

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

RESOLUTION NO. R2-2003-0095

In Support of Collaboration between the Regional Board and Bay Area Clean Water Agencies to Report and Manage Sanitary Sewer Overflows

Whereas, both the California Regional Water Quality Board, San Francisco Bay Region (Board), and the Bay Area Clean Water Agencies (BACWA) agree that Sanitary Sewer Overflows (SSOs), or release of sewage to the environment, may, in some cases, pose localized human health and environmental risks.

Whereas, the Board believes that some agencies may not be consistently reporting SSOs, possibly due to a lack of region wide uniform reporting standards and requirements that specify what and how to report.

Whereas, it is the Board's expectation and requirement that sewage collection system owners or operators report all SSOs to Board staff, in order for the Board to determine the full extent of SSOs and consequent environmental impacts occurring in this region.

Whereas, many SSOs are preventable through implementation of a Sewer System Management Plan (SSMP).

Whereas, to facilitate proper management of collection systems, it is necessary for each collection system owner or operator to have and operate, or develop and implement, a facility-specific SSMP. To be effective, these SSMPs should specify elements that provide proper management, operation and maintenance of collection systems. If properly implemented, SSMPs should improve performance of the collection systems and reduce SSOs.

Whereas, in lieu of the Board issuing waste discharge requirements to sewage collection system owners and operators at this time, BACWA has indicated its commitment to a program of working with collection system owners and operators to improve SSO reporting, and to reduce and prevent, to the maximum extent practicable, SSOs through proper management, operation, maintenance, and capital improvements of collection systems.

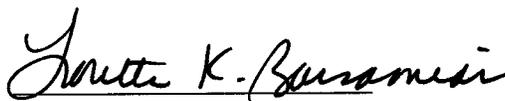
Whereas, BACWA and Board staff have jointly proposed the attached Work Plan, to

1. develop a uniform SSO reporting format to be used regionally, which is consistent with recent legislation amending the Water Code,
2. develop an outline for the necessary elements for an SSMP, and
3. conduct outreach and education of collection system owners and operators in the San Francisco Bay Area on SSO reporting and SSMP elements.

THEREFORE, BE IT RESOLVED that

1. The Board supports the Work Plan and schedule of implementation, copies attached.
2. BACWA will initiate, fund and implement the Work Plan. Board staff will participate in the Work Plan implementation.
3. The Board directs the Executive Officer to issue a letter to collection system owners and operators pursuant to Section 13267 of the California Water Code. This letter will establish new SSO Reporting Requirements, and establish the required elements and submission schedule for SSMPs. The Executive Officer will issue this letter once BACWA and Board staff have come to an agreement on the format and contents of the SSO Reporting Requirements, and SSMP elements.
4. Board staff, in conjunction with BACWA, will provide periodic reports on the progress of this effort to the Board.
5. Within three (3) years from this resolution, Board staff will bring another item before the Board with recommendations that indicate whether or not there is a need for any further action, such as a region wide permit for collection systems. The specific timing, nature, and content of this item will be based on the success of BACWA's efforts, the level of compliance with the 13267 letter described above, the extent of reported SSOs in the region, the staffing and resource needs of the Board to oversee the program through permit fees, and any new policy and regulations that may become effective.

I, Loretta K. Barsamian, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on October 15, 2003.


LORETTA K. BARSAMIAN
Executive Officer

Attachments:

1. Work Plan for Program to Inform San Francisco Bay Area Collection Systems
2. Schedule to Implement BACWA Work Plan for Collection System Agencies

Attachment 1

Work Plan for: Program to Inform San Francisco Bay Area Collection Systems About (1) Proper Reporting of Sanitary Sewer Overflows, and (2) Recommended Elements of a Sewer System Management Plan

Bay Area Clean Water Agencies, Collection Systems Committee

Introduction

Sanitary Sewer Overflows (SSOs) from collection systems occur due to one or more of the following causes: blockages formed in the sewer due to grease, roots, and other debris; exceedance of sewer capacity (such as during wet weather); vandalism; pump station mechanical failures; power outages; deterioration of the collection system due to age; construction material failures; contractor activities and actions; and lack of proper operation and maintenance. Some SSOs are preventable with adequate and appropriate source control measures and operation and maintenance of the wastewater collection system. Knowledge of when and why these overflows occur is the first step in preventing their occurrence. In addition, steps can be taken to prevent many SSOs using a Sewer System Management Plan (SSMP) customized for each agency.

The Bay Area Clean Water Agencies (BACWA) is committed to working with Bay Area collection system agencies to develop documentation materials, which can be used, by agencies to report SSOs and to improve the operations and maintenance of their collection systems. It is anticipated that this program, to be initiated and funded by BACWA, will be adopted as a resolution by the San Francisco Bay Regional Water Quality Control Board at a public hearing.

Purpose of Program

The San Francisco Bay Regional Water Quality Control Board (Regional Board) has information indicating that some collection system agencies may be inconsistently reporting the occurrence of sanitary sewer overflows (SSOs). Inconsistent reporting may be due to lack of information about what and how to report. The intent of this program is to inform collection system agencies about the importance of proper reporting so that the Regional Board can obtain more consistent reporting of SSOs in the region, and recommended elements of an SSMP. This program is the first step in determining if additional requirements are needed for collection systems owners and operators to improve management, operations, maintenance, and capital improvements in order to minimize SSOs to the maximum extent practicable.

Task 1 - Develop Final Reporting Format for Collection Systems

The Bay Area Clean Water Agencies (BACWA) will build upon the work conducted to date between Regional Board staff and the BACWA Permits Committee to finalize the reporting format for SSOs, for presentation at workshops to collection system agencies (see Task 3 below for information about workshops). The first step is to develop the form, or information needed in SSO reports. The second step is to develop a system for reporting those data electronically into a

database similar to the Electronic Reporting System (ERS) for self-monitoring of treatment plant effluent discharge. Development of the e-reporting system will be funded through the Work Plan process. BACWA and the Regional Board will explore funding options that include BACWA budget system, workshop fees, and Supplemental Environmental Projects through Mandatory Minimum Penalties.

It is anticipated that the majority of the discussions will be held under the auspices of the newly formed BACWA Collection Systems Committee. Regional Board staff will be requested to review the draft reporting form and provide comments as appropriate. A draft reporting form, which includes the timing and content for reporting SSOs, will be completed by BACWA following adoption of this program as a resolution by the Regional Board. It is hoped that the content of the final form will be agreed upon by BACWA and Regional Board staff within two months of the resolution date.

Task 2 – Develop Outline for Sewer System Management Plan

The Bay Area Clean Water Agencies (BACWA) will build upon the work conducted to date between Regional Board staff and the BACWA Permits Committee to finalize a detailed outline for the development of a Sewer System Management Plan (SSMP) by individual collection system agencies. A draft outline is attached, which is based on draft U.S. EPA regulations and other Regional Board orders. Regional Board staff will be requested to review any changes to draft SSMP outline and provide comments. It is anticipated that a final SSMP elements will be agreed upon by BACWA and Regional Board and presented at workshops organized by BACWA (see Task 3 below for information about workshops). A finalized draft SSMP outline will be completed by BACWA within ten weeks of adopting this program as a resolution by the Regional Board. Elements of the SSMP may be modified through the Workshop process based on input from the participants.

Task 3 – Conduct Workshops for Collection System Agencies

One-day workshops would be held at multiple locations around the San Francisco Bay Area to inform and educate collection system agencies about SSO reporting and development of SSMPs. The following elements are currently expected to be included in the agenda for the workshops:

- National and local goals for reducing sanitary sewer overflows
- Why uniform reporting is important
- Training on reporting format developed under Task 1 above
- Desired elements of spill response and mitigation (including estimation of spill volumes)
- Public notification standards
- How to investigate the cause of a spill
- Water Quality sampling and when it's appropriate
- Regional Board procedure for enforcement of major spills, including what will be expected of the agency in the event of a major spill
- Description of sewer system management plan outline
- Examples of a good sewer system management plan, including case studies

It is hoped that at least one Regional Board staff member can participate as a speaker at the workshops to provide relevant information and show their support of the program.

A draft agenda for the workshops (same for each location) would be prepared by BACWA within four months of the date of the Regional Board resolution. Regional Board staff will be requested to review the draft agenda and provide comments. BACWA will coordinate the workshop details, such as locations, speakers, audio-visual equipment, refreshments, and other logistics associated with conducting the workshops. A flyer would be prepared with agenda and registration information, and sent to potential attendees.

The one-day workshops would be held at five locations around the Bay Area, estimated by geography at this time as follows:

- Marin County
- North Bay (Napa and Sonoma Counties)
- East Bay (Alameda, Contra Costa, and Solano Counties)
- South Bay (Santa Clara County and southern portions of Alameda and San Mateo Counties)
- Peninsula (San Francisco and San Mateo Counties)

It is expected that the workshops can be scheduled to occur within ten months following Regional Board adoption of the resolution.

Cost and Schedule

BACWA will fund the program except for Regional Board participation. It may be necessary to charge a nominal fee for attendance at the workshops. The schedule for elements of this program is described in the individual tasks above and summarized in the attached bar chart.

Attachment: Draft Outline of Sewer System Management Plans for Further Discussion

More detail on SSMP elements to be developed over next few months. Final draft to be presented at SSO workshops. Detailed final SSMP elements will be included in the 13267 letter.

Attachment to SSO Work Plan

Draft Outline of Sewer System Management Plans For Further Discussion

1. Goals

- a. Reduce frequency and severity of SSOs
- b. Provide plan and schedule for measures to be implemented, the measures should include steps to achieve the following goals:
 - (1) To properly manage, operate and maintain all parts of the collection system;
 - (2) To provide adequate capacity to convey base flows and peak flows; and
 - (3) To reduce and mitigate the impact of sanitary sewer overflows.

2. Organization

- a. Identify personnel responsible for implementing the SSMP.
- b. Identify chain of communication for reporting SSOs.

3. Legal Authority (can be waived for systems with average daily flow of 1.0 mgd or less)

The SSMP should include legal authority, through sewer use ordinances, service agreements or other legally binding procedures to,

- a. I/I control;
- b. Proper design and construction of sewer and connections;
- c. Proper installation, testing, and inspection of new and rehabilitated sewers; and

4. Measures and Activities (elements d through h can be waived for systems with average daily flow of 1.0 mgd or less)

- a. *Collection System Map*, Maintain an up-to-date map of the collection system.
- b. *Facilities & Equipment*, Provide adequate operation and maintenance facilities and equipment.
- c. *Prioritizing*, Prioritize appropriate SSMP preventive maintenance activities.
- d. *Structure deficiencies*, Identify and prioritize structural deficiencies and implement short-term and long-term rehabilitation actions to address them.
- e. *Routine Maintenance Schedule*, Establish a routine preventive operation and maintenance schedule.
- f. *Capacity Assessment*, Establish a framework to assess the current capacity of the collection system.
- g. *Replacement Inventories*, Provide equipment and replacement parts inventories.
- h. *Training*, Provide training on a regular basis for staff on collection system operations, maintenance, and monitoring.
- i. Special considerations for the level of measures and activities will be needed for small communities with fewer resources.

5. Design and Construction Standards (can be waived for systems that have no significant new installations)

- a. Identify design and construction standards and specifications for the installation of new sewer systems and for rehabilitation and repair of existing sewer systems; and
- b. Identify procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances; and for rehabilitation and repair projects.

More detail on SSMP elements to be developed over next few months. Final draft to be presented at SSO workshops. Detailed final SSMP elements will be included in the 13267 letter.

6. Monitoring, Measurement and Program Modifications

Monitor the effectiveness of each SSMP element, update SSMP elements and modify SSMP elements to keep it updated, accurate and available for audit, as appropriate.

7. Overflow Emergency Response Plan (The plan should coordinate with storm water programs, if applicable)

- a. *Notification*, Provide SSO notification procedures;
- b. *Response*, Develop and implement a plan to respond to SSOs;
- c. *Reporting*, Develop procedures to report and notify SSOs per SSO Monitoring and Reporting Program; and
- d. *Containing and Cleaning Up*, Develop steps to contain sewage and prevent sewage discharges to surface waters, and to minimize or correct any adverse impact from SSOs.

8. Fats, Oils, and Grease (FOG) Control Program

The collection system owner or operator should evaluate its service area to determine if a FOG control program is needed. Recommended elements for FOG control program:

- a. *Identification & Sewer Cleaning*, Identify sections of the sewer system subject to grease blockages and establish a cleaning maintenance schedule for each section;
- b. *Source Control*, Develop and implement source control measures, for all sources of grease and fats that may be discharged to the sewer system, for each section identified in item (a) above;
- c. *Facility Inspection*, Authority to inspect grease producing facilities, enforcement authorities; and
- d. *Legal Authority*, Legal authority to prohibit discharges to collection system.

9. System Evaluations and Capacity Assurance Plan

Prepare and implement a capital improvement plan to provide hydraulic capacity of key sewer system elements under peak flow conditions. The recommended elements of the Plan are,

- a. *Evaluation Steps*, Evaluate portions of the collection system experiencing SSOs due to hydraulic deficiency;
- b. *Capacity Enhancement Measures*, Establish a short- and long-term capital improvement program to address identified hydraulic deficiencies; and
- c. *Plan updates*, Update the plan on a regular basis as specified in the SSMP.

10. SSMP Audits (This item can be waived for collection systems with average daily flow of 2.5 mgd or less)

As part of the SSMP, each collection system owner or operator should conduct an internal audit, appropriate to the size of the system and the number of overflows, and submit a report of such audit, evaluating the SSMP and its compliance with this subsection, including its deficiencies and steps to correct them.

More detail on SSMP elements to be developed over next few months. Final draft to be presented at SSO workshops. Detailed final SSMP elements will be included in the 13267 letter.

Draft Sewer System Management Plan Development Time Schedule

SSMP Item No.	Completion Date
Item 2. Organization Item 3. Legal Authority Item 4. Measures and Activities	6 months from the date of 13267 letter to be issued after the workshops
Item 5. Design and Performance Provisions Item 6. Monitoring, Measurement and Plan Modifications Item 7. Overflow Emergency Response Plan	18 months from the date of 13267 letter
Item 8. Fats, Oils, and Grease Control Program Item 9. System Evaluation and Capacity Assurance Plan	33 months from the date of 13267 letter
Final SSMP	36 months from the date of 13267 letter

The above schedule is subject to changes based on the results of the workshops.

Bay Area Clean Water Agencies
Collection Systems Committee

Attachment 2 Schedule to Implement BACWA Work Plan for Collection System Agencies

	Month Following Adoption of Regional Board Resolution									
	1	2	3	4	5	6	7	8	9	10
Regional Board Resolution	●									
Task 1 - Develop SSO Reporting Form										
1.1 - Complete first draft reporting form										
1.2 - Incorporate BACWA comments										
1.3 - Incorporate Regional Board comments										
Task 2 - Develop Outline for SSMP										
2.1 - Complete first draft SSMP outline										
2.2 - Incorporate BACWA comments										
2.3 - Incorporate Regional Board comments										
Task 3 - Conduct Workshops										
3.1 - Develop first draft agenda										
3.2 - Incorporate BACWA comments										
3.3 - Incorporate Regional Board comments										
3.4 - Coordinate speakers										
3.5 - Identify and secure workshop locations										
3.6 - Prepare flyer and registration form										
3.7 - Coordinate registration of workshops										
Hold workshops										