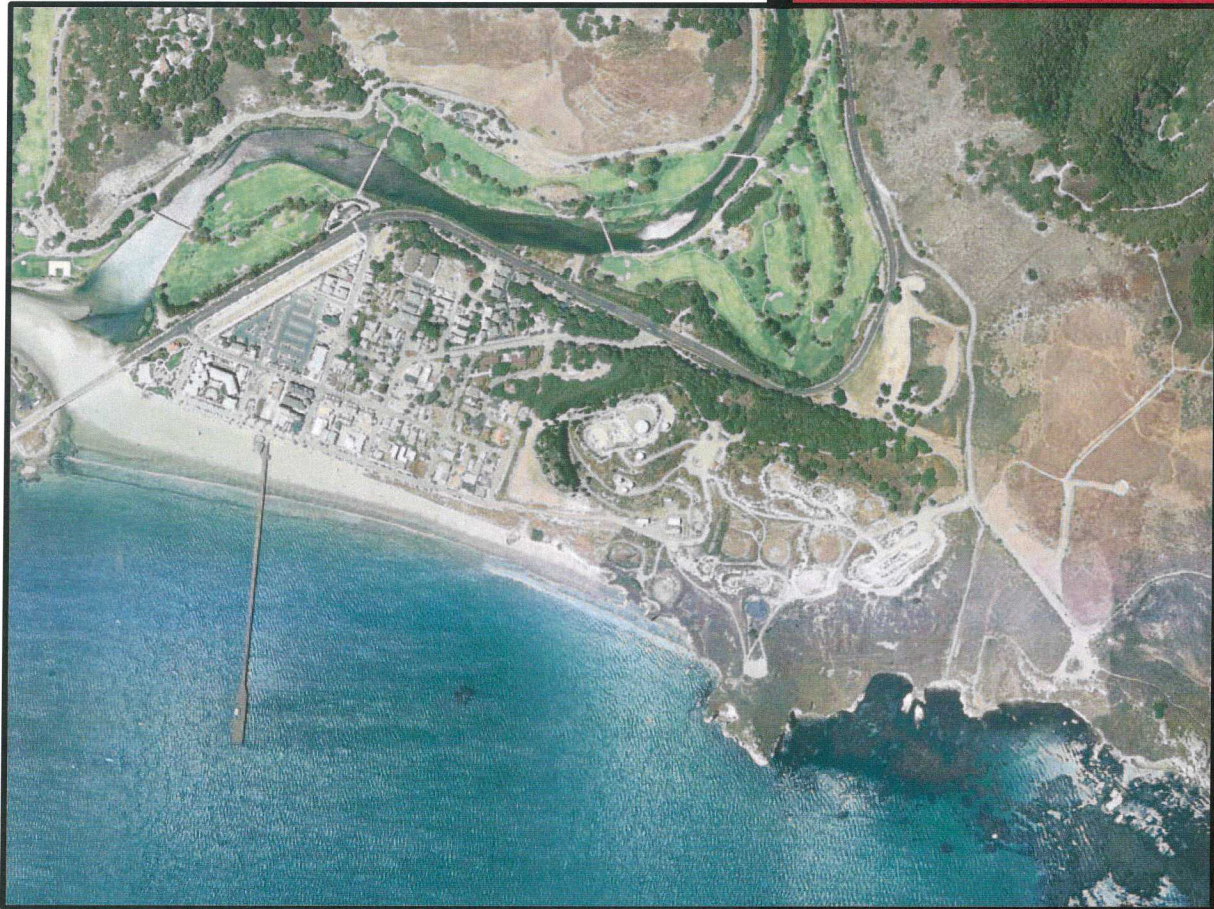


2017

Avila Beach CSD Sewer System Management Plan—Audit Report



Prepared by Fluid Resource Management
on behalf of Avila Beach CSD

Avila Beach Community Services District

Sewer System Management Plan Audit Report

March 2017

Avila Beach CSD General Manager

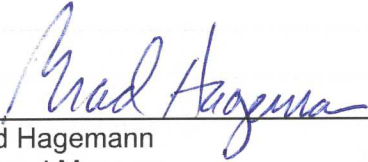
Brad Hagemann

Avila Beach WWTP Chief Plant Operator

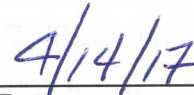
Mike Wentzel

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.



Brad Hagemann
General Manager
Avila Beach Community Services District



Date

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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 2013-0058-EXEC (SSS WDR Orders) require the Avila Beach Community Services District (District) to conduct Sewer System Management Plan (SSMP) audits at least every two years. The last audit was conducted in June, 2014. The District is required to file the audit report with the most current revision of the SSMP.

The District's SSMP Audit Report is required to evaluate the effectiveness of and compliance with the District'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 District's implementation of the current certified SSMP; Revision 3 dated April 2014:

1. [SSSWDR, Sect. D.13 (i): Goals
2. [SSSWDR, Sect. D.13 (ii): Organization
3. [SSSWDR, Sect. D.13 (iii): Legal Authority
4. [SSSWDR, Sect. D.13 (iv): Operations and Maintenance
5. [SSSWDR, Sect. D.13 (v): Design and Performance Standards
6. [SSSWDR, Sect. D.13 (vi): Overflow Emergency Response Plan
7. [SSSWDR, Sect. D.13 (vii): Fats, Oils, and Grease (FOG) Control Program
8. [SSSWDR, Sect. D.13 (viii): System Evaluation and Capacity Assurance Plan
9. [SSSWDR, Sect. D.13 (ix): Monitoring, Measurement, and Program Modifications
10. [SSSWDR, Sect. D.13 (x): Sewer System Management Plan Audits
11. [SSSWDR, Sect. D.13 (xi): Communications

AUDIT BENCHMARKS

In keeping with previous SSMP program audits, the benchmarks used to demonstrate performance effectiveness are outlined in Table 1.

Table 1: 2017 Avila Beach SSMP Audit Ranking System

Benchmark Ranking	Ranking Basis
In Compliance	All requirements specified in the section are met.
Substantial Compliance	The majority of requirements 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.

SSMP AUDIT PARTICIPANTS AND SCHEDULE

The SSMP Audit Report assesses the effectiveness of District's SSMP Revision 3, dated April 2014, 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:

- Krista Ackermann
Compliance Specialist – Fluid Resource Management

Staff participating in the audit were:

- Brad Hagemann
General Manager – Avila Beach Community Services District
- Mike Wentzel
Chief Plant Operator – Fluid Resource Management
- Carinna Butler
Operations Manager – Fluid Resource Management

The audit schedule is outlined in Table 2.

Table 2: 2017 Avila Beach SSMP Audit Schedule

Date	Description of Work	Completed By
March 2017	Review SSMP records, prepare draft audit report with recommendations	Krista Ackermann
April 2017	Review draft audit report; make corrections as needed	Carinna Butler Mike Wentzel Brad Hagemann
May 2017	Present audit report for board review and adoption	Brad Hagemann ABCSD Board
June 2017 – June 2018	Update SSMP; implement other recommendations from audit report	ABCSD Staff and Contractors

AUDIT SUMMARY

The SSMP Audit results in a finding that the Avila Beach CSD SSMP dated April 2014 is in compliance or substantial compliance with eight out of eleven subsections of SSSWDR Section D.13 and has been in partial compliance with the three remaining subsections. The District has been substantially effective in implementation of the SSMP. A summary of these findings is presented in the Table 3 below:

Table 3: Summary of Avila Beach CSD 2017 SSMP Audit Findings

SSSWDR Section D.13	SSMP Compliance with Required Subsection	District Effectiveness in Implementation of SSMP Subsections	Recommendations
1. Goals [SSSWDR D.13(i)]	Substantial Compliance	The District is effective in demonstrating progress on the goals stated in its SSMP.	Review/revise District SOP's by June 2018; update Goals 3-5 by the end of 2017.
2. Organization [SSSWDR D.13(ii)]	Partial Compliance	The District contact and organization information is significantly outdated.	Update the Organization section by the end of September 2017.
3. Legal Authority [SSSWDR D.13(iii)]	In Compliance	The District possesses the legal authority to implement the SSMP through the sewer ordinances outlined in the plan.	Update the Legal Authority section as appropriate when new sewer ordinances are issued.
4. Operations and Maintenance [SSSWDR D.13(iv)]	Partial Compliance	This section must be updated to remove references to GIS use for maintaining update maps and tracking preventative maintenance.	Update the Operation and Maintenance Section by June 2018.
5. Design and Performance Standards [SSSWDR D.13(v)]	In Compliance	This section reflects that the District uses the most current San Luis Obispo County Public Works Standards for design, installation, repair, and inspection of all sewer system components.	N/A

SSSWDR Section D.13	SSMP Compliance with Required Subsection	District Effectiveness in Implementation of SSMP Subsections	Recommendations
6. Overflow Emergency Response Plan [SSSWDR D.13(vi)]	Substantial Compliance	The SSO response procedure outlined in the SSMP is too specific and does not apply to all spills; training records for EOPs were not complete for 2015-2016.	Update the District Emergency Operating Procedures by the end of 2017; update the Overflow Emergency Response Plan Section by the end of June 2018.
7. Fats, Oils, and Grease (FOG) Control Program [SSSWDR D.13(vii)]	In Compliance	The District was effective in the implementation of this requirement, although some portions of the SSMP FOG section are outdated.	Included updated summary of FOG inspections and violations; provide FOG billing inserts to consumers by the end of June 2018.
8. System Evaluation and Capacity Assurance Plan [SSSWDR D.13(viii)]	Substantial Compliance	The 2006 Avila Beach CSD Wastewater Master Plan and 2010 Avila Beach CSD Wastewater Master Plan update are included in the SSMP as evidence of the SECAP. No formal I/I study has been conducted since 2006.	The District should complete the I/I analysis after the wet rain year of 2016-2017 to determine if a system-wide wet weather capacity analysis is necessary.
9. Monitoring, Measurement, and Program Modifications [SSSWDR D.13(ix)]	Substantial Compliance	The District has only had one SSO since 2014 and informally monitors elements of the SSMP through monthly coordination meetings. However, performance indicators have not been formally or regularly reviewed to assess SSO trends or the success of the preventative maintenance program.	The District should conduct an annual review of specific sections of the SSMP and reevaluate the performance indicators in Table 9-1 by June 2018. Table 9-1 should be updated with data from mid-2014 forward by the end of January 2018.

SSSWDR Section D.13	SSMP Compliance with Required Subsection	District Effectiveness in Implementation of SSMP Subsections	Recommendations
10. SSMP Audits [SSSWDR D.13(x)]	Partial Compliance	The biannual audit was due in 2016 but was not conducted until March 2017.	Conduct the next Audit by the end of March 2019. SSMP sections subject to frequent outdating should be reviewed and updated annually.
12. Communications [SSSWDR D.13(xi)]	Substantial Compliance	The District was effective in implementing the majority of the items in this section. The current SSMP was not posted on the District website and there was no evidence of promoting SSO awareness at community events since 2014.	Review/update the Communications section of the SSMP, distribute educational SSO/FOG billing inserts to residents, update the District website, and update the Board by the end of June 2018.

The following sections of this report describe these deficiencies in detail and address future additions and updates the District 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.

Goals [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 2014 Avila Beach CSD SSMP states that the District goals for maintaining and implementing the SSMP are to:

Table 4: Avila Beach CSD 2010 SSMP Goals

2014 Avila Beach CSD SSMP Goal	2017 SSMP Audit
1. Continue to conduct regularly planned maintenance activities and inspections to minimize SSOs to less than 2 dry weather SSOs over the next two years.	1. The District has met this goal. Regular maintenance has been conducted and Avila Beach CSD had only one SSO (in July 2014) between April 2014 and February 2017.
2. Continue to formalize operations, maintenance, and record keeping through the ongoing development, adoption, and implementation of District standard operating procedures.	2. The District has created, adopted, and implemented Standard Operating Procedures for Operations and Maintenance activities.
3. Maintain a Computerized Work Order System to document and improve system maintenance and record keeping. Existing system will be reviewed for necessary updates by April 2014.	3. The District is now utilizing eMaint Computerized Maintenance Management Software (CMMS) to produce and track O&M activities for all District collection system assets.
4. Work with the San Luis Obispo County (SLOCO) Public Works Department to develop a plan that identifies and corrects flooding problems at the First Street Lift Station which could lead to SSOs in the Avila sanitary sewer system prior to November 2013.	4. Contract Operations staff installed a new concrete collar around the First Street Lift Station in 2016 that reduced flooding problems. The District is in the process of working with county staff on implementing a stormwater runoff pumping system; SLO County PW staff is currently seeking project funding.
5. Review rainfall data and WWTP influent flow data to assess the need for additional Inflow and Infiltration studies prior to July 2014.	5. No formal Inflow and Infiltration studies were completed since the last audit; however, the District is in the process of working with county staff on implementing a stormwater runoff pumping system to address Inflow and Infiltration problems.

Sufficiency: Substantial Compliance

Reference: April 2014 Avila Beach SSMP, Page 8.

Deficiencies: No formal Inflow and Infiltration studies were completed since the last audit.

Recommendations: Review and revise Standard Operating Procedures discussed in Goal 2 by June 2018; update outdated benchmarks for Goals 3 – 5 by the end of 2017.

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 name of one legally authorized representative as described in Section J of the SSWDR is included on page 10 of the SSMP; the names of two other current legally authorized representatives are missing from the SSMP, and current additional name listed on page 10 is no longer a legally authorized representative.

Section D.13(ii)(b): Names and contact information for some staff members responsible for management and implementation of the SSMP are located pages 10 – 17 of the SSMP. An organization flow chart identifying the lines of authority and responsibility is found on page 16 of the SSMP; a narrative explanation of lines of authority is included in the table on pages 10 – 12. However, many of the people listed on these pages no longer work for or are affiliated with the District or its contract operations company, and many of the people with responsibilities for various elements of the District SSMP are not listed in the April 2014 revision.

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 included on page 14-15 of the SSMP. However, the notification procedure listed in the SSMP is out of date and needs to be revised and updated.

Sufficiency: Partial Compliance

Reference: April 2014 Avila Beach CSD SSMP, pages 9-17.

Deficiencies: Contact information in the most recent revision of the SSMP is significantly outdated; responsibilities need to be reviewed and revised; the District should revise the figure on page 14 to reflect current notification procedures for lines of communication in the event of an SSO and should verify that contact information is current for reporting to local agencies.

Recommendation: Update this section of the SSMP by the end of September 2017.

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), storm water, 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 new Sewer Use Ordinance (SUO) Ordinance No. 2012-01 adopted on August 9, 2012.

Section D.13(iii)(a): Illicit discharges are addressed by Ordinance No. 2012-01, Article 3 – Discharges, Section 3.01.020 which is entitled Specific Prohibitions and as follows:

- Illicit connections which cause I/I are indirectly prohibited under Section 3.01.020.C;
- Discharge of storm water, surface water, roof runoff, and subsurface drainage, is prohibited under Section 3.01.020.B;
- Discharge of waters or wastes with chemical attributes (pH lower than 6.0 and greater than 9.0, are toxic, explosive, have a temperature that exceeds 150 F, etc.) and/or physical characteristics (sand, earth, cement, glass wood, rags etc.) harmful to the system are prohibited under Section 3.01.020.E (1. – 16.);
- Discharge of oil, grease or petroleum greater one hundred parts per million concentration is prohibited under Section 3.01.020.E.4 and solid or viscous substances that cause blockages under Section 3.01.020.E.9; and
- Discharge of solid substances, such as garbage (e.g. wood), with the ability to cause blockages is prohibited under Section 3.01.020.E.10.

This section is in compliance with the requirement above.

Section D.13(iii)(b): Page 18 of the District SSMP states that sewers and connections are required to be designed and constructed in accordance with the San Luis Obispo County Standards and Specifications. Ordinance No. 2012-01, Article 2 – Connections, Section 2.04.010 which is entitled Construction Provisions – Standard Specifications and Details specifies that all improvements shall be constructed in accordance with the current version of San Luis Obispo County Department of Public Works Standard Improvement Specifications and Drawings or the Standards and Specifications of the Avila Beach Community Services District, whichever is more stringent. A link to San Luis Obispo County Standard Specifications and Details is included on page 19 of the SSMP.

This section is in compliance with the requirement above.

Section D.13(iii)(c): Page 18 of the District SSMP references Ordinance 2012-01, Article 2 – Connections, Section 2.05-040 – Inspection Provisions, Easements, which grants the District the right for access to inspect, maintain or repair portions of the lateral owned or maintained by the District for which the District as an easement.

Section D.13(iii)(d): Page 19 of the District SSMP references Ordinance 2012-01, Article 3 – Discharges, Section 3.04 – Fats, Oils, and Grease Program and Section 3.01.020.E. which prohibits

the discharge of oil, grease or petroleum greater one hundred parts per million concentration. This section of the SUO also requires installation and maintenance of Grease Control Devices in food service establishments.

Section D.13(iii)(e): Page 20 of the District SSMP cites Ordinance 2012-01, Article 6 – Violations which gives the District to enforce and take civil and/or criminal action against violators of the SUO.

Sufficiency: In Compliance

Reference: April 2014 Avila Beach CSD SSMP, pages 18-20. Avila Beach Ordinance No. 2012-01.

Deficiencies: None

Recommendation: Incorporate any future changes to the District's Sewer Use Ordinance in future revisions of the District's SSMP.

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 storm water 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.

The District provides for Operations and Maintenance of the sewer collection and conveyance system through a contract with Fluid Resource Management. The current contract for these services was approved on October 8, 2013. The contract denotes specific tasks such as; lift station operation and maintenance, sewer line cleaning, utility marking, emergency response, monthly reporting, and adherence to District adopted policies and operating procedures.

Section D.13(iv)(a): The District SSMP, on pages 21-22 describes the Geographical Information System (GIS) and associated sewer atlas maps created for the District by Wallace Group in 2009. The GIS system is no longer being routinely used by the District or its contract operator. When changes are made to sewer lines, updated maps are requested from the supervising engineer.

Section D.13(iv)(b): Page 22 of the District SSMP refers to plans to use the GIS mapping system to tracking work history and CCTV inspections; however, the GIS system is no longer being routinely used by the District or its contract operator. FRM uses eMaint Computerized Maintenance Management System (CMMS) to schedule and track the District's preventative maintenance activities. This CMMS was updated in early 2014 to include all assets in the District's sewer system. Page 23 of the District SSMP states that the collection system is cleaned annually between April 1st and May 15th. Annual cleaning of the collection system has taken place each year, but has not always been between the dates listed in the SSMP. As discussed on page 22 of the District SSMP, High Maintenance Areas continue to be cleaned quarterly.

Section D.13(iv)(c): The District SSMP refers to future CCTV inspections being entered into GIS maps; however, the GIS system is no longer being routinely used by the District or its contract operator. The rate study discussed on page 23 of the of the District SSMP established a five year

rate schedule that the Board reviews annually when they consider the annual budget in order to fund the Capital Improvement Program (CIP).

ABCSD Collection System CIP 2016-2017

Project	Status
WWTP Upgrades	Ongoing; funding allocated for FY 2016/17 through 2021/22
Effluent Line Repair	Scheduled for FY 2016/17
Chlorination System Improvements	Scheduled for FY 2017/18
Wastewater Collection Line Repair	Ongoing; funding allocated for FY 2016/17 through 2019/20
Influent Wet Well Coating Repairs	Scheduled for FY 2016/17
Miscellaneous Wastewater Projects	Ongoing; funding allocated for FY 2016/17 through 2019/20
Repair to Decking at WWTP	Scheduled for FY 2016/17
First Street Sewer Line Replacement	Scheduled for FY 2021/22
Ocean Outfall Inspection and Benthic Monitoring	Scheduled for FY 2018/19
Front Street Sewer Line Replacement	Scheduled to begin in FY 2019/20
San Miguel Street Sewer Line Replacement	Scheduled to begin in FY 2018/19

Section D.13(iv)(d): The District SSMP requires staff and contract operations and maintenance staff to be trained annually in the District’s Standard Operating Procedures for the Operation and Maintenance of the sewer system. Annual training by contract operations and maintenance staff has taken place each year, but not always during the month (April) specified by the SSMP.

Section D.13(iv)(e): The list of equipment available to District staff is discussed on page 23 and 24 of the SSMP. The critical parts inventory has been a priority for District and contract operations staff and is regularly reviewed and replenished; however, the equipment inventory list has not been integrated into the SSMP as discussed on page 24.

Sufficiency: Partial Compliance

Reference: April 2014 Avila Beach CSD SSMP, pages 21-24.

Deficiencies: References to GIS in the SSMP no longer reflect current practice.

Recommendation: Complete a comprehensive update of Section 4 to remove references to GIS updates, use of GIS for tracking preventative maintenance work history, integration of CCTV inspections with GIS and to remove references to specific months for annual collection system cleaning and training on SOP’s. Update this section of the SSMP by the end of June 2018.

Design and Performance Standards [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): The District SSMP, on page 25-26, states that the District Ordinance No. 2012-01, Article 2 – Connections, Section 2.04.010 which is entitled Construction Provisions – Standard Specifications and Details specifies that all improvements shall be constructed in accordance with the current version of San Luis Obispo County Department of Public Works Standard Improvement Specifications and Drawings or the Standards and Specifications of the Avila Beach Community Services District, whichever is more stringent.

The current link to these standards is included as:

<http://www.slocounty.ca.gov/PW/DevServ/PublicImprovementStandards.htm>.

Section D.13(v)(b): The District SSMP, on page 25-26, states that the District Engineer inspects installations of all work and gives a link to inspection standards and procedures from the San Luis Obispo County Website:

www.slocounty.ca.gov/PW/DevServ/PublicImprovementStandards.htm

Sufficiency: In Compliance

Reference: September 14, 2010 Avila Beach CSD SSMP, pages 25-26, SLO Co Public Works Website for Design/Construction Standards and Inspection/Testing Procedures.

Deficiencies: None

Recommendation: None

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): Pages 27-36 of the District SSMP provide an Overflow Emergency Response Plan for use in the event of a SSO. The District outlines the program used for appropriate response, notification, and reporting for SSOs in this section of the SSMP. However, many of the procedures outlined in the SSMP are specific and do not apply in all cases. Written procedures to address emergency operations, traffic control, crowd control, additional monitoring, and other necessary response activities have been developed by the District and are referenced in the SSMP. This section commits to annual training of staff in SSO response procedures. Annual training for District EOPs is regularly conducted; training records are maintained at the wastewater treatment plant.

Sufficiency: Substantial Compliance

Reference: April 2014 Avila Beach CSD SSMP, pages 27-36, District Emergency Operating Procedures, 2015-2016 EOP Training Records

Deficiencies: The SSO response procedure outlined in Section 6 is too specific, as every spill is different and some procedures outlined do not apply in all cases; some of the Emergency Operating Procedures referenced in Section 6 are outdated and do not reflect current practice. Annual training records were not available for all EOPs.

Recommendations: The District should update this section of the SSMP to verify and update contact information, the reporting chain of command, forms used during spill reporting, response procedures, authorized Legally Responsible Officials, etc., and to include the current SSO report form. These updates should be completed by the end of June 2018. All EOPs referenced in Section 6 of the SSMP should be reviewed and revised by the end of 2017.

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 District 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 District 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 District's FOG program has been implemented; a public outreach campaign was conducted at the onset of the program; the District continues to contract with Wallace Group to conduct routine FOG inspections to verify proper disposal of FOG and issue inspection reports; Wallace Group presents summary reports to the district and contract operator monthly. The District maintains legal authority to prohibit FOG discharges and inspect FOG facilities outlined in the SSMP. A cleaning schedule for sections subject to FOG is part of the HMA list and Work Order system.

Sufficiency: In Compliance

Reference: April 2014 Avila Beach CSD SSMP, pages 37-40; FOG End of Month Reports, 2015-2017.

Deficiencies: None.

Recommendation: Include an attachment to the Avila Beach SSMP with an updated annual summary of FOG inspections and any violations issued; update the section on the FOG Control Program to remove references to compliance rates at specific points in time; continue outreach campaign by posting FOG outreach materials on the District website and/or providing FOG informational billing inserts by the end of June 2018.

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

The Enrollee shall prepare and implement a Capital Improvement Program (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): Page 41 of the District SSMP presents a summary of the 2006 Avila Beach CSD Wastewater Master Plan (WWMP) and 2010 WWMP Update as evidence that a SECAP was completed. The September 2010 WWMP also included significant revisions to the population, linear feet of collection system, number of manholes, and number of cleanouts. This information was used to help update the SSMP in 2014. District budgets documents continue to include 5-year CIP priorities. The 2016-2017 wet rain year has provided data regarding wet weather inflow and infiltration and answered some questions regarding capacity, but no formal I/I analysis has been completed.

Sufficiency: Substantial Compliance

Reference: April 2014 Avila Beach CSD SSMP, pages 41-42. 2006 and 2010 Avila Beach CSD Wastewater Master Plan. Avila Beach CSD Fiscal Year Budget 2016/17.

Deficiencies: The District has not completed a formal evaluation of wet weather capacity for the collection and conveyance system.

Recommendation: Complete the I/I analysis discussed above to determine if the District is required to conduct a system wide wet weather capacity analysis.

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) – (d): Pages 43-47 of the District SSMP outline an approach to monitoring, measurement, and SSMP Program modifications. The monthly coordination meeting between the General Manager, District Engineer, Chief Plant Operator, and Office Manager is one of the key components of this approach. Although SSMP activities and preventative maintenance have been prioritized by the District and discussed at monthly coordination meetings, the SSMP has not been substantially reviewed or updated since 2014.

Section D.13(ix)(e): Table 9-1 of the SSMP identifies a number of annual indicators for SSOs and maintenance activities from 2009 – 2014, but needs to be updated.

Sufficiency: Substantial Compliance

Reference: April 2014 Avila Beach CSD SSMP, pages 43-47.

Deficiencies: The SSMP has not been substantially reviewed or updated since early 2014. Table 9-1 needs to be updated do include information about the July 2014 SSO, as well as maintenance data for 2015-2016.

Recommendation: The District should conduct an annual review of specific sections of the SSMP in order to maintain relevant information that can be used to prioritize SSMP activities and should reevaluate the performance indicators listed in Table 9-1 by June 2018 to determine whether they provide the information needed to identify SSO trends, assess the success of the preventative maintenance program, and address potential areas of concern. Table 9-1 should be updated with data from 2014-2017 by the end of January 2018.

Sewer System Management Plan Audits [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: Partial Compliance

Reference: April 2014 Avila Beach CSD SSMP, page 48.

Deficiencies: The District was due to conduct an SSMP Audit by August 2, 2016; the audit was not conducted until March, 2017. The size of the District's system is less than ten miles, conducting a more frequent audit has not been necessary to date.

Recommendation: The District should conduct the next SSMP Audit and prepare the Audit Report by the end of March 2019. In order to minimize outdating of the SSMP, specific sections that are subject to more frequent change (such as Sections 1, 2, 6, and 9) should be reviewed for necessary updates annually.

Communications [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 District committed to accomplishing the following:

Table 6: Avila Beach CSD 2014 SSMP Goals

Activity	Stakeholders	Contact Frequency	Audit Finding
Update District Website	All – Residents, Visitors, Businesses	As Needed	Previous version of SSMP posted on district website as of initial 2017 Audit.
Present SSMP Updates	District Board	As Needed	No updates have been presented to the Board since 2014.
Promote SSO Awareness	All	Twice per year	There has been no evidence of outreach at community events since 2014.
Conduct FOG Education	Local Restaurants and Residents	Ongoing	FOG education with local FSE’s is ongoing as part of the FOG program.
Distribute SSO Prevention Materials	All	Ongoing	FOG flyers are available at the District office, but should be distributed via a billing insert to residents.
Communicate with tributary/satellite system	Port San Luis Harbor District (PSLHD)	Quarterly or as needed.	Quarterly communication with Port SLO on SSO issues has continued consistently.

Sufficiency: Substantial Compliance

Reference: April 2014 Avila Beach CSD SSMP, pages 49-50.

Deficiencies: The District did not participate in SSO/FOG outreach at community events and did not have the most recent version of the SSMP posted on the district website as of the initial 2017 Audit.

Recommendation: Review the communication program plan in this section and revise/update as appropriate; post the most recent version of the SSMP on the District website; promote SSO and FOG awareness and education to residents by distributing a billing insert and attending community outreach events; update the Board on the SSMP Audit and recommended updates by the end of June 2018.