SSMP Audit Procedures

| Category (check applicable): | [ ]Policy  [X]Process  [X]Procedure  [ ]Strategy  [ ]Program |
| Purpose: | The purpose of this document is to describe the internal evaluation process that will be applied to assist with meeting the SSMP Audit requirements. |
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Purpose

The purpose of this document is to describe the internal evaluation process that will be applied to assist with meeting the SSMP Audit requirements.

Background

Regulatory Requirement

On May 2, 2006, the State Water Resources Control Board (SWRCB) enacted Order No. 2006-0003 (Order), Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (WDR). The WDR requires any public agency that owns or operates a sanitary sewer system more than one mile in length that collects and/or conveys untreated or partially treated wastewater to a publicly owned treatment facility in the State of California to comply with the requirements of the WDR. The Sacramento Area Sewer District (SASD) operates a sanitary sewer system as described, therefore it is subject to the WDR.

Sanitary Sewer Management Plan (SSMP)

To comply with the WDR a SSMP must be written and there are eleven required elements of the SSMP. The required elements are as follows:

I. Goals
II. Organization
III. Legal Authority
IV. Operations and Maintenance Program
V. Design and Performance Provisions
VI. Overflow Emergency Response Plan
VII. Fats, Oils and Grease (FOG) Control Program
VIII. System Evaluation and Capacity Assurance Plan
IX. Monitoring, Measurement, and Plan Modifications
X. SSMP Program Audits
XI. Communication Program

The requirements identified in the SWRCB WDR Order No. 2006-0003 subsection (D.13) requires that at a minimum, an internal audit occur every 2 years and a report must be prepared and kept on file. SASD meets these requirements by conducting periodic internal audits, appropriate to the size of the system and the number of SSOs, through the SASD Process titled, “SSMP Audit Procedures” (this document).

Objective

The objective of this document is to provide the details by which periodic internal evaluations of the SSMP are conducted by SASD. The evaluations are to assist the District in meeting the formal SSMP audit requirement and provide continuous improvement. The audit should focus on evaluating the effectiveness of the SSMP and SASD's compliance with the SSMP requirements, including identification of any deficiencies in the SSMP and steps to correct them.

Evaluation Approach and Structure

There are three parts to the audit:
- Document review of the current publicly posted SSMP for WDR compliance
- Practices review to determine how closely SASD is following the intent of its SSMP
- Interviews of key staff and management to determine the effectiveness of SASD's SSMP in meeting the goals of the WDR

The evaluation approach will include an administrative, in-office segment, and a practices review segment. The approach for the in-office segment will be to ask specific questions relating to the eleven sections of the SSMP. The structure includes documenting the questions and responses to them. Interview questions will be developed prior to the audit interviews, and may vary from audit to audit. As SASD's business practices and performance evolve, management may modify the questions accordingly to stimulate continuous improvement and WDR compliance. The practices review segment will consist of an evaluator accompanying selected SASD staff as they perform their work duties, and documenting key aspects of their work for compliance with the intent of SASD's SSMP.
The written report of the audit will consist of three parts:
- Report outlining the results of the document review, the practices review and the effectiveness review.
- List of areas where improvements could be made.
- Action plan to improve the effectiveness of, and compliance with, SASD's SSMP. Although many possible improvements may be identified, the plan should only include those actions expected to result in the most progress towards meeting the goals of the WDR prior to SASD's next internal audit.

Updates

The Director of Operations owns this document. Updates will occur, as the evaluations require, which will be every 24 months.

Training

There will not be training prior to the interviews or evaluations, specific to the audit process. The audit is required by the WDR and as such is included as part of the general WDR training.

Roles & Responsibilities

The following groups and individuals will be responsible for the corresponding areas of the implementation of this procedure:

The Director of Operations will identify the key management staff to be interviewed for the interview portion of this audit. The Director will also provide direction for involvement in the practices review phase of the audit.

The evaluator role will be selected by the Director of Operations at each audit cycle. The Evaluator is responsible for:
- updating this procedure as directed by the Director of Operations
- performing a review of the publicly posted SSMP documents and any publicly released supporting documents for compliance with the WDR
- performing a practices review to confirm the practices match the document
- developing, incorporating comments, and finalizing interview questions
- performing the SSMP evaluation interviews and documenting:
  - how the selected team shows SSMP compliance with the WDR
  - how the selected team determines effectiveness of the SSMP
  - how the selected team addresses practices variance with the SSMP
- providing a draft written findings document for review by the SASD management team
- providing a final written findings document for the WDR required internal audit
- holding an SSMP deficiencies workshop with SASD management
- collating and preparing a draft SSMP deficiencies action plan and time schedule for review by the SASD management team
- providing a final written SSMP deficiencies action plan and time schedule by April 1 of each audit year

SASD management selected by the Director will be responsible for identifying the additional appropriate personnel to be present for the interview sessions. The identified personnel will provide verbal responses to the questions. Staff selected for the practices review phase of the audit will provide verbal responses to questions asked by the evaluator to indicate how the SSMP has been implemented in practice.
Definitions

FOG – Fats, Oils, and Grease
MRP – Monitoring and Reporting Program
Cal - EMA – California Emergency Management Agency
SASD – Sacramento Area Sewer District
SMUD – Sacramento Municipal Utility District
SRWQCB – State Regional Water Control Board
SSMP – Sanitary Sewer Management Plan
SSO – Sanitary Sewer Overflow
SWRCB – State Water Resources Control Board

Process & Procedure

The evaluations will address the mandatory elements of the WDR required in an SSMP. The mandatory elements are outlined in the table below.

<table>
<thead>
<tr>
<th>Mandatory Element</th>
<th>Detailed Description</th>
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<tbody>
<tr>
<td>I. Goals</td>
<td>Define the goals of the SSMP. Do the goals provide a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer system?</td>
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| II. Organization  | Provided an SSMP that identifies:  
1. The name of the responsible authorized representative as described in Section J of the Order.  
2. The names and telephone numbers for management 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.  
3. The chain of communication for reporting SSOs, from receipt of a complaint or other information, including the person responsible for reporting SSOs to the SWRCB, SRWQCB, Environmental Management Division, State OES, and other applicable agencies. |
| III. Legal Authority | Demonstrated through sanitary sewer use ordinances, service agreements, or other legally binding procedures, that it possesses the necessary legal authority to:  
1. Prevent illegal discharges into its sanitary sewer system (examples may include IL, stormwater, chemical dumping, and unauthorized debris and cut roots).  
2. Require that sewers and connections be properly designed and constructed.  
3. Ensure access for maintenance, inspection, or repairs of sewers lines owned or maintained by SASD.  
4. Limit the discharge of fats, oils, and grease (FOG) and other debris that may cause blockages.  
5. Enforce any violation of the sewer ordinances. |
4. Reporting all SSOs in accordance with this MRP, the California Water Code, other State Law, and other applicable MRP authorities.
5. Procedures to ensure that staff and contractors are aware of and follow the emergency response plan.
6. Procedures to ensure that staff and contractors are appropriately trained.
7. A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from the SSOs. This program would include such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.

### VII. Fats, Oil, and Grease Control (FOG)

Prepared and implemented a FOG control Program that includes:

1. An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG.
2. A plan and schedule for the disposal of FOG generated within the SASD service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within the SASD service area.
3. Legal authority to prohibit discharges to system and measures to prevent SSOs caused by FOG.
4. Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, BMP requirements, record keeping, and reporting requirements.
5. The authority to inspect grease producing facilities and provide enforcement.
6. Determining whether SASD has sufficient staff to inspect and enforce the FOG ordinance.
7. Identifying sections of the sewer systems subject to FOG blockages and establishing cleaning maintenance schedule for each section.
8. Developing and implementing source control measures for all sources of FOG discharge to the sewer systems.

### VIII. System Evaluation and Capacity Assurance Plan

Prepared and implemented a Capital Improvement Plan (CIP) that provides 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 provide:

1. Evaluations: Action steps to evaluate portions of the sewer system that are experiencing or contributing to SSOs caused by hydraulic deficiencies.
2. Evaluations: Estimates of peak flows (including flows from SSOs that escape from the system) associated with conditions similar to those causing overflow events.
3. Evaluations: 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.
4. Design Criteria: Where design criteria do not exist or are deficient, explain how the evaluations described in items 1, 2, and 3 are undertaken to provide appropriate design criteria.
5. Capacity Enhancement Measures: Short and long term CIP to address identified hydraulic deficiencies including prioritization, alternative analysis, schedule, and funding.
6. Capacity Enhancement Measures: A CIP that may include increases in pipe size, infiltration/inflow reduction programs, increases and redundancy in pumping capacity, and emergency storage facilities and upgrading of pumping systems for redundancy, reliability, and emergency storage.
7. Capacity Enhancement Measures: A CIP that includes an implementation schedule and identifies sources of funding.
8. Schedule: A schedule of completion dates for all portions of the CIP identified in items 1 through 7.
9. Schedule: Review of the schedule and updates consistent with the SSMP requirements as described in SWRCB Order No. 2006-0003 section D.14.

### IX. Monitoring, Measurement, and Program Modification
Developed or identified a system to do the following:
1. Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities.
2. Monitor the implementation and where appropriate, measure the effectiveness of each element of the SSMP.
3. Assess the success of the preventative maintenance program.
4. Update program elements as appropriate, based on monitoring or performance evaluations.
5. Identify and illustrate SSO trends, including: frequency, location and volume.

### X. SSMP Program Audits
Developed or identified a system to do the following:
1. SASD conducts periodic internal audits, appropriate to the size of the system and the number of SSOs, as part of the SSMP.
2. At a minimum, these audits must occur every two years and a report must be prepared and kept on file.
3. The audit focuses on evaluating the effectiveness of the SSMP and SASD’s compliance with the SSMP requirements identified in the SWRCB Order No. 2006-0003 subsection (D.13) including identification of any deficiencies in the SSMP and steps to correct them.

**NOTE** – The audit process will not “audit the audit”, but the audit process will be included as part of the deficiencies workshop and may have action steps for improvements to the audit process as part of the deficiencies action plan.

### XI. Communication Program
Developed or identified a system to do the following:
1. Communicate on a regular basis with the public on the development, implementation, and performance of the SSMP.
2. A communication system that provides the public the opportunity to provide input to SASD as the program is developed and implemented.
3. A plan of communication with systems that are tributary and/or satellite to SASD’s sanitary sewer system. An example is public education and outreach programs that promote proper disposal of FOG.

Specific questions for each section, including compliance deadlines, will be documented in the audit report.