

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM R5-2012-XXXX
FOR
EAST BAY MUNICIPAL UTILITY DISTRICT
CAMANCHE NORTH SHORE RECREATION AREA
WATER TREATMENT PLANT LAND APPLICATION
AMADOR COUNTY

This Monitoring and Reporting Program (“MRP”) describes requirements for monitoring raw water, filter backwash water, and land application areas. This MRP is issued pursuant to Water Code section 13267. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer.

Specific sampling locations shall be approved by Central Valley Regional Water Quality Control Board (“Central Valley Water Board”) staff prior to implementation of sampling activities. All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. The time, date, and location of each grab sample shall be recorded on the sample chain of custody form. Field test instruments (such as those used to measure pH and dissolved oxygen) may be used provided that:

1. The operator is trained in proper use and maintenance of the instruments;
2. The instruments are calibrated prior to each monitoring event;
3. The instruments are serviced and/or calibrated per the manufacturer’s recommended frequency; and
4. Field calibration reports are submitted as described in the “Reporting” section of the MRP.

RAW WATER MONITORING

The Discharger shall establish permanent monitoring stations within the water treatment plant (“WTP”) as needed to ensure that all samples are representative. At a minimum, the Discharger shall monitor raw water as follows:

<u>Constituent</u>	<u>Units</u>	<u>Sample Type</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Flow	gpd	Meter Observation	Daily	Monthly
Electrical Conductivity	µmhos/cm	Grab	Annually	Annually
Total Dissolved Solids	mg/L	Grab	Annually	Annually
pH	Standard	Grab	Annually	Annually
Dissolved Metals ^{1,2}	mg/L	Grab	Annually	Annually
Standard Minerals ³	mg/L	Grab	Annually	Annually

¹ At a minimum, the following metals shall be included: antimony, arsenic, cadmium, chromium, copper, iron, lead, magnesium, manganese, mercury, nickel, silver, thallium, and zinc.

² Samples shall be filtered through a 0.45-micron filter prior to preservation.

³ Standard minerals shall include, at a minimum, the following elements/compounds: bromide, chloride, fluoride, and sodium.

FILTER BACKWASH WATER MONITORING

The filter backwash water from the second pressure tank shall be sampled and monitored for the following. Grab samples will be considered representative of the discharge. Semi-annual monitoring shall occur in the second and third calendar quarters.

Constituent	Units	Sample Type	Sampling Frequency	Reporting Frequency
Flow	gpd	Meter observation	Daily	Monthly
Dissolved Antimony	µg/L	Grab	Semi-annually ²	Monthly
Dissolved Arsenic	µg/L	Grab	Semi-annually ²	Monthly
Dissolved Iron	µg/L	Grab	Semi-annually ²	Monthly
Dissolved Lead	µg/L	Grab	Semi-annually ²	Monthly
Dissolved Manganese	µg/L	Grab	Semi-annually ²	Monthly
Total Dissolved Solids	mg/L	Grab	Semi-annually ²	Monthly
pH	Standard	Grab	Semi-annually ²	Monthly
Standard Minerals ¹	mg/L	Grab	Annually	Annually

¹ Standard Minerals shall include, at a minimum, the following elements/compounds: bromide, chloride, fluoride, and sodium.

² Semi-annual monitoring results shall be reported in the monthly monitoring reports for the months during which sampling occurs.

LAND APPLICATION AREA MONITORING

The Discharger shall monitor the application of filter backwash water to the land application areas. Monitoring shall be conducted **daily during the irrigation operations**. Evidence of erosion, ground saturation, tailwater runoff, and the presence of nuisance conditions shall be reported in the monthly monitoring report. If irrigation does not occur during a reporting period, the monitoring report shall so state.

SOLIDS DISPOSAL MONITORING

The Discharger shall implement the approved *Solids Management Plan* required by Provision G.1.a. The Discharger shall maintain a written log of all solids disposal activities. For each discrete quantity of solid removed from the facility, the log shall contain the following information:

1. Date;
2. Name and signature of the recorder of the entry;
3. Volume or weight of solids removed;
4. Name and address of permitted disposal site;
5. Analytical results for any solids monitoring conducted at the request of the disposal facility;

6. Transport method; and
7. Transporter.

REPORTING

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., raw water, wastewater, etc.), and reported analytical result for each sample are readily discernible. The data shall be summarized in such a manner to clearly illustrate compliance with waste discharge requirements and spatial or temporal trends, as applicable. The results of any monitoring done more frequently than required at the locations specified in the Monitoring and Reporting Program shall be reported to the Central Valley Water Board.

As required by the California Business and Professions Code sections 6735, 7835, and 7835.1, all Groundwater Monitoring Reports shall be prepared under the direct supervision of a registered Professional Engineer or Geologist and signed by the registered professional.

A. Monthly Monitoring Reports

Monthly reports shall be submitted to the Central Valley Water Board on the **1st day of the second month following sampling** (i.e. the January Report is due by 1 March). At a minimum, the reports shall include:

1. Results of raw water, filter backwash water, land application area, and solids disposal monitoring performed during the month, including all daily, monthly and semi-annual sampling data. Semi-annual monitoring results shall be reported in the monthly monitoring reports for the months during which sampling occurs.
2. A comparison of monitoring data to the discharge specifications and an explanation of any violation of those requirements. Data shall be presented in tabular format.
3. Copies of laboratory analytical report(s).
4. A calibration log verifying calibration of all hand-held monitoring instruments and devices used to comply with the prescribed monitoring program.
5. Reports shall be submitted monthly, even if there is no discharge to land during that month.

B. Annual Monitoring Report

An Annual Monitoring Report shall be submitted to the Central Valley Water Board by **1 February** each year. The Annual Report shall include the following:

1. Volumes of raw water treated and filter backwash water applied to the LAAs during the previous year.
2. Results of the annual raw water and filter backwash water analytical testing.
3. Tabular and graphical summaries of all data collected during the year with data arranged to confirm compliance with the WDRs.
4. A comparison of filter backwash water monitoring results for the year to the Filter Backwash Water Limitations, and a detailed explanation of significant differences, if any.
5. A detailed description of any operational changes or new systems for sludge handling or dewatering.
6. A summary of solids disposal practices for the year, including tabulation of all solids disposal monitoring data.
7. A discussion of compliance and the corrective action taken, as well as any planned or proposed actions needed to bring the discharge into full compliance with the waste discharge requirements.
8. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.

A letter transmitting the self-monitoring reports shall accompany each report. The letter shall include a discussion of requirement violations found during the reporting period, and actions taken or planned for correcting noted violations, such as operation or facility modifications. If the Discharger has previously submitted a report describing corrective actions and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory. The transmittal letter shall contain the penalty of perjury statement by the Discharger, or the Discharger's authorized agent, as described in the Standard Provisions General Reporting Requirements Section B.3.

The Discharger shall implement the above monitoring program as of the date of this Order.

Ordered by: _____
PAMELA C. CREEDON, Executive Officer

(Date)