

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION**

SELF-MONITORING PROGRAM

FOR

**UNION SANITATION DISTRICT
OLD ALAMEDA CREEK INTERMITTENT WET WEATHER DISCHARGE
UNION CITY, ALAMEDA COUNTY**

NPDES PERMIT NO. CA0038733

ORDER NO. R2-2004-0002

Consists of:

**Part A (not attached)
Adopted August 1993**

and

**Part B (Attached)
Effective: April 1, 2004**

Note: Part A (dated August 1993, not attached, but are available for review or download on the Board's website at www.swrcb.ca.gov/rwqcb2)

SELF-MONITORING PROGRAM – Part B

I. Description of Sampling and Observation Stations

Station

Description

A. EFFLUENT

E-wet weather

At any point in the outfall from the treatment facility at which adequate disinfections has taken place and just prior to discharge, and the point at which all waste tributary to that outfall is present.

II. Schedule of Sampling, Measurements, and Analysis

1. **Effluent Monitoring** The sampling, measurements, and analysis for effluent shall follow the schedule given in Table 1 below.

Table 1 Schedule of Effluent Sampling, Analysis for Peak Wet Weather Discharges

Sampling Station	Unit	E-wet weather	
		Grab	24-hour composite [a]
Flow volume	Gallons	Each occurrence	
During of discharge	Hours and minutes	Each occurrence	
Total Suspended Solids	mg/L		Each occurrence
BOD ₅	mg/L		Each occurrence
Oil and Grease	mg/L	Each occurrence	
Fecal Coliform Organisms	MPN/100 ml	Each occurrence	
pH		Each occurrence	
Total Chlorine Residual [b]	mg/L	Continuous/hourly	
Copper	µg/L		Each occurrence
Mercury	µg/L	Each occurrence	
Nickel	µg/L		Each occurrence
Zinc	µg/L		Each occurrence
Cyanide	µg/L	Each occurrence	

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Sampling Station	Unit	E-wet weather	
Sample Type		Grab	24-hour composite [a]
Parameters in Enclosure A of August 6, 2003 Letter except metals	µg/L	Once per year [c]	

FOOTNOTES FOR TABLE 1:

- a. If the discharge is expected to last less than 24 hour, the Discharger has the option of taking grab sample or composite sample by mechanically or manually compositing samples on an hourly, or once every two hour basis for the duration of the discharge.
- b. Chlorine residual shall be monitored continuously or hourly. If an effluent violation is detected, grab samples shall be taken every 30 minutes until compliance is achieved.
- c. These data shall be complied and submitted with the Self-Monitoring Report, and with the application for permit reissuance in five years. The Discharger is not required to monitor the constituents, such as metals, which are regularly monitored at Alvarado Wastewater Treatment Plant outfall E-2 under separate permit (CA0037869). If there is no discharge from the wet weather outfall, samples shall be taken from Alvarado Wastewater Treatment Plant outfall E-2 preferably during a wet weather event, but not later than March of each year. Refer to August 6, 2001 letter for test method requirement. August 6, 2001 letter can be found at the Board wet site at <http://www.swrcb.ca.gov/rwqcb2/Download.htm> under “Requirement for Monitoring of Pollutants in Effluent and Receiving Water to Implement New Statewide Regulations and Policy.”

Table 2 lists the Minimum Levels (SIP) of the priority constituents, which have interim limits in the Order

Table 2. Minimum Levels (µg/l or ppb)

CTR #	Constituent [a]	Types of Analytical Methods [b]											
		GC	GCMS	LC	Color	FAA	GFAA	ICP	ICP MS	SPGF AA	HYD RIDE	CVAA	DCP
6.	Copper [c]					25	5	10	0.5	2			1000
8.	Mercury [d]												
9.	Nickel					50	5	20	1	5			1000
13.	Zinc					20		20	1	10			
14.	Cyanide				5								

FOOTNOTES FOR TABLE 2:

- (a) According to the SIP, method-specific factors (MSFs) can be applied. In such cases, this additional factor must be applied in the computation of the reporting limit. Application of such factors will alter the reported ML (as described in section 2.4.1 of the SIP). Discharger is to instruct laboratories to establish calibration standards so that the ML value is the lowest calibration standard. At no time is the discharger to use analytical data derived from the extrapolation beyond the lowest point of the calibration curve.

- (b) Laboratory techniques are defined as follows: GC = Gas Chromatography; GCMS = Gas Chromatography/Mass Spectrometry; LC = High Pressure Liquid Chromatography; Color = Colorimetric; FAA = Flame Atomic Absorption; GFAA = Graphite Furnace Atomic Absorption; Hydride = Gaseous Hydride Atomic Absorption; CVAA = Cold Vapor Atomic Absorption; ICP = Inductively Coupled Plasma; ICPMS = Inductively Coupled Plasma/Mass Spectrometry; SPGFAA = Stabilized Platform Graphite Furnace Atomic Absorption (i.e. EPA 200.9); DCP = Direct Current Plasma.
- (c) For copper, the discharger may also use the following laboratory techniques with the relevant minimum level: GFAA with a minimum level of 5 µg/L and SPGFAA with a minimum level of 2 µg/L.
- (d) Use ultra-clean sampling (EPA 1669) to the maximum extent practicable, and ultra clean analytical methods (EPA 1631) for mercury monitoring. The discharger may use alternative methods of analysis (such as EPA 245), if the alternate method has a Minimum Level of 2 ng/L or less.

Table 3 Schedule of Effluent Sampling, Analysis for Regular Valve Exercise Discharges

Sampling Station	Unit	E-wet weather
Sample Type		Grab
Chlorine residual	mg/L	Once per occurrence
Fecal Coliform Organism	MPN/100 ml	Once per occurrence

2. **Receiving Water Monitoring** The sampling, measurements, and analysis for receiving water shall follow the schedule and requirement specified in Board August 6, 2001 letter. The Discharger shall submit a Sample Plan for approval by the Executive Officer prior to start of the receiving water sampling. The samples shall be taken between October to March and when Old Alameda Creek is in its Peak Wet Weather Flow (PWWF) condition as safety permits. If safety is of concern during the discharge event, the receiving water monitoring may be conducted outside the discharge period, as long as the sample is collected during the PWWF conditions and is conducted as close to the wet weather discharge as is safe to do so. These data shall be compiled and submitted with the Self-Monitoring Reports, and with the application for permit reissuance in five years. The analysis results will be used as background data for reasonable potential analysis in the next permit reissuance.

III. Reporting Requirements

- A. General Reporting Requirements are described in Section E of the Board’s *Standard Provisions and Reporting Requirements for NPDES Surface Water Discharge Permits*, dated August 1993.
- B. Self-monitoring reports shall be submitted quarterly. The required contents of these reports are described in Section F.4. of Part A as modified below.
- C. An Annual Report shall be submitted for each calendar year. The report shall be submitted to the Board by February 1 of each year. The required contents of the Annual Report are described in Section F.5 of Part A as modified below.

- D. Any overflow, bypass, or any significant noncompliance incident that may endanger health or the environment shall be reported in accordance with Sections F.1 and F.2 of Part A. The date, time, duration, location, estimated volume of wastewater discharged, and corrective actions taken for these events shall be reported in quarterly self-monitoring reports.

IV. Modifications to Part A

B. Modification to section F.4 of Part A: Self-Monitoring Report

The first sentence of section F.4 shall be modified as follows: Written reports shall be filed regularly for each calendar quarter. If there is no discharge during the quarter, the Discharger shall indicate that there is no discharge during the reporting quarter on its self-monitoring report.

C. Modification to section F.4 of Part A: Self-Monitoring Report:

Quarterly self-monitoring report: The purpose of the report is to document treatment performance, effluent quality and compliance with waste discharge requirements prescribed by this Order, as demonstrated by the monitoring program data and the Discharger's operation practices. A self-monitoring report (SMR) shall be submitted to the Board in accordance with the following:

1. The report shall be submitted to the Board no later than 30 days from the last day of the reporting quarter. If there is no discharge during the quarter, the Discharger shall indicate that there is no discharge during the reporting quarter.
2. *Letter of Transmittal:* Each report shall be submitted with a letter of transmittal. This letter shall include the following:
 - a. Identification of all violations of effluent limits or other discharge requirements found during the monitoring period;
 - b. Details of the violations: parameters, magnitude, test results, frequency, and dates;
 - c. The cause of the violations;
 - d. Discussion of corrective actions taken or planned to resolve violations and prevent recurrence, and dates or time schedule of action implementation. If previous reports have been submitted that address corrective actions, reference to such reports is satisfactory;
 - e. Signature: The letter of transmittal shall be signed by the Discharger's principal executive officer or ranking elected official, or duly authorized representative, and shall include the following certification statement:

"I certify under penalty of law that this document and all attachments have been prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. 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."

3. *Compliance Evaluation Summary:* Each report shall include a compliance evaluation summary. This summary shall include, for each parameter for which effluent limits are specified in the Permit, the number of samples taken during the monitoring period, and the number of samples in violation of applicable effluent limits.
4. *Results of Analyses and Observations.*
 - a. Tabulations of all required analyses and observations, including parameter, sample date and time, sample station, and test result;
 - b. If any parameter specified in Table 1 of Part B is monitored more frequently than required by this permit and SMP, the results of this additional monitoring shall be included in the monitoring report, and the data shall be included in data calculations and compliance evaluations for the monitoring period;
 - c. Calculations for all effluent limits that require averaging of measurements shall utilize an arithmetic mean, unless specified otherwise in this permit or SMP.
5. *Effluent Data Summary – U.S. EPA NPDES Discharge Monitoring Reports:* Summary tabulations of monitoring data including maximum, minimum and average values for subject monitoring period shall be reported in accordance with the format given by the U.S. EPA NPDES Discharge Report(s) (DMRs; U.S. EPA Form 3320-1 or successor). Copies of these DMRs shall be provided to U.S. EPA as required by U.S. EPA.
6. *Data Reporting for Results Not Yet Available:* The Discharger shall make all reasonable efforts to obtain analytical data for required parameter sampling in a timely manner. The Board recognizes that certain analyses require additional time in order to complete analytical processes and result reporting. For cases where required monitoring parameters require additional time to complete analytical processes and reporting, and results are not available in time to be included in the SMR for the subject monitoring period, such cases shall be described in the SMR. Data for these parameters, and relevant discussions of any observed violations, shall be included in the next following SMR after the data become available.
7. *Report Submittal:* The Discharger shall submit SMRs to:

Executive Officer
 San Francisco Bay Regional Water Quality Control Board
 1515 Clay Street, Suite 1400
 Oakland, CA 94612
 Attn: NPDES Division

D. Modification to section F.5 of Part A: Annual Report:

An Annual Report shall be submitted for each calendar year. The report shall be submitted to the Board by February 1 of the following year. This report shall include the following:

1. Both tabular and graphical summaries of monitoring data collected during the calendar year that characterize treatment plant performance and compliance with waste discharge requirements.
2. A comprehensive discussion of treatment plant performance and compliance with waste discharge requirements. This discussion should include any corrective actions taken or

planned such as changes to facility equipment or operation practices which may be needed to achieve compliance, and any other actions taken or planned that are intended to improve performance and reliability of the Discharger's wastewater collection, treatment or disposal practices.

E. Additions to Part A of Self-Modification Program:

1. Reporting Data in Electronic Format:

The Discharger has the option to submit all monitoring results in electronic reporting format approved by the Executive Officer. If the Discharger chooses to submit the SMRs electronically, the following shall apply:

- a. *Reporting Method:* The Discharger shall submit SMRs electronically via the process approved by the Executive Officer in a letter dated December 17, 1999, Official Implementation of Electronic Reporting System (ERS).
- b. *Modification of reporting requirements:* Reporting requirements F.4 in the attached *Self-Monitoring program, Part A*, dated August 1993, shall be modified as follows. In the future, the Board intends to modify Part A to reflect these changes.
- c. *Quarterly Report Requirements:* For each calendar quarter, a self-monitoring report (SMR) shall be submitted to the Board in accordance with the following:
 - i. The report shall be submitted to the Board no later than 30 days from the last day of the reporting quarter.
 - ii. *Letter of Transmittal:* Each report shall be submitted with a letter of transmittal. This letter shall include the following:
 - (i) Identification of all violations of effluent limits or other discharge requirements found during the monitoring period;
 - (ii) Details of the violations: parameters, magnitude, test results, frequency, and dates;
 - (iii) The cause of the violations;
 - (iv) Discussion of corrective actions taken or planned to resolve violations and prevent recurrence, and dates or time schedule of action implementation. If previous reports have been submitted that address corrective actions, reference to such reports is satisfactory.
 - (v) *Signature:* The letter of transmittal shall be signed by the Discharger's principal executive officer or ranking elected official, or duly authorized representative, and shall include the following certification statement:

"I certify under penalty of law that this document and all attachments have been prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. 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."
 - (vi) *Compliance Evaluation Summary:* Each report shall include a compliance evaluation summary. This summary shall include the number of samples in violation of applicable effluent limits.
 - (vii) *Results of Analyses and Observations.*

- (viii) Tabulations of all required analyses and observations, including parameter, sample date, sample station, and test result.
 - (ix) If any parameter is monitored more frequently than required by this permit and SMP, the results of this additional monitoring shall be included in the monitoring report, and the data shall be included in data calculations and compliance evaluations for the monitoring period.
 - (x) Calculations for all effluent limits that require averaging of measurements shall utilize an arithmetic mean, unless specified otherwise in this permit or SMP.
- d. **Data Reporting for Results Not Yet Available:** The Discharger shall make all reasonable efforts to obtain analytical data for required parameter sampling in a timely manner. The Board recognizes that certain analyses require additional time in order to complete analytical processes and result reporting. For cases where required monitoring parameters require additional time to complete analytical processes and reporting, and results are not available in time to be included in the SMR for the subjected monitoring period, such cases shall be described in the SMR. Data for these parameters, and relevant discussions of any observed violations, shall be included in the next following SMR after the data become available.

V. Self-Monitoring Program Certification

I, Bruce H. Wolfe, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Board Order No. R2-2004-0002.
2. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the Discharger, and revisions will be ordered by the Executive Officer.
3. Is effective as of April 1, 2004.

Bruce H. Wolfe
Executive Officer