirements, cont.



Region 2 “SSMP Development Guide” contents, cont.

Key Point

The audit should cover the most recent calendar year, and be submitted to the Regional Water Board by March 15 of the year following the calendar year for which the analysis applies.

1.a. Review of Requirements, cont.



Region 2 “SSMP Development Guide” contents, cont.

Helpful Information

The audit can contain information about successes in implementing the most recent version of the SSMP, and identify revisions that may be needed for a more effective program. Information collected as part of Section 9 above can be used in preparing the audit. Tables and figures or

1.a. Review of Requirements, cont.



Region 2 “SSMP Development Guide” contents, cont.

charts can be used to summarize information about these indicators. An explanation of the SSMP development, and accomplishments in improving the sewer system, should be included in the audit, including:

- Progress made on development of SSMP elements, and if the sewer system agency is on schedule in development of the SSMP. Provide justification on the delay if the sewer system agency is behind schedule on development of the SSMP;
- How the sewer system agency implemented SSMP elements in the past year;
- The effectiveness of implementing SSMP elements;
- A description of the additions and improvements made to the sanitary sewer collection system in the past reporting year; and
- A description of the additions and improvements planned for the upcoming reporting year with an estimated schedule for implementation.

1.a. Review of Requirements, cont.



Region 2 “SSMP Development Guide” contents, cont.

Additional Tips

Helpful Information

- You may want to include a section up front entitled “System Overview,” which describes the size and physical features of the system, to put the rest of the document into context.
- When you prepare the SSMP for the first time, you may want to include a “Sewer Overflow History” to give you a place to start from in evaluating any trends for SSOs in the future.



1.b. General WDR Requirements

1.b. Review of Audit Requirements, cont.



General WDR, section D.13(x):

- ✓ Essentially mirrors RB2 SSMP Audit requirements
- ✓ Only required min. of every 2 years following initial SSMP adoption date

1.b. Review of Audit Requirements, cont.



(e) Identify and illustrate SSO trends, including frequency, location, and volume.

- (x) **SSMP Program Audits** - As part of the SSMP, the Enrollee shall conduct periodic internal audits, appropriate to the size of the system and the number of SSOs. At a minimum, these audits must occur every two years and a report must be prepared and kept on file. This audit shall focus on evaluating the effectiveness of the SSMP and the

State Water Resources Control Board Order No. 2006-0003-DWQ
Statewide General WDR For Wastewater Collection Agencies

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Enrollee's compliance with the SSMP requirements identified in this subsection (D.13), including identification of any deficiencies in the SSMP and steps to correct them.

1.b. Review of Audit Requirements, cont.



General WDR, section D.13(x):

“...audit shall focus on evaluating the effectiveness of the SSMP and the Enrollee’s compliance with the SSMP requirements identified in this subsection (D.13), including identification of any deficiencies in the SSMP and steps to correct them.”

1.b. Review of Audit Requirements, cont.



Minimum Audit Contents per General WDR:

1. Narrative of SSMP Effectiveness
 - Documents things working well
 - Documents areas needing improvement
 - Lists strategies to reduce/eliminate SSOs/impacts
2. Demonstration of agency's compliance with ALL applicable SSMP requirements
 - Validates status of SSMP compliance with D.13

1.b. Review of Requirements, cont.



General WDR, section D.13(x) also says Audit are
“appropriate to the size of the system and number of SSOs.”

- Larger systems with **HIGH** number/volume of SSOs:
 - **MORE** in-depth discussion expected about problems and planned improvements/solutions
- Smaller systems with **LOW** number/volume SSOs:
 - **LESS** in-depth discussion expected about problems and planned improvements/solutions



2. How SSMP Self Audits are used by the Water Boards

2. How SSMP Audits are Used, cont.



1. Provides tool for checking adequacy of: 1) system operations/management; 2) compliance performance; and, 3) level of effort/professionalism in reducing SSOs
2. Assists with statewide inspection/enforcement prioritization
3. Improves efficiency of Water Board/contractor inspections
4. Provides data to justify CIWQS data submitted
5. Improves Waterboard knowledge for regulatory purposes



3. Response to Noncompliance

3. Response to Noncompliance, cont.



- ✓ **What if discharger found to be in violation of SSMP Self Audit Requirement?**
 - Must provide information to address violation
 - May be issued Notice of Violation (NOV)
 - May be issued 13267 Order
 - May be subject to inspection/investigation
 - May be subject to formal enforcement (ACL, etc.)



4. Summary of What We've Seen so Far

4. Summary of What We've Seen, cont.



- ✓ **October 2011 Statewide SSMP Audit Request:**
 - 42 systems statewide (population 40-50K)
 - 2-year SSMP self Audit requested
 - System Evaluation and Capacity Assurance Plan (SECAP) also requested

4. Summary of What We've Seen, cont.



✓ RESULTS: Most systems not complying with D.13(x)

- Many missed evaluation of SSMP effectiveness
- Some missed SSMP compliance evaluation
- Some failed to submit any information or missed deadline



5. Sample SSMP Audits

5. Sample SSMP Audits, cont.



1. City of Woodland, CA

- + Measures SSMP effectiveness
- Does not completely evaluate SSMP compliance with section D.13

2. Union Sanitary District (Union City, CA)

- + Measures SSMP effectiveness
- Does not completely evaluate SSMP compliance with D.13

3. City of La Mesa, CA

- + Evaluates SSMP compliance with D.13
- Does not completely measure SSMP effectiveness

5. Sample SSMP Audits, cont.



4. Discharger “1” (uses BACWA SSMP checklist)
 - + Evaluates SSMP element compliance with D.13
 - Does not completely measure SSMP effectiveness

5. Discharger “2” (generic audit)
 - Does not measure SSMP effectiveness
 - Does not evaluate SSMP compliance

5. Sample SSMP Audits, cont.



Example #1:

City of Woodland

- + **Measures SSMP effectiveness**
- **Does not completely evaluate SSMP compliance with section D.13 in General WDR**

✓ **Presents improvements needed to SSMP and to system operations to reduce SSOs/impacts**

Objectives

This memorandum summarizes the performance of the City of Woodland's Sewer System Management Plan (SSMP) for FY09/10 and 10/11. The purpose of the SSMP is to provide a written framework for the management, operation, and maintenance programs executed by the City, with the ultimate goal of maintaining the level of service of the sewer collection system while minimizing sanitary sewer overflows (SSOs). This review is completed as part of the annual audit process described in sections ix and x of the City's SSMP. This process helps the SSMP document to evolve over time to address identified deficiencies in the management, operation and maintenance of the sewer collection system. This memorandum summarizes the following information:

1. SSO history, describing the number and nature of SSOs over the past six years.
2. Summary of progress of further development of the SSMP elements which have a plan and schedule for full implementation.
3. Summary How SSMP elements were implemented over last year
4. Effectiveness of the implemented SSMP elements
5. What SSMP elements are planned to be implemented next year
6. Description of additions and improvements to the collection system over the last year
7. Description of the additions and improvements to the collection system planned for the upcoming year
8. Review of performance indicators and overall summary of the past two fiscal years with proposed modifications for implementation in fiscal year 11/12 in areas in need of improvement.

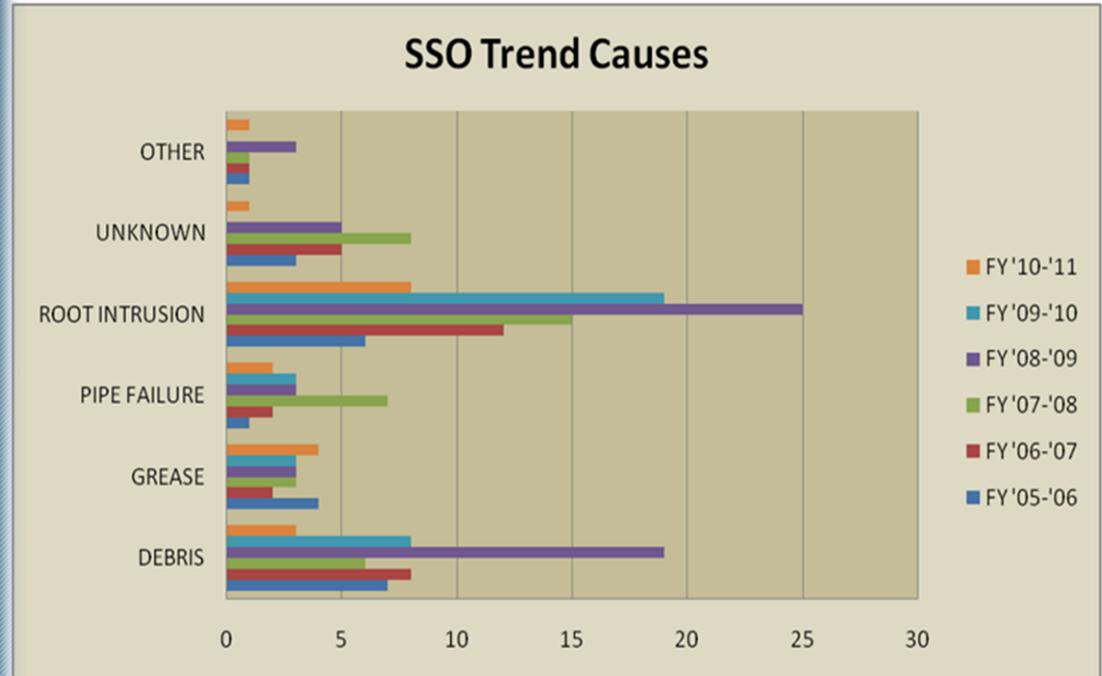
5. Sample SSMP Audits, cont.



Example #1, cont.:

City of Woodland

SSO History



FY10-11

<u>Lateral SSO's</u>	<u>Main SSO's</u>	<u>SSO volume lateral</u>	<u>SSO volume Main</u>
18	1	1,266	400

FY09-10

<u>Lateral SSO's</u>	<u>Main SSO's</u>	<u>SSO volume lateral gallons</u>	<u>SSO volume Main</u>
33	-	1,719	-

5. Sample SSMP Audits, cont.



Example #1, cont.: City of Woodland

- ✓ Example narrative explaining necessary SSMP improvements

Progress on development of SSMP elements

The SSMP audit has identified some elements that need refinement in the frequency of data collection and type of data collected for both the Utility Maintenance Workers and management staff. Some elements only need to be collected on an annual basis. Some new data needs to be collected to facilitate data collection for the SSMP and analysis of future needs. Furthermore, the communication plan for the SSMP was not completely implemented and progress of finishing implementation will happen in FY11/12. Overall, the SSMP is 90% complete.

5. Sample SSMP Audits, cont.



Example #1, cont.: City of Woodland

- ✓ SSMP Performance Indicators used to track necessary collection system operational improvements (CCTV improvements)

	Performance Indicators	Rating			
		Below Goal	Acceptable	Good	Excellent
1	Feet inspected with CCTV / year	< 100,000	100,000-170,000	170,000-200,000	> 200,000
2	Pipe segments inspected / year	< 400	400-600	600-800	> 800
3	Footage inspected / 16 work hours	<1500	1500-1750	1750-2000	> 2000
4	% Passing quality control check	< 90%	90%	95%	98%

5. Sample SSMP Audits, cont.



Example #1, cont.: City of Woodland

- ✓ SSMP Performance Indicators used to track necessary collection system operational improvements (CCTV improvements)

Periodic Performance Tracking						
Date	Measured Value				Performance Assessment Comments	
FY 10-11	Goal	1	2	3	4	2. Staffing vacancies attributed to low number of inspections 4. QA/QC field not in use because CCTV has not been implemented with CA&CIP module.
	Value	125,976	375	1,665	N/A	
Annual Performance Assessment / Recommendations for Updates						
FY 10-11 Ratings:						
1. Acceptable						
2. Below Goal						
3. Acceptable						
4. Below Goal						
Recommendation #1: Filling vacancies will increase the amount of pipe inspected						
Recommendation #2: Filling vacancies will increase the amount of pipe inspected						
Recommendation #3: Filling vacancies will increase the amount of pipe inspected						
Recommendation #4: Anticipate CA&CIP linkage to CCTV module FY 11/12						

5. Sample SSMP Audits, cont.



Example #1, cont.: City of Woodland

- ✓ SSMP Performance Indicators track collection system operational improvements (SSO reduction performance)

	Performance Indicators	Rating			
		Below Goal	Acceptable	Good	Excellent
1	% captured of SSO (flat, 1-5%)	<70%	70%-80%	90-90%	90-100%
2	% captured of SSO (steep, >5%)	<30%	30-50%	50-90%	90-100%
3	Average time to investigate SSO with CCTV	>1 week	5-7 days	3-5 days	< 3 days
4	% complete on-line reporting for category 3 spills	< 70%	70-80%	80-90%	90-100%

5. Sample SSMP Audits, cont.



Example #1, cont.: City of Woodland

- ✓ SSMP Performance Indicators track collection system operational improvements (SSO reduction performance)

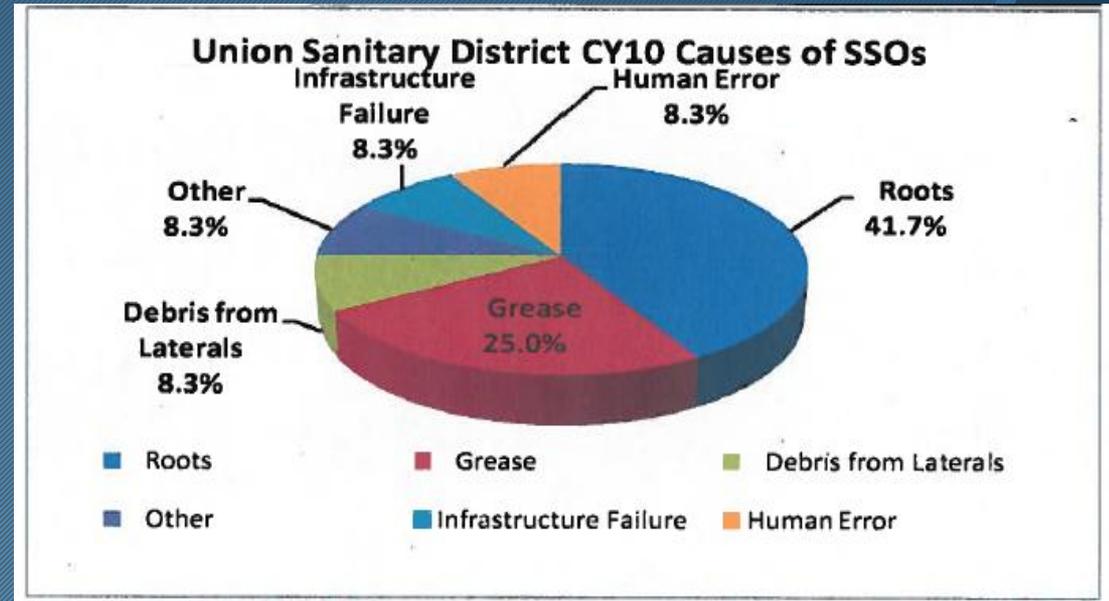
Periodic Performance Tracking						
Date	Measured Value				Performance Assessment Comments	
FY 09-10	Goal	1	2	3	4	3. 24 out of 46 SSO were CCTV but can't capture time CCTV occurred for 22 of the work orders. 4. 10 private lateral SSO's and 5 reported on-line
	Value	99%	N/A	24/46	50%	
Annual Performance Assessment / Recommendations for Updates						
FY 09-10 Ratings:						
1. Excellent – generally sewer captures 100% of any spill.						
2. Below Goal – Not applicable to Woodland.						
3. Below Goal – 22 work orders did not specify when the CCTV occurred. CCTV is at the spill site but difficulty in capturing the time in the work orders.						
4. Below Goal – Decision was made during the FY to stop reporting private lateral SSO's on-line as no other city does report private lateral SSO's						
Recommendation #1: None.						
Recommendation #2: Woodland is a flat area with a slope of less than 5% throughout the city, performance indicator does not apply in Woodland and should be removed.						
Recommendation #3: Modify data entry in Cityworks to capture time CCTV began						
Recommendation #4: Change or remove performance indicator.						

5. Sample SSMP Audits, cont.



Example #2: Union Sanitary District

- + Measures SSMP effectiveness
- Does not completely evaluate SSMP compliance with D.13



- ✓ Includes historic and planned activities to reduce SSOs/impacts

5. Sample SSMP Audits, cont.



Example #2, cont.: Union Sanitary District

- ✓ Includes detailed SSO information (SSO causes and corrective actions undertaken as a result of overflows)

Location of SSOs and Preventative Measures

2010 Major Spills Summary (Over 1000 gallons)

(CIWQS) SSO ID#	Date	Amount	Summary
			No Major Spills

2010 Minor Spills Summary (100 to 1000 gallons)

(CIWQS) SSO ID#	Date	Amount	Summary
748187	01/02/2010	200	This spill occurred from USD manhole AH13036, on Hartnell St. in Union City. All of the 200 gallons spilled were recovered and returned back to the collection system. On January 6, a CCTV was sent out to inspect the line, which was reported to have signs of grease and debris. This line is being inspected every six months for 1.5 years to determine if the cleaning schedule needs changed.
749372	02/02/2010	200	This spill occurred from USD manhole AI15003, at 34400 Mission Blvd. in Union City. All of the 200 gallons spilled were recovered and returned back to the collection system. After the review of this structure's history, the cleaning frequency was increased and a Smart Cover was installed.
749401	02/07/2010	320	This spill occurred from USD riser AC18008, at the end of L St. in Fremont. Estimated spill volume was 320 gallons and 315 gallons was recovered. It was estimated that 5 gallons trickled down the riprap and soaked into the dirt. Water samples for ammonia were taken and all results came back negative. None of the wastewater reached the creek. The crew washed down the affected areas, vacuumed up all of the water and returned it to the collection system. A CCTV crew televised the line and found a large root mass which was determined to cause the spill. The line was re-cleaned and has been added to our root control program.
752644	04/04/2010	600	This spill occurred from USD manhole S20027, located on Trenouth St. in Fremont. All of the 600 gallons spilled were recovered and returned back to the collection system. The street, gutter, and storm basins were also washed down and all of the water was vacuumed up and returned to the collection system. On April 5, a CCTV crew inspected the line and found small amounts of grease and root intrusion in several locations. The line was cleaned with a chain flail and added to our root control

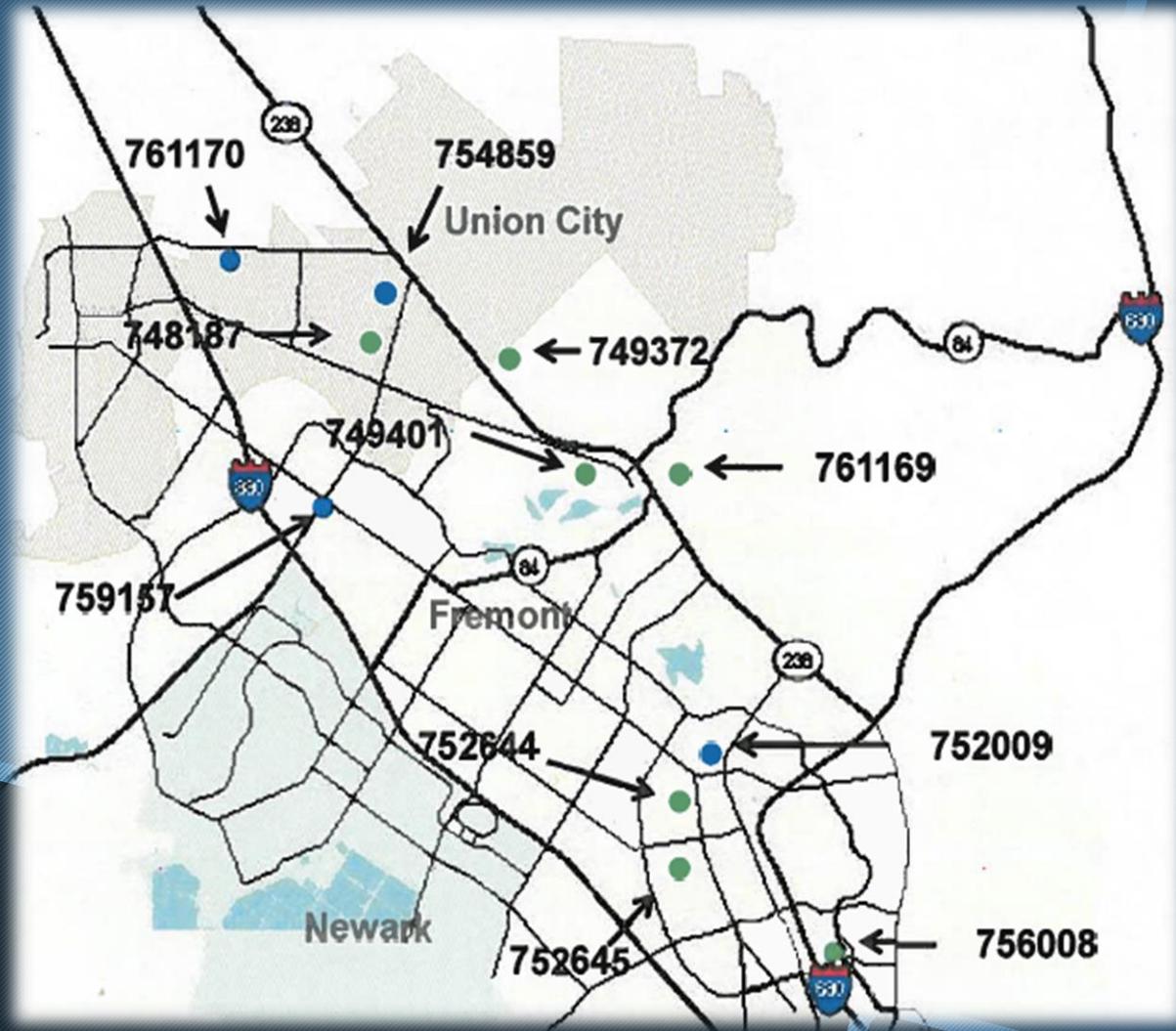
5. Sample SSMP Audits, cont.



Example #2, cont.:

Union Sanitary District

- ✓ Includes sewer system map showing each SSO location

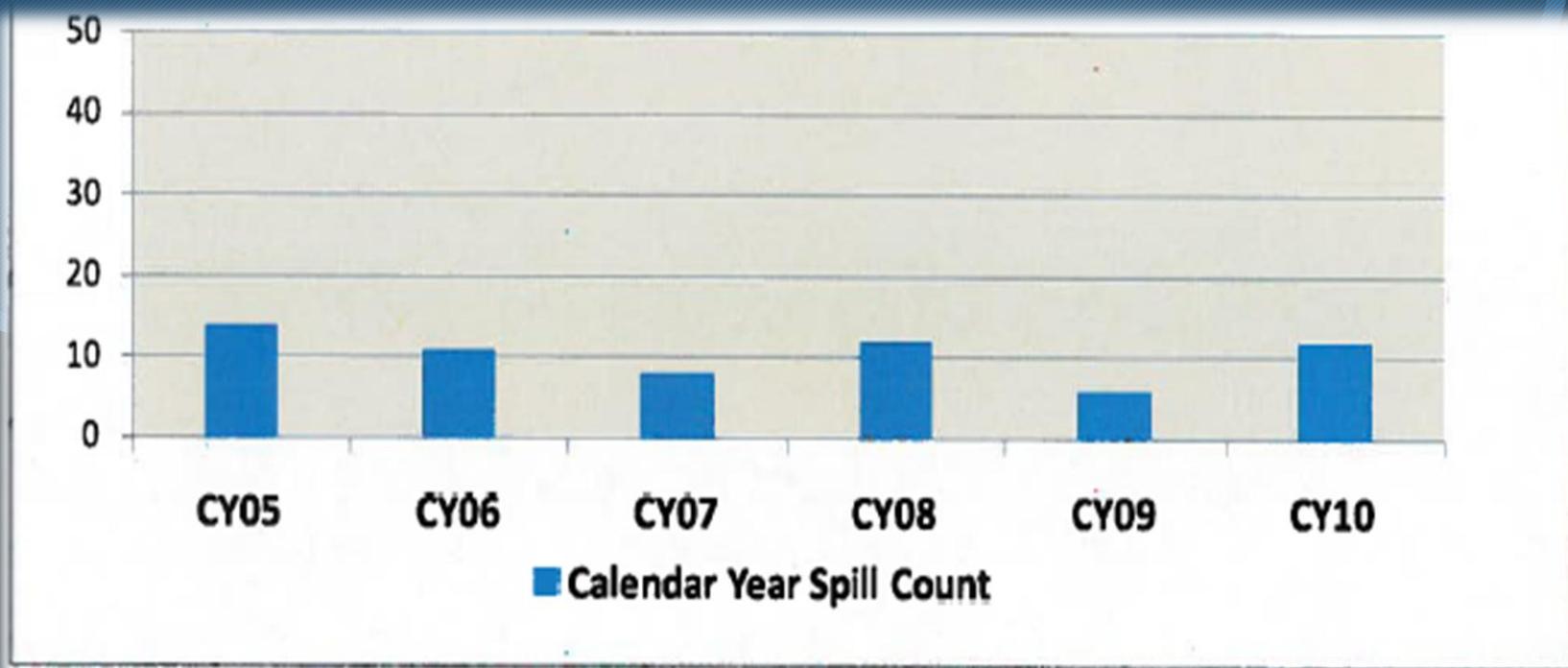


5. Sample SSMP Audits, cont.



Example #2, cont.: Union Sanitary District

✓ Graphic shows historic SSO performance



5. Sample SSMP Audits, cont.



Example #2, cont.: Union Sanitary District

✓ Highlights Accomplishments

Other Information

In the calendar year 2010, we had the following accomplishments;

Progress/Accomplishments

- Completed 1,021,413 feet of cleaning and 588,948 feet of televising of sewer lines in CY2010
- Responded to 258 service request calls in CY2010
- Completed a total of 212 main repairs in CY2010
- Provided support on the following projects: Asset Hierarchy, Solar Project, Pipe Vulnerabilities, Blacow Rd, Cast Iron Pipe Lining, IT Master Plan Update, and Plant Shut Downs
- Provided input on CIWQS online SSO reporting to State Water Board
- Hosted the kick off meeting for the CIWQS Data Review Task Force (TF)
- Participated with the Summit Partners WDR TF - Discussing potential changes to the General Waste Discharge Requirements
- Presented and handed out the new Best Practices Manual for SSO Reduction Strategies at the annual BACWA membership meeting.
- Participated in CWEA TCP update and validation TF
- Presented for CWEA Santa Clara Section – Failure Analysis/SSO Prevention Strategies
- Presented for CWEA Mid Summer Conference in Morro Bay
- Presented for CWEA at Northern Regional Training Conference in Modesto
- Presented for CWEA SF Bay Section training in Antioch
- Attended CWEA Safety Conference in Woodland
- Hosted the CWEA SF Bay Section Vendor Fair
- Attended APWA training conference
- Attended CSRMA workshop on SSOs and Flooded Buildings
- Attended the Sewer Smart Summit hosted by ABAG

5. Sample SSMP Audits, cont.



Example #2, cont.: Union Sanitary District

✓ Explains details about historic/future efforts

SSMP Audit

USD has an SSMP addressing all of the required elements that has been in place for six years. We use our SSMP as a tool to manage our collection system. In 2010, we updated our SSMP twice. Specifics of the changes can be made available upon request.

Twice a year we audit and update our SSMP, once at the beginning of the Fiscal Year and once at the beginning of the Calendar Year.

In 2010, CIP completed the following:

- Completed the construction of the Blacow Rd. Sewer Rehabilitation/Replacement project
- Completed the construction of the Misc. Sewer Spot Repairs - Phase I project
- Completed the construction of the Cast Iron Sewer Pipeline Rehabilitation - Phase I project
- Completed the Treatment Plant Drainage study

In 2011, CIP is expected to work on:

- The design of the I-680 Freeway Sewer Crossing replacement at Hayward Fault
- The design and construction of the SFPUC/Mission Blvd. Relocation project
- The design of the Misc. Sewer Spot Repairs - Phase III project
- The design of the Cast Iron Sewer Pipeline Rehabilitation - Phase III project
- The design of replacing the flanged coupling adapters on the force main pipelines inside the pump station valve boxes

5. Sample SSMP Audits, cont.



Example #2, cont.:

Union Sanitary District

✓ Shows summary chart of sewage collected and sewage spilled

✓ Shows list of efforts being undertaken to prevent SSOs

Description	Gallons	Percentage
CY10 Gallons Collected	9,415,160,000	99.9999999%
CY10 Gallons Spilled	2,084	0.0000221%
CY10 Not Recovered, That Did Not Reach State Waters	5	0.0000001%
CY10 Reached State Waters	0	0.0000000%

CY 2010 Efforts to Prevent SSOs and Minimize Their Impact Through O & M

Count	Description Of Efforts	CY09
258	Service Requests investigated	245
26	Spot Repairs completed	41
186	Trenchless Point Repairs completed	136
741	Mains Cleaned on the Selective Maintenance Program (these are lines that have had blockages in the past)	555
1,970	Mains cleaned on 72 Months Preventative Maintenance Program	2,861
896	Mains Treated for Root Control (these are lines that have had root caused blockages in the past or were likely to in the future)	751
18	Stoppages that did not result in a spill due to a quick response or our system design with grade breaks and relief points	17
2,265	Mains Televised to assess line condition	3,349
128	Mains had their schedule adjusted to a more frequent schedule on the Selective Maintenance Program	22

5. Sample SSMP Audits, cont.



Example #3

City of La Mesa

- + **Evaluates SSMP compliance with D.13**
- **Does not completely measure SSMP effectiveness**

Performance Measures	2008	2009	2010
	Actual	Actual	Actual
<u>Input</u>			
Total number of wastewater field personnel	9	9	9
<u>Workload/Output</u>			
Total number of SSO responded to in 12-month period	6	7	9
Total miles of sewer line maintained	172	195	198
Lineal feet of sewer televised	27,948	13,530	25,805
Total SSO > 1,000 gallons responded to	0	0	6
Total FOG related SSOs responded to	0	0	2
Total root related SSOs responded to	3	2	1
Total SSOs due to other caused (debris, vandalism, etc)	3	5	1
Total number of capacity related SSOs	0	0	5
Total number of SSOs due to pump station malfunction	0	0	0
Number of SSOs responded to within 2 hours or less	6	6	9
Total number of SSOs not reaching storm drain system	1	4	0
<u>Effectiveness/Outcome</u>			
Percentage of SSOs > 1,000 gallons	0%	0%	66%
Percentage of SSOs due to FOG	0%	0%	22%
Percentage of SSOs due to roots	50%	29%	11%
Percentage of SSOs due to other causes	50%	71%	66%
Percentage of SSOs that reached waters of United States	83%	43%	100%
Percentage of SSOs with response time 2 hours or less	100%	86%	100%

5. Sample SSMP Audits, cont.



Example #3, cont.: City of La Mesa

SSMP Program Audit
City of La Mesa

Chapter 4.0: Legal Authority

The Legal Authority element includes the following subsections:

- Regulatory Requirements for Legal Authority Provisions
- Background for Legal Authority
- Summary and Evaluation of the City's Existing Legal Authority

The intent of the Legal Authority element is to provide authority for the City to administer its collection system and to provide measures to enforce codes and regulations.

Audit Questions:

Does the SSMP contain current information about the City's legal authority?

Yes No

Does the City have sufficient legal authority to control sewer use and maintenance?

Yes No

5. Sample SSMP Audits, cont.



Example #3, cont.: City of La Mesa

Discussion:

The SSMP contains a background section which discusses the regulatory authority derived from Federal and State regulations as well as a section which discusses and evaluates the City's existing legal authority. As stated in the SSMP, on April 14, 2009, the City adopted additional municipal codes to ensure the City possesses the necessary legal authority to require, implement, and enforce compliance with the SSMP elements. As elements of the SSMP evolve and are further refined, the legal authority necessary to implement the provisions and require compliance by its residents and rate payers may also be addressed. At this time, it is determined that the City has adequate legal authority to administer the collection system, and enforce codes and regulations.

Updates to This Chapter:

The City shall add the Fats, Oils, and Grease (FOG) Ordinance 2009-2794 and 2009-2795 to Appendix H of the Sewer Master Plan, which is referenced in the SSMP. The updates are included within Attachment A-1 to this document.

5. Sample SSMP Audits, cont.



Example #3, cont.: City of La Mesa

SSMP Program Audit
City of La Mesa

Chapter 4.0: Legal Authority

The Legal Authority element includes the following subsections:

- Regulatory Requirements for Legal Authority Provisions
- Background for Legal Authority
- Summary and Evaluation of the City's Existing Legal Authority

The intent of the Legal Authority element is to provide authority for the City to administer its collection system and to provide measures to enforce codes and regulations.

Audit Questions:

Does the SSMP contain current information about the City's legal authority?

Yes No

Does the City have sufficient legal authority to control sewer use and maintenance?

Yes No

5. Sample SSMP Audits, cont.



Example #4:

Discharger "1"

- Does not measure SSMP effectiveness
- Presents no details

Directions: Please check YES or NO for each question. If NO is answered for any question, describe the updates/changes needed and the timeline to complete those changes in the "Description of Scheduled Updates/Changes to the SSMP" section at the end of this form.

		YES	NO
ELEMENT 1 - GOALS			
A.	Are the goals stated in the SSMP still appropriate and accurate	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ELEMENT 2 - ORGANIZATION			
A.	Is the Public Works Key Staff Telephone List current?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
B.	Is the Sanitary Sewer Overflow Responder Telephone List current?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
C.	Is the SSMP "City Organization Chart" current?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
D.	Are the position descriptions an accurate portrayal of staff responsibilities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
E.	Is the SSMP "Chain of Communication for Reporting and Responding to SSOs" accurate and up-to-date?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ELEMENT 3 - LEGAL AUTHORITY			
Does the SSMP contain excerpts from the current City Municipal Code documenting the City's legal authority to:			
A.	Prevent illicit discharges?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
B.	Require proper design and construction of sewers and connections?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
C.	Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the City?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
D.	Limit discharges of fats, oils, and grease?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
E.	Enforce any violation of its sewer ordinances?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ELEMENT 4 - OPERATIONS AND MAINTENANCE			
Collection System Maps			
A.	Does the SSMP reference the current process and procedures for maintaining the City's wastewater collection system maps?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

5. Sample SSMP Audits, cont.



Example #4, cont.:

Discharger "1"

B.	Are the City's wastewater collection system maps complete, current, and sufficiently detailed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Resources and Budget			
C.	Does the City allocate sufficient funds for the effective operation, maintenance and repair of the wastewater collection system and is the current budget structure documented in the SSMP?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Prioritized Preventive Maintenance			
D.	Does the SSMP describe current preventive maintenance activities and the system for prioritizing the cleaning of sewer lines?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
E.	Are the City's preventive maintenance activities sufficient and effective in minimizing SSOs and blockages?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Scheduled Inspections and Condition Assessments			
F.	Is there an ongoing assessment program sufficient to develop a capital improvement plan addressing the proper management and protection of infrastructure assets? Are the current components of this program documented in the SSMP?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Contingency Equipment and Replacement Inventory			
G.	Does the SSMP list the major equipment currently used in the operation and maintenance of the collection system and document the procedures on inventory management?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
H.	Are contingency equipment and replacement parts sufficient to respond to emergencies and properly conduct regular maintenance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Training			
I.	Is the training calendar current?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
J.	Does the SSMP document current training expectations and programs within the City's Wastewater Division?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Outreach to Plumbers and Building Contractors			
K.	Does the SSMP document current outreach efforts to plumbers and building contractors?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ELEMENT 5 - DESIGN AND PERFORMANCE STANDARDS			
A.	Does the SSMP contain current design and construction standards for the installation of new sanitary sewer systems, pump stations and other appurtenances and for the rehabilitation and repair of existing sewer systems?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
B.	Does the SSMP document current procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and the rehabilitation and repair of existing sewer lines?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ELEMENT 6 - OVERFLOW AND EMERGENCY RESPONSE PLAN			

5. Sample SSMP Audits, cont.



Example #5: Discharger “2”

X. SSMP Program Audits

New, or different information that has been reflected in SSMP keeping the document accurate in terms of staff, and contact information, and the addition of two SSO's which have occurred since August 2009.

Organization

LRO:

Data Submitter: I

Operations staff: .

Recent SSO's

February 6, 2010: [reached receiving waters)

April 4, 2010:



6. SSMP Audit changes being considered

6. SSMP Audit Changes Being Considered, cont.



1. Delete RB2 Annual SSMP Audit Requirement; revert to General WDR's 2-year time requirement
2. Possible changes being considered for inclusion in revised General WDR:
 - 1) Require results of D.13(ix), "Monitoring, Measurement and Program Modifications" to be included in 2-year Audit
 - 2) Consider 2-year Audit time clock to "reset" if SSMP is re-adopted by local governing board



6. SSMP Audit Changes Being Considered, cont.

3. Develop new Online CIWQS Form to satisfy 2-year SSMP Audit requirement.

Benefits:

- Helps discharger comply with General WDR SSMP Audit requirements
- Helps ensure statewide consistency and compliance
- Utilizes CIWQS information to auto generate audit metrics (# of SSOs, volume, causes, etc.)
- Provides platform to showcase discharger's strategic efforts, programs, strategies, and approaches to reduce/eliminate SSOs

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