ELEMENT 9: MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS

This Section describes the BCPUD's Monitoring, Measurement and Program Modifications and fulfills the SWRCB Element 9 SSMP requirements.

SWRCB REQUIREMENTS FOR THE MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS

The Enrollee shall:

- (a) Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;
- (b) Monitor 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.

MAINTAIN RELEVANT INFORMATION/IDENTIFY TRENDS

BCPUD wastewater staff tracks numerous performance measures of the district's sewer system, including the following:

- daily flows into the collection system
- daily pump hours at the downtown lift station
- flow meter reports at the treatment ponds
- daily pump hours at the spray fields (during spray season)
- available free board in holding ponds
- weekly lab tests for coliform and nitrates
- SSO records (including reports and response documentation)
- maintenance records
- repair records
- weather records

These measures of the district's sewer system are evaluated by the Chief Operator – Wastewater to determine whether there are any trends pertaining to SSO which might indicate a need for a rehabilitation or replacement project.

In addition, on a monthly basis, the Chief Operator – Wastewater generates reports to the Regional Water Quality Control Board pursuant to WDR 88-100 and, since November 2007, the General Manager submits monthly SSO-related reports to the State Water Resources Control Board pursuant to WDR Order 2006-0003-DWQ. The General Manager discusses these reports regularly with the Chief Operator – Wastewater and also from time-to-time with district staff at the regular staff meetings. The BCPUD plans to continue tracking performance measures that are currently tracked.

MONITOR THE IMPLEMENTATION OF THE SSMP AND SUCCESS OF PREVENTATIVE MAINTENANCE

The BCPUD's Chief Operator – Wastewater periodically reviews the district's preventative maintenance activities to assess their effectiveness and relevance. This review will include, but not necessarily be limited to:

- a review of any SSOs, if any, including volume, cause and response time
- inspection overview and results
- preventative maintenance schedule and any backlogs
- completed projects
- planned projects

The Chief Operator checks in with collection system operators on at least a monthly basis (and generally much more frequently) to identify potential areas for improvement based on the above review. Verbal progress reports summarizing these meetings and any recommendations for change are regularly provided to the General Manager, usually on at least a weekly basis. The district plans to implement a procedure for written progress reports.

In addition, to monitor the effectiveness of the SSMP, the BCPUD has selected certain specific parameters that can be documented and compared on an annual basis. Changes in these parameters over time will indicate the overall success of the SSMP or, conversely, underlying conditions that can be investigated further. The SSMP monitoring parameters of program effectiveness are shown in the table provided on the next page

Table 9-1 - SSMP Monitoring Parameters, by SSMP Element

SSMP Element	Summary of Element Purpose	Actions or Measures of Tracking Effectiveness
Goals	Reduce overflows	Not needed
Organization	Establish the hierarchy and assign responsibility within the organization	Review, update and adjust based on organizational changes
Legal Authority	Ensure the district has sufficient legal authority to properly maintain the sewer system	Modify as needed
Operation and Maintenance Program	Minimize blockages and reduce SSOs by properly maintaining the system and keeping the system in good condition	 Total number and volume of SSOs Number of repeat SSOs Total number of mainline blockages Length of pipe cleaned Length of pipe CCTV'd and inspected Number of laterals replaced Length of mains replaced Number of cleanouts installed Length of pipe treated for roots
Design & Construction Standards	Ensure any new or repaired facilities are properly designed and constructed	Modify as needed
Overflow Emergency Response	Provide timely and effective response to SSMP emergencies and comply with regulatory reporting requirements	Response timeOvertime hoursMonthly trend analysis
Fats, Oils & Grease Control	Minimize blockages due to FOG	Number of blockages, if any, due to FOGNumber of SSOs, if any, due to FOG
Capacity Management	Minimize SSOs due to insufficient hydraulic capacity	 Number of SSOs, if any, due to hydraulic capacity limitations Number of SSOs, if any, due to wet weather
Monitoring, Measurement and Program Modifications	Evaluate effectiveness of SSMP, keep SSMP up-to-date and identify necessary changes	As needed
Program Audits	Review the program effectiveness and make necessary changes to comply with the requirements	Formally audit the program every two years
Communication Program	Evaluate the effectiveness of communication and identify necessary changes	As needed

PROGRAM MODIFICATIONS

The BCPUD's SSMP will be modified to include operations changes that affect the SSMP elements. The BCPUD will review the successes and needed improvements of the SSMP as part of the SSMP annual audit (see Element 10).

BCPUD staff will update critical information, such as pager numbers, radio call signs, contact information and all other SSO response change of communication information as needed. A comprehensive SSMP update will occur every 5 years, as required by the SWRCB. Major changes proposed for the SSMP will be presented for approval to the BCPUD's Board of Directors at duly noticed public meetings.