



**City of Buellton
Sewer System Management Plan, Revision 0 – April 22, 2010
Audit Report**

December 20, 2012

Prepared By:



WALLACE GROUP®

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted 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 fine and imprisonment for knowing violations.

Rose Hess

Public Works Director /City Engineer
City of Buellton

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SCOPE AND PURPOSE

The State Water Resources Control Board (SWRCB) Sanitary Sewer System Waste Discharge Requirements Order No. 2006-0003-DWQ as amended by WQ 2008-0002-EXEC (SSSWDR Orders) require the City of Buellton (City) to conduct Sewer System Management Plan (SSMP) Audits a minimum of every two years or more frequently if warranted. The City was required to conduct an audit by April 22, 2012 and file the audit report with the most current revision of the SSMP.

The City's SSMP Audit Report is required to evaluate the effectiveness of and compliance with the City's current revision of the SSMP.

The SSMP Audit Report measures compliance with section D.13 of the SSSWDR Orders and the effectiveness of the City's implementation of the current certified SSMP; Revision 0 dated April 22, 2010:

1. [SSSWDR, Sect. D.13.i]: Agency Goals
2. [SSSWDR, Sect. D.13.ii]: Agency Organization
3. [SSSWDR, Sect. D.13.iii]: Legal Authority
4. [SSSWDR, Sect. D.13.iv]: Operations and Maintenance
 - a. Sanitary System Maps
 - b. Rehabilitation and Replacement Plan
 - c. Routine Preventative Operation and Maintenance Activities
 - d. Contingency Equipment and Replacement Inventories
 - e. Employee Training
5. [SSSWDR, Sect. D.13.v]: Design and Performance Provisions
6. [SSSWDR, Sect. D.13.vi]: Overflow Emergency Response Plan
7. [SSSWDR, Sect. D.13.vii]: Fats, Oils, and Grease Control Program
8. [SSSWDR, Sect. D.13.viii]: Capacity Management
9. [SSSWDR, Sect. D.13.ix]: Monitoring, Measurement, and Program Modifications
10. [SSSWDR, Sect. D.13.x]: Sewer System Management Plan Audit
11. [SSSWDR, Sect. D.13.xi]: Communication Program

AUDIT FORMAT

The format for the audit report is as follows:

SSSWDR Section and/or Finding
Sufficiency Ranking

Ranking	Ranking Basis
In Compliance	All requirements specified in the section are met.
Substantial Compliance	The majority of requirements, with the exception of one or two are met.
Partial Compliance	Half of the requirements stated are met.
Marginal Compliance	Less than half of the requirements are met.
Out of Compliance	None of the requirements are met.

Reference Information

Deficiencies

Recommendation of steps and schedule to correct Deficiencies

SSMP AUDIT PARTICIPANTS AND SCHEDULE

The SSMP Audit Report assesses the effectiveness of City’s SSMP Revision 0, dated April 22, 2010, and compliance with the SSSWDR Section D.13 requirements. The Audit is required to identify deficiencies, if any, in the SSMP and identify steps to correct them. The Audit was conducted by:

- Heather Billing
Senior Environmental Compliance Specialist II, Wallace Group
- Bill Callahan
Senior Environmental Compliance Specialist I, Wallace Group
- Anastasia Mylonas
Engineering Associate II, Wallace Group

City staff participating in the audit were:

- Rose Hess
Public Works Director /City Engineer, City of Buellton
- John Sanchez
Chief Plant Operator and Utility Systems Worker, City of Buellton
- Ray Ochoa
Plant Operator and Utility Systems Worker, City of Buellton

2012 City of Buellton Audit Meeting

SSMP Audit Date	Location	Attendees
June 25, 2012	City of Buellton Office	Heather Billing, Anastasia Mylonas, Rose Hess, Ray Ochoa, John Sanchez

AUDIT DEFICIENCIES

The SSMP Audit results in a finding that the city of Buellton SSMP dated April 22, 2010 needs to develop and update ten out of eleven subsections of SSSWDR Section D.13 for compliance with the SSSWDRs and has been partially effective in implementation of the SSMP. A summary of these findings is presented in the table below:

SSMP Introduction:

The introduction to the SSMP, pages 5 – 6, requires updating to include; the age of the collection and conveyance system and clarification on the number of lift stations in the system.

SSSWDR Section D.13	SSMP Compliance with Required Subsection	City Effectiveness in Implementation of SSMP Subsections	Schedule
1. Agency Goals [SSSWDR D.13(i)]	Marginal Compliance	The City must develop a program that demonstrates through written documentation that it meets the majority of the eleven goals stated in its SSMP.	Update Agency Goals by December 2013.
2. Organization [SSSWDR D.13(ii)]	Partial Compliance	The City is required to keep the organization information and regulatory contact information current. This information must include relevant staff contact information. The City must update this section to reflect current City and regulatory staff contacts.	Update the Organization Section by December 2013.
3. Legal Authority [SSSWDR D.13(iii)]	In Compliance	The City's Municipal Code is effective in providing the legal authorities required by the section D.13(iii). Updates to Sewer Ordinance Enforcement Language are recommended to assist the City with FOG enforcement goals.	Consider updating applicable Sewer Ordinance Enforcement Language by December 2014.

<p>4. Operation and Maintenance Program [SSSWDR D.13(iv)]</p>	<p>Marginal Compliance</p>	<p>This section must be updated and improvements to the Sewer System Atlas, Preventative Maintenance (PM) Program, Critical Parts Inventories, and Training Program must be documented. Plans to identify, finance, rehabilitate, and replace deficient areas of the collection system need to be developed and documented.</p>	<p>Update the Operation and Maintenance Program Section by December 2013.</p>
<p>5. Design and Performance Provisions [SSSWDR D.13(v)]</p>	<p>Partial Compliance</p>	<p>This section is required to be updated to include design standards that are stamped and signed by the City Engineer. Maintenance, Inspection, and Testing procedures should be developed, adopted, and implemented. Design requirements for lift stations and other sewer appurtenances should be addressed in the SSMP.</p>	<p>Update the Design and Performance Provisions Section by December 2013. Provide required inspection procedures by December 2013.</p>
<p>6. Overflow Emergency Response Plan [SSSWDR D.13(vi)]</p>	<p>Marginal Compliance</p>	<p>This section must be revised and updated with a plan and schedule to update the OERP, emergency response procedures, forms, and training program. Documentation of how SSOs are estimated, how start and stop times are derived, and photos of all SSO activities should be developed.</p>	<p>Update the Overflow Emergency Response Plan Section and provide required procedures by December 2013.</p>
<p>7. Fats, Oils and Grease (FOG) Control Program [SSSWDR D.13(vii)]</p>	<p>Substantial Compliance</p>	<p>The City has been successful in the implementation of its FOG Program. Some minor updates and revisions are recommended.</p>	<p>Update the FOG section of the SSMP to include an annual summary of FSE's inspected and results by December 2013. Update Municipal Code to assist FOG Program compliance by December 2013. Update plan and schedule to identify and address HMA areas prone to FOG by December 2013.</p>

<p>8. System Evaluation and Capacity Assurance (SECAP) Plan [SSSWDR D.13(viii)]</p>	<p>Substantial Compliance</p>	<p>The 2006 Buellton Citywide Capacity Assurance Plan is included in the SSMP as evidence of the SECAP. Additional monitoring should be performed to include an analysis of wet weather flows. This analysis will allow the City to establish if this SSMP section requires additional development in subsections b, c, and d.</p>	<p>Create a plan and schedule to update the SECAP section by December 2013.</p>
<p>9. Monitoring, Measurement, and Program Modifications [SSSWDR D.13(ix)]</p>	<p>Marginal Compliance</p>	<p>The City has been successful at maintaining some of the relevant information that could be used to establish and prioritize SSMP activities such as sewer line cleaning records, lift station maintenance records, and SSO data from CIWQS. The majority of the required activities of this section such as; evaluation each SSMP element, assessment of the effectiveness of O&M Program, and updates to program elements did not occur.</p>	<p>Update the Monitoring, Measurement, and Program Modifications Section by December 2013.</p>
<p>10. SSMP Program Audits [SSSWDR D.13(x)]</p>	<p>Out of Compliance</p>	<p>The City SSMP commits to performing internal SSMP audits in conjunction with the annual review and update of the SSMP. Annual reviews did not occur. Program audits are additionally scheduled to take place every two years. The City conducted the SSMP Audit and completed an SSMP Audit Report after the April 2012 (two year) deadline.</p>	<p>Next Audit must be performed by April 22, 2014. Significant changes/updates to the SSMP as a result of the Audit must be recertified by the City Council.</p>
<p>11. Communication Program [SSSWDR D.13(xi)]</p>	<p>Substantial Compliance</p>	<p>The City met many of the commitments found in the communication plan however it did not update the SSMP as discussed and did not participate in SSO awareness as outline in the SSMP.</p>	<p>Update the SSMP Communication Program by December 2013.</p>

The following sections of this report describe these deficiencies in detail and address future additions and updates the City is required to make to its SSMP. The above list of updates is a summary and is not intended to replace the detailed Deficiencies identified in the SSMP Audit Report. The entire SSMP Audit Report recommendations are required to be implemented in a reasonable time frame to ensure compliance with the SSSWDR Orders.

Goal [SSSWDR D.13(i)]

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.

Section D.13(i): The April 22, 2010 Buellton SSMP states that the City goals for maintaining and implementing the SSMP are to:

2010 Buellton SSMP Goal	2012 SSMP Audit
1. Continue with the proactive approach to minimize the likelihood of an SSO (current practices in place have prevented SSO incidents(s) for five (5) years). Should one occur the goal of the City is to perform a comprehensive analysis determining if any process/management of the collection system changes are warranted.	1. Goal met. The City had zero SSOs in 2011 and zero to date in 2012.
2. Prevent public health hazards through proper notification, emergency response and spill containment and clean up procedures.	2. Proper notification of regulators was documented in CIWQS for No Spill Reports reported in 2010 thru May 2012. The Overflow Emergency Response Plan requires updating to include specific SSO emergency response, spill volume estimation, spill containment, clean-up, mitigation procedures, chain of communication contact numbers, and updated reporting timeframes to meet this goal.
3. Minimize inconveniences by responsibly handling interruptions in service.	3. Unable to confirm that interruptions are handled responsibly or quickly due to lack of service call records and/or customer log records.
4. Protect large investments in collection system by maintaining adequate capacities and extending useful life.	4. The City was substantially successful at demonstrating this goal has been met with the exception of a wet weather capacity analysis.
5. Use available funds for sewer operations in the most efficient manner. Identify, prioritize, and continuously renew and replace sewer system facilities to maintain reliability.	5. Records demonstrating this goal is being met were not available.
6. Convey wastewater to the treatment facility with a minimum of infiltration and inflow.	6. A review of the "City of Buellton 2006 Citywide Sewer System Capacity Study" indicates there is adequate "dry weather capacity" in the system. Wet weather capacities and Inflow and Infiltration (I/I) were not evaluated as part of the study but recommended in the future, therefore information was not available to demonstrate that this goal is being met.

7. Provide adequate capacity to convey peak flows.	7. Review of Buellton 2006 Citywide Sewer System Capacity Study indicates there is adequate capacity for peak dry weather flows. While the City has not experienced and reported wet weather related SSOs, no evidence was found that peak wet weather capacities are adequate now and will be in the future.
8. Remain proactive in capacity assurance through continual system evaluations so that the City can ensure proper wastewater collection throughout future growth.	8. Evidence was found in the 2006 Citywide Sewer System Capacity Study that dry weather capacity exists for future growth and development. Unable to confirm sewer capacities for peak wet weather flows.
9. Perform all operations in a safe manner to avoid personal injury and/or property damage.	9. Some evidence exists that the City is meeting this goal through safety training records. The audit was unable to confirm goal is being met regarding personal injury and property damage.
10. Be available and responsive to the needs of the public, and work cooperatively with local, state and federal agencies to reduce, mitigate and properly report Sanitary Sewer Overflows (SSOs).	10. The City has not experienced a SSO during the period the SSMP was implemented. Evidence of No Spill Certifications on CIWQS was provided demonstrating proper reporting to the RWQCB. Evidence of response to the needs of the public was not available.
11. Implement regular, practical maintenance of the sewer collection system to remove roots, debris, sand, and Fats, Oils, and Grease (FOG) in areas prone to blockages that may cause SSO or sewer backups.	11. Goal met. Evidence of a regular sewer line cleaning program and quarterly lift station maintenance shows evidence that the City is meeting this goal. There were no SSOs reported over the two years the SSMP was being implemented.

Sufficiency: Marginal Compliance

Reference: April 22, 2010 Buellton SSMP, Page 8 and 9.

Deficiencies: Lack of documentation demonstrating the City is meeting these goals.

Recommendation: Revise the SSMP to reduce the number of goals to a reasonable number (less than five). Develop goals that are specific, measurable, and clearly understood by City staff, City Council, and Members of the Public. Develop a schedule to implement these goals. Develop programs and procedures that support these goals and document them as they are implemented. Update this section by December 2013.

Organization [SSSWDR D.13 (ii)]

The SSMP must identify:

- a) The name of the responsible or authorized representative as described in Section J of the SSSWDR;
- b) The names and telephone numbers for management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP Program. The SSMP must identify lines of authority through an organization chart or similar document with a narrative explanation;
- c) The chain of communication for reporting Sanitary Sewer Overflows (SSOs) from receipt of a complaint or other information, including the person responsible for reporting SSOs to the State and Regional Water Board and other agencies if applicable (such as County Health Officer, County Environmental Health Agency, Regional Water Board, and/or California Emergency Management Agency).

Section D.13(ii)(a): The City Public Works Director is identified as the legally authorized representative on page 11 of the SSMP.

This section is in compliance with the requirements above.

Section D.13(ii)(b): Names and limited contact information for management, administrative, and operations staff are located in Appendix B of the SSMP. Contact information is not included for Operations and Field Staff. Updating Public Works Department “Contact List” requires changes to reflect current staffing. Names, positions, and phone numbers are required for individuals listed in D.13(ii)(b).

Section D.13 (ii) (c): A chain of communicating SSOs from receipt of complaint or other information to persons responsible for notifications, gathering and documentation of required SSO information, and final required reporting in the State’s database (CIWQS) is incomplete and requires updating. Wastewater Operators should have a listed phone number in SSO Chain of Communication on page 13. Additionally, Solvang is referred to as a source of assistance during a SSO. A “Mutual Aide Agreement” should be documented and included in Element 6: OERP. If there is additional staff responsible for SSO notification, they should also be listed. All phone numbers for spill notification should be verified along with reporting requirements referenced on page 14.

Sufficiency: Partial Compliance

Reference: April 22, 2010 Buellton SSMP, page 10 – 14 and Appendix B. SWRCB CIWQS public reports, facility information, Buellton Place ID 631688.

Deficiencies: The Organization element requires updating to clearly identify the names of the legally authorized representative(s). The Board of Directors requires updating; Holly Sierra has replaced Russ Hicks as Mayor. The Field and Operations Staff list requires updating to represent current staffing levels and positions. Update the flow chart diagramming the chain of communication expected from receipt of notification to persons responsible for reporting to the required regulators within the required timeframe. Include phone numbers for each person in

flow chart. If District's Legal Counsel is responsible for specific portions of the SSMP, he/she should be identified along with roles and responsibilities pertaining to SSMP implementation. **Recommendation:** Update this element of the SSMP and review update with City staff by the end of December 2013.

Legal Authority [SSSWDR D.13(iii)]

This element requires the following:

Each Enrollee must demonstrate, through sanitary system use ordinances, service agreements, or other legally binding procedures, that it possesses the necessary legal authority to:

- a) Prevent illicit discharges into its sanitary sewer system (examples include Inflow/Infiltration (I/I), stormwater, chemical dumping, unauthorized debris, and cut roots, etc.);
- b) Require that sewers and connections be properly designed and constructed;
- c) Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the Public Agency;
- d) Limit the discharge of fats, oils, and grease (FOG) in and other debris that may cause blockages; and
- e) Enforce any violations of its sewer ordinances.

This section was audited against the City of Buellton Municipal Code, Title 14: Sewer Code found on the City of Buellton web site: www.cityofbuellton.com . This Municipal Code was adopted by the City in 1995.

Section D.13(iii)(a): Prevention of Illicit Discharges - Illicit discharges are addressed in the City of Buellton Municipal Code, Chapter 14.24: Use of Public Sewers

- Illicit connections which cause I/I are prohibited under Chapter 14.24.010 Drainage into sanitary sewers-Prohibited, and Chapter 14.24.030(E) Specific Discharge Prohibitions;
- Discharge of stormwater, surface water, roof runoff, and subsurface drainage, is additionally prohibited under Chapter 14.24.010 and 14.24.030(E) referenced above;
- Discharge of waters or wastes with chemical attributes (pH lower than 6.0 and greater than 10.0, are toxic, explosive, have a temperature that exceeds 104 F, etc) and/or physical characteristics (sand, ashes, glass, mud, wood, rags etc.) harmful to the system are prohibited under Chapter 14.24.030, (A-S) Specific Discharge Prohibitions;
- Discharge of oil, grease or petroleum greater one hundred parts per million concentration is prohibited under Chapter 14.24.030, (F) and solid or viscous substances that cause blockages under Chapter 14.24.030, (D); and
- The prohibition of illicit chemicals is additionally addressed throughout the subsections of Chapter 14.24.030.

This section is in compliance with the requirement above.

Section D.13(iii)(b): Properly Designed Sewer Connections- This section is addressed on pages 20-22 of the City's SSMP, titled: 3.3 Design and Construction. Properly design and construction requirements for sewers and connections are discussed in the City of Buellton Municipal Code, Chapter 14.16: Building Sewers, Lateral Sewers, and Connections; and are addressed in detail in the following sub-chapters:

- 14.16.010 Permit- Required
- 14.16.020 Construction Requirements
- 14.16.030 Sewer Materials -14.16.040 Minimum size and Slope

- 14.16.050 Building Drain
- 14.16.060 Joints and Connections
- 14.16.070 Connection to Public Sewer
- 14.16.080 Separate Sewers
- 14.16.090 Old Building Sewers
- 14.16.100 Sewer too Low
- 14.16.110 Protection of Excavation
- 14.16.120 Maintenance of Side Sewer
- 14.16.130 Backflow Protection Device

This section is in compliance with the requirement above.

Section D.13(iii)(c): Public Agency Lateral Access- The City SSMP discusses “Public Lateral Access” on page 22. The City uses the term “Side Sewer” to define the term “Sewer Lateral”. Municipal Code Chapter 14.16.120: Maintenance of Side Sewer, states “side sewers, including the horizontal piping beginning at the building drain of any building and terminating in the main sewer, shall be maintained by the owner of the property thereby.” While this releases the City from the responsibility to repair or maintain this sewer appurtenance, the City maintains the authority to inspect sewer laterals when and if it is necessary. This authority is established in Municipal Code Chapter 14.52.020: Powers and Authorities of Inspectors.

This section is in compliance with the requirement above.

Section D.13(iii)(d): FOG and Debris Limitations- The City SSMP addresses this section on pages 23-25 and is titled: 3.5 FOG Control. City Municipal Code Chapter 14.24.030: Specific Discharge Prohibitions (D&F) are referenced to meet the requirements of this section. This portion of the Code prohibits “solid or viscous substances which may cause obstruction to the flow in a sewer...” some examples referenced are: grease, oils, sand, mud, metal, animal guts or tissue, etc.... The City SSMP also refers to Municipal Code Chapters requiring Interceptors and Gravity Separating Devices (Chapters 14.24.040 and 14.24.050) to regulate sewer users who may discharge some of the items identified in; Chapter 14.24.030: Specific Discharge Prohibitions, above. Powers and Authorities of Inspectors, Chapter 14.52.020 is also referenced in the SSMP, enabling City staff to monitor sewer users who may discharge FOG and other debris that has the potential to cause a sewer blockage or SSO.

This section is in compliance with the requirements above.

*Section D.13(iii)(e): Sewer Ordinance Enforcement-*The City SSMP addresses this section on pages 25-28 and is titled: 3.6 Enforcement. This section of the SSMP states; “It is essential to protect the City form chronic violators of the Sewer Code. In the event that a person fails to comply with the current regulations a Notice of Violation will be issued. The following sections of the Municipal Code allow the City to serve a person who is in violation of the Sewer Code written notification for correction and that person will be held liable for any damages resulting from such violation.” Cease and Desist Orders, fines, and Emergency Suspension of discharge permits are also discussed. The following Municipal Code Chapters are referenced to address the requirements of this section:

- 14.08.015 Excessive Sewer Maintenance Expense
- 14.08.016 Damage to City's Municipal Wastewater System: Creation of Other Liability
- 14.24.100 Control of Wastewater Discharges
- 14.72.040 Cease and Desist Orders
- 14.72.050 Administrative Fines
- 14.72.060 Emergency Suspensions

This section is in compliance with the requirements above.

Sufficiency: In Compliance

Reference: April 22, 2010 Buellton SSMP, page15-28 and City of Buellton Municipal Code .

Deficiencies: None

Recommendation: Review Sewer Ordinance Enforcement language; 14.72.050

“Administrative Fines” and consider revising/developing administrative fines specific to FOG Control Program. The addition of smaller monetary penalties (\$100 - \$150) for FOG violations and language that streamlines the administration of potential enforcement actions will assist the City with FOG compliance goals.

Operations and Maintenance Program [SSSWDR D.13(iv)]

The SSMP must include those elements listed below that are appropriate and applicable to the Enrollee's system:

- a) Maintain an up-to-date map of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable stormwater conveyance facilities;
- b) Describe routine preventive and 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. The Preventative Maintenance (PM) Program should have a system to document scheduled and conducted activities, such as work orders;
- c) Develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short- and long-term plans plus a schedule for developing the funds needed to the capital improvement plan;
- d) Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be appropriately trained; and
- e) Provide equipment and replacement part inventories, including identification of critical replacement parts.

Section D.13(iv)(a): Sewer System Maps -The City SSMP, discusses a mapping system on page thirty. The SSMP states that these maps are “updated regularly –with every sewer collection system change –several times a year if necessary.” A sewer atlas is referred to and located in Appendix C. A map showing all sewer assets and appurtenances (lift stations, force mains, air/pressure relief valves, applicable stormwater conveyance systems) was not available at the time this audit was conducted.

This section is in partial compliance with the requirements above.

Section D.13(iv)(b): Preventative Maintenance- The City SSMP describes a O&M Program consisting of; a year round pipeline maintenance program, CCTV inspection program, manhole inspections, work orders, and lift station maintenance performed by an outside contractor. There are two documents listed in the SSMP, Appendix “C” proposed as evidence of some of these activities:

- List of High Maintenance Areas (HMA)
- Sample Work Order Form

The City provided evidence of routine and HMA cleaning. A schedule for these activities was not available. Quarterly Lift Station maintenance records were also provided by the City, however a schedule/contract for this maintenance was not provided. Sample work order forms were not available at the time of this audit. The City did not provide evidence of other maintenance activities referred to in the SSMP: CCTV Inspections, Manhole Inspections, and Work Order Program.

This section is in marginal compliance with the requirements above.

Section D.13(iv)(c): Rehabilitation and Replacement -The City SSMP, on pages 30 and 31, summarizes a Rehabilitation and Replacement Plan. Methods of assessment and repair are referenced however a specific plan that cites methods of assessment, prioritization, and repair were not available during the audit. The City SSMP references a 2006 Collection System Master Plan (CSMP) as a reference/guidance document for the prioritization of capital projects with a budget for sewer system maintenance and repairs during 2009 and 2010. The CSMP and documents demonstrating the implementation of recommendations or CIP found in the CSMP were not available at the time of this audit.

This section is out of compliance with the requirement above. It should be updated to include a plan to:

- a) Identify and prioritize system deficiencies
- b) Implement short and long term inspection and rehabilitation actions
- c) Create a CIP that includes a schedule for long and short term rehabilitation and replacement.
- d) A plan to fund rehabilitation and replacement projects.

Section D.13(iv)(d): Training - The City SSMP summarizes training activities on page 31, citing various methods such as; formal and informal in house training, workshops, and classes. The SSMP refers to training for specific equipment as being performed by contractors and/or the manufacturer. Safety training is also discussed as an important component of the City's training program. A few documents demonstrating training specific to physical O&M activities were provided, along with significant examples of safety related training during this audit. Documentation demonstrating "regular" training for operations and maintenance staff and introductory training for new staff was not available at the time of the audit. Evidence that contractors are appropriately trained was not available.

The City is in marginal compliance with the requirement above.

A formal training program for O&M Staff should be developed. This program should include standard operating procedures (SOPs) for the collection system ensuring new and "seasoned" staff understand proper procedures and are appropriately trained to perform O&M activities. Training records should be maintained to document this training. The City should ensure contractors are properly trained for the O&M services they provide specific to the sewer system.

Section D.13(iv)(e): Equipment Inventory – The City SSMP summarizes the management of parts, equipment, and components necessary for O&M activities on page 31. A brief “Sample Inventory List” is found in Appendix “C”. Contractors are required to provide critical parts as part of their scope of work in the performance of O&M activities. Local retailers are identified as the source of supplies and parts in the event of an emergency. At the time of the audit, a comprehensive list identifying critical parts necessary in an emergency was not available. Local retailers were not identified for the provision of parts/equipment in an emergency.

The City is in marginal compliance with the requirement above.

The list is out of date and is missing critical emergency response parts and equipment such as material to block off a storm drain, spare parts for equipment needed during SSO response, lift station parts/components such as fuses and floats. A list of retailers and critical parts they provide should also be included in this section.

Sufficiency: Marginal Compliance

Reference: April 22, 2010 Buellton SSMP, pages 29-31 and Appendix “C”. City of Buellton Sewer Line Cleaning Records: 2009 - 2012, Quarterly Lift Station Maintenance Records: 2009 – 2012, Staff Training Records: 2011

Deficiencies: The Operation and Maintenance Program subsection does not meet the requirements of the SSSWDR section D.13 (iv) as specified above. The City has been marginally effective in implementing this section of the SSMP as specified above.

Recommendation: This section must be updated by December 2013.

Design and Performance Provisions [SSSWDR D.13(v)]

- a) 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; and
- b) Procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

Section D.13(v)(a): Design and Construction Standards- The City SSMP discusses Design and Performance Standards on page 32-33. Appendices are not assigned to this SSMP Element but reference is made to:

- 1) City of Buellton Municipal Code
- 2) City of Buellton Standard Drawings and Specifications
- 3) Santa Barbara County Standards and Specifications
- 4) Green Book of Standard Public Works Construction

Specific Design and Performance standards for the City's sewer system should be stamped by the engineer of record and included in this SSMP.

Design and Construction Standards are discussed in the SSSMP as "minimum standards for the design, types of uses of materials, and the preparation of plans for construction, repair, or alteration of City sewer facilities." Title 14 of the Cities Municipal Code is cited as including:

- 1) Specifications used for the Materials used to construct sewers
- 2) Specifications and standards for the installation of new sewers
- 3) Specifications and standards for the repair and rehabilitation of existing sewers
- 4) Specifications and standards for pipe size
- 5) Permits and fees associated with construction of sewer systems
- 6) Inspection procedures during construction of sewer systems
- 7) Provisions for Record drawings showing the actual location of all mains, structures, wyes, tees, laterals and cleanouts to be filed with the City before final acceptance of the work.

All of the Design and Construction Standards referred to above meet portions of this requirement but should be upgraded to include; design and construction drawings and standards that are specific to the City of Buellton Sewer System. These drawings should be stamped/approved by the engineer of record.

Section D.13(v)(b): Testing and Inspection Procedures - The City SSMP, on page 33, states that the Public Works Director/City Engineer accepts/approves all work, but City standard inspection procedures are not mentioned or presented. This section should be upgraded to include specific inspection procedures and tests that ensure proper installation/operation of all new and rehabilitated projects (ex: pressure testing of manholes and pipelines, trench compaction tests, pump and flow meter output tests/calibrations, etc...).

Sufficiency: Partial Compliance

Reference: April 22, 2010 Buellton SSMP, page 32-33 and City of Buellton Standard Specifications 1995.

Deficiencies: Design and Performance Provisions subsection partially meets the requirements of the SSSWDR as specified above. Procedures for the inspection of new or rehabilitated sewer systems are not available. Standard Drawings and Specifications should be stamped and dated by the City Engineer. Design standards and testing methods for sewer lift stations and other appurtenances were not found.

Recommendation: Update this section based on the above recommendations and requirements by December 2013.

Overflow Emergency Response Plan [SSSWDR D.13 (vi)]

Each Enrollee shall develop and implement an overflow emergency response plan (OERP) that identifies measures to protect public health and the environment. At a minimum, the plan must include the following:

- a) Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;
- b) A program to ensure appropriate response to all overflows;
- c) Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, regional water boards, water purveyors, etc.) of all SSOs that potentially affect public health or reach the waters of the State. All SSOs shall be reported in accordance with the California Water Code, other State Laws, and other applicable RWQCB WDR or permit requirements. The SSMP identifies the officials who will receive immediate notification;
- d) Procedures to ensure that appropriate staff and contract personnel are aware of and follow the OERP and are appropriately trained;
- e) Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and
- f) A program to ensure that all reasonable steps are taken to contain untreated wastewater and prevent discharge of untreated wastewater to waters of the State and minimize or correct any adverse impact on the environment resulting from the SSO, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.

Section D.13 (vi)(a) – (f): Overflow Emergency Response Plan- The City SSMP on pages 34 to 37 provides an Overflow Emergency Response Plan for use in the event of a SSO. The times specified for reporting require updating, information found on page 35, 6.5 *Sewer System Overflow Reporting* appears to conflict with the *Chain of Communication* (Figure 6-1) found on page 36 and 6.5a *Spill Categories and Reporting Timeframes* found on page 37. For consistency these areas should reflect the reporting timeframes and notification procedures found on page 1 and 2 of the 2008 MRP. The written procedures required to ensure City staff and contract personnel are aware of the OERP and written procedures to address emergency operations, traffic control, crowd control, and other necessary response activities were not provided during the audit and are not included in the SSMP. A program to inform and train City staff or contractors on how to prevent an SSO from reaching surface waters were not provided during the audit and are also not included in the SSMP. Lastly a procedure to conduct training and additional monitoring to measure the impact of the SSO on human health and the environment is not available. This section commits to training of staff in SSO response procedures, procedures were not identified and training documentation was not available at the time of this audit. Updates to Figure 6-1 Chain of Communication for Responding to SSOs should also be made to reflect 2008 MRP.

Two documents were referenced in the SSMP Appendices:

- 1) Chain of Communication Contact Numbers – this document was not found in the appendix. Updates to this section should include a chain of communication for SSO response that includes phone numbers of all staff responsible for SSO response.
- 2) Sample Sewer System Overflow Report – this report should be updated to reflect the reporting requirements outlined in the 2008 MRP. Examples of missing information are: estimated operator arrival time, estimated SSO end time, whether or not there is an ongoing investigation, etc...

Sufficiency: Marginal Compliance

Reference: April 22, 2010 City of Buellton SSMP, pages 34-37, Appendix D, SSWDR 2008 Monitoring and Reporting Program Requirements pages 1-5.

Deficiencies: The basic framework for an Overflow Emergency Response Plan (OERP) is in place but requires significant development for full compliance with SSWDR requirements as specified above.

Recommendation: This section must be updated with a schedule to create the necessary OERP and associated emergency response procedures, forms, and training program by December 2013.

Fats, Oils, and Grease Control Program [SSSWDR D.13 (vii)]

Each Enrollee shall evaluate its service area to determine whether a FOG control program is needed. If an Enrollee determines that a FOG program is not needed, the Enrollee must provide justification for why it is not needed. If FOG is found to be a problem, the Enrollee must prepare and implement a FOG source control program to reduce the amount of these substances discharged to the sanitary sewer system. This plan shall include the following as appropriate:

- a) An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;
- b) A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area;
- c) An Ordinance establishing the legal authority of the City to prohibit FOG discharges to the system and identify measures to prevent SSO and blockages caused by FOG;
- d) Requirements to install grease removal devices (such as traps or interceptors) and the development of design standards for such devices, maintenance requirements, Best Management Practices (BMP) requirements, record keeping and reporting requirements;
- e) Authority to inspect grease producing facilities, enforcement authorities, and whether the City has sufficient staff to inspect and enforce the FOG ordinance;
- f) An identification of sewer system sections subject to FOG blockages and establish a cleaning maintenance schedule for each section; and
- g) Development and implementation of source control measures, for all sources of FOG discharged to the sewer system.

Section D.13(vii)(a) – (g): The City cites various methods to meet the SSMP FOG requirements discussed above. Thirty-nine Food Services Establishments are permitted, inspected, and issued inspection reports for FOG compliance on a semi-annual and annual basis dependent on grease production and maintenance histories. A review of FOG inspection logs and reports demonstrated that the City is performing required inspections and is working to enforce their FOG program for compliance with adopted FOG Municipal Code Sections referred to below. Public outreach education flyers regarding FOG have been available in the City office since the spring of 2011. The City has the legal authority to regulate and prohibit FOG discharges demonstrated in the following Municipal Code Sections:

- 14.24.030 Specific Discharge Prohibitions
- 14.24.040 Interceptors-Required
- 14.24.050 Grease Interceptors and Gravity Separating Devices
- 14.52.020 Powers and Authorities of Inspections

Element 7, Section 7.2 discusses the identification of High Maintenance Areas (HMAs) prone to FOG accumulation through various methods such as; response to dry weather blockages and SSOs, CCTV inspections, and observations during sewer line cleaning. The City provided sewer line cleaning logs that document FOG and a list of HMAs at the time of the audit. CCTV inspections were not available and the City has not encountered SSOs related to FOG.

Sufficiency: Substantial Compliance

Reference: April 22, 2010 Buellton SSMP, page 38-40 and Appendix E.

Deficiencies: The Fats, Oils, and Grease (FOG) Control Program meets the majority of the requirements found above. Element 7: Sections (a) and (f) need to be updated.

Recommendation: Update the FOG section of the SSMP to include an annual summary of FSE's inspected and results by December 2013. Update Municipal Code related to FOG to further encourage Food Service Establishments (FSEs) to comply with FOG Program through monetary penalties or other methods to ensure FOG does not become a public nuisance or contribute to SSOs in the future by December 2013. Update plan and schedule for public education and outreach program, found in Element 7: Section (a). Develop a program to identify, maintain, and track sections of sanitary sewer that are prone to FOG, found in Element 7: Section (f). Document these activities by December 2013.

System Evaluation and Capacity Assurance Plan (SECAP) [SSSWDR D.13 (viii)]

The Enrollee shall prepare and implement 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 event. At a minimum, the plan must include:

- a) **Evaluation:** Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to a SSO discharge deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs that escape from the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to the peak flows associated with overflow events;
- b) **Design Criteria:** Where design criteria do not exist or are deficient, undertake the evaluation identified above to establish appropriate design criteria; and
- c) **Capacity Enhancement Measures:** The steps needed to establish a short- and long-term CIP to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, I/I reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding.
- d) **Schedule:** The agency shall develop a schedule of completion dates for all portions of the capital improvement program developed in (a) - (c) above. This schedule shall be reviewed and updated consistent with the SSMP requirements as described in Section D.14.

Section D.13(viii)(a) – (d): The City SSMP, on pages 41-42, presents a summary of the 2006 Buellton Citywide Sewer System Capacity Study as evidence that a SECAP was completed. While the 2006 Study does meet portions of the requirements in this section, it does not provide an analysis of wet weather flows. A Wet Weather (I/I) Flow Analysis is one of the recommendations made in the 2006 Study. This section should be updated to address potential wet weather flow requirements. Once the City has a comprehensive analysis of peak wet and dry weather flows, it can establish the need to develop subsections b, c, and d, discussed above.

Sufficiency: Substantial Compliance

Reference: April 22, 2010 Buellton SSMP, page 41-42 and Appendix F: 2006 Buellton Citywide Capacity Assurance Plan.

Deficiencies: This section requires updating to include an analysis of wet weather flows which will allow the City to establish if this section requires additional development in subsections b, c, and d.

Recommendation: Provide analysis wet weather analysis and update SECAP section by December 2013.

Monitoring, Measurement, and Program Modifications [SSSWDR D.13 (ix)]

The Enrollee shall:

- a) Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;
- b) Monitoring the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;
- c) Assess the success of the preventative maintenance program;
- d) Update program elements, as appropriate, based on monitoring or performance evaluations; and
- e) Identify and illustrate SSO trends, including: frequency, location and volume.

Section D.13(ix)(a): The City has been successful at maintaining some of the relevant information that could be used to establish and prioritize SSMP activities such as sewer line cleaning records, lift station maintenance records, and SSO data from CIWQS. Table 9-1 on page 44 outlines a template for “Proposed SSMP Performance Indicators” but was not used prior to the audit. Efforts to use data as described in this subsection were not available at the time of this audit.

Section D.13(ix)(b): There was no evidence that the City has monitored the implementation and effectiveness of the Elements of their SSMP. A “Gap Analysis” template is located in Appendix “G” but was not completed between SSMP adoption and time of this audit.

Section D.13(ix)(c): The District does not have a formal preventative maintenance program. Lift station maintenance is performed by a contractor on a quarterly basis and sewer line cleaning is regularly performed by staff. A contract scoping the scheduled frequency of lift station maintenance and schedule for line cleaning was not available during this audit.

Section D.13(ix)(d): The City SSMP indicates the Public Works Director will update SSMP program elements, as appropriate, based on organizational changes, new regulatory requirements, monitoring and performance evaluations, etc.... These updates were not performed prior to the audit being conducted.

Section D.13(ix)(e): The City did not report any SSOs between April 2010 and June 2012. Therefore there are no SSO trends to identify during this period.

Sufficiency: Marginal Compliance

Reference: April 22, 2010 Buellton SSMP, pages 43 to 44, CIWQS: Facility At-A Glance Report, May 1, 2012 and CIWQS: Spill Public Report - Summary Page, January 1, 2000 to June 23, 2012.

Deficiencies: The City did not evaluate each element as required. A schedule and formal maintenance program for manhole inspections, sewer line cleaning, CCTV inspections, etc... does not exist. Records to assist in the evaluation of SSMP implementation should be further developed and improved upon.

Recommendation: Update this section to include a plan and schedule to review each element of the SSMP and develop programs to support the evaluation of each element by December 2013.

Sewer System Management Plan Audit [SSSWDR D.13(x)]

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

Sufficiency: Out of Compliance

Reference: April 22, 2010 Buellton SSMP, page 45 and Appendix H.

Deficiencies: The City SSMP commits to performing internal SSMP audits in conjunction with the annual review and update of the SSMP. Annual reviews did not occur. Program audits are scheduled to take place every two years. The City conducted the SSMP Audit and completed an SSMP Audit Report after the April 2012 (two year) deadline.

Recommendation: Update the SSMP to reflect the requirements found in SWRCB Order No. 2006-0003-DWQ: Statewide General Waste Discharge Requirements for Sanitary Sewer Systems and Associated updates to the 2008 Monitoring and Reporting Program by December 2013. Re-certification of the SSMP is required when significant updates to the SSMP are made. Updates are required every 5 years at a minimum.

Communication Program [SSSWDR D.13(xi)]

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

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

The City committed to accomplishing the following:

Activity	Stakeholders	Contact Frequency	Implementation Year	Audit Finding
1. Post SSMP on City Website	All – Residents, Visitors, Businesses	As Needed	FY 09/10 and FY 10/11	Activity Performed. See Note 1
2. Present SSMP Update	City Board	Annually or As Needed	FY 09/10 and FY 10/11	Activity not performed. See Note 2
3. Promote SSO Awareness	All	Twice per year	FY 10/11	Activity not Performed See Note 3
4. Conduct FOG Education	Local Restaurants and Residents	Ongoing	FY 09/10 and FY 10/11	Activity Performed See Note 4
5. Distribute SSO Prevention Materials	All	Ongoing	FY 09/10 and FY 10/11	Activity Performed See Note 5

1. The City committed to posting the SSMP on the City’s website with updates occurring on an “as needed basis” when new information such as revised procedures or new policies are developed or new regulatory information is received. The City had posted the SSMP on their website, however at the time of this audit the website had been updated and the SSMP was omitted in the update by mistake. A placeholder was found for the SSMP on the City website however supporting documentation was not found in the associated dropdown menu. It is recommended that the SSMP be uploaded again to the City’s web site by the end of January 2013.

2. This activity was not performed as the SSMP was not updated or substantially revised in FY 10/11 or FY 11/12. It is recommended that the Board be updated on the status of the SSMP as a result of this audit by December 2013.

3. SSO awareness was promoted by the availability of a flyer promoting FOG awareness on the City counter since the spring of 2011. Evidence that the City participated in promotional opportunities to educate the public at community events, as noted on page 46 of the SSMP, was not available during the audit. It is recommended that the City plan and schedule opportunities

for public outreach regarding SSO's at functions such as farmers markets and at local schools by December 2013.

4. FOG education was conducted twice a year during a Food Service Establishments (FSE) semi-annual inspection. Inspection reports to the seven FSEs document this continuing conversation regarding the necessary cleaning frequencies of grease traps or interceptors and the proper method of yellow grease storage. As discussed above, FOG flyers for residents are available on the City counter, residents must pick up their mail at the post office daily and often drop by the City counter to pay bills, ask questions of the Office Manager, or use the bathroom.

5. This activity was performed as described above in notes three and four.

The City does has four private sewer systems that are tributary to and/or satellite to the municipal sewer system. Typical outreach and communication efforts as described above are conducted with systems such as trailer parks and Industrial Parks. Industrial sewer users are permitted and inspected as part of the City's Sewer Pre-Treatment Program.

Sufficiency: Substantial Compliance

Reference: April 22, 2010 Buellton SSMP, page 46, FOG flyers and BMP materials, City Public Service Announcement on domestic FOG management.

Deficiencies: The City Communication Program met several of the requirements to communicate with the public on a regular basis. The City did not update the SSMP and consequently did not present this update to the City Council. Public education/outreach for SSO awareness was not conducted.

Recommendation: Update the SSMP and present updates to the City Council by January 2014. Incorporate the SSMP updates into the City's web site as a way for the public and interested parties to stay informed about the SSMP by the end of December 2013. Continue outreach efforts with the public and monitor the need for additional communication efforts with the four private sewer systems; Ranch Club Mobile Estates, Rivergrove Mobile Home Park, Flying Flag RV Park, South Industrial Way Industrial Park, and commercial sites east of Thumbline Creek, that are tributary to the City's sewer system. Document the City's communications with these private systems.

Appendix A – SSMP Audit Records Reviewed

- 1) **City of Buellton SSMP: April 22, 2010**
- 2) **City of Buellton Citywide Sewer System Capacity Study: October 2006**
- 3) **City of Buellton Municipal Code, Chapter 14: Sewer Code**
- 4) **City of Buellton FOG Program Spreadsheet**
- 5) **City of Buellton Public Outreach Materials and Web Site**
- 6) **City of Buellton Standard Specifications and Drawings: June 1995**
- 7) **Sewer Cleaning and Lift Station Records: 2010-2012**
- 8) **City of Buellton Meeting Minutes November 12, 2009 and April 22, 2010**
- 9) **City of Buellton Resolution No. 09-15**
- 10) **City of Buellton Training Log Examples: 2011**
- 11) **CIWQS: Spill Report Summary Page, No Spill Certification, and Facility At-A Glance Report**