

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION
MONITORING AND REPORTING PROGRAM WQ 2014-0153-DWQ-R5338
FOR
EAST BAY MUNICIPAL UTILITY DISTRICT
CAMANCHE NORTH SHORE WASTEWATER TREATMENT PLANT
AMADOR COUNTY

This Monitoring and Reporting Program (MRP) describes requirements for monitoring a wastewater treatment system at the Camanche North Shore Wastewater Treatment Plant. 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 Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) or Executive Officer.

Water Code section 13267 states, in part:

“In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.”

Water Code section 13268 states, in part:

“(a) Any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (b) of section 13267, or failing or refusing to furnish a statement of compliance as required by subdivision (b) of section 13399.2, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in accordance with subdivision (b).

(b)(1) Civil liability may be administratively imposed by a regional board in accordance with article 2.5 (commencing with section 13323) of chapter 5 for a violation of subdivision (a) in an amount which shall not exceed one thousand dollars (\$1,000) for each day in which the violation occurs.”

The East Bay Municipal Utility District operates the wastewater system that is subject to the Notice of Applicability (NOA) of Water Quality Order 2014-0153-DWQ-R5338. The reports are necessary to ensure that the Discharger complies with the NOA and General Order.

Pursuant to Water Code section 13267, the Discharger shall implement this MRP and shall submit the monitoring reports described herein.

All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. The name of the sampler, sample type (grab or composite), time, date, location, bottle type, and any preservative used for each sample shall be recorded on the sample chain of custody form. The chain of custody form must also contain all custody information including date, time, and to whom samples were relinquished. If composite samples are collected, the basis for sampling (time or flow weighted) shall be approved by Central Valley Water Board staff.

Field test instruments (such as those used to test pH, dissolved oxygen, and electrical conductivity) may be used provided that they are used by a State Water Resources Control Board, Environmental Laboratory Accreditation Program certified laboratory, or:

1. The user is trained in proper use and maintenance of the instruments;
2. The instruments are field calibrated prior to monitoring events at the frequency recommended by the manufacturer;
3. Instruments are serviced and/or calibrated by the manufacturer at the recommended frequency, and
4. Field calibration reports are maintained and available for at least three years.

Analytical procedures shall comply with the methods and holding times specified in the following: Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater (EPA); Test Methods for Evaluating Solid Waste (EPA); Methods for Chemical Analysis of Water and Wastes (EPA); Methods for Determination of Inorganic Substances in Environmental Samples (EPA); Standard Methods for the Examination of Water and Wastewater (APHA/AWWA/WEF); and Soil, Plant and Water Reference Methods for the Western Region (WREP 125). Approved editions shall be those that are approved for use by the United States Environmental Protection Agency or the California Department of Public Health's Environmental Laboratory Accreditation Program. The Discharger may propose alternative methods for approval by the Executive Officer. Where technically feasible, laboratory reporting limits shall be lower than the applicable water quality objectives for the constituents to be analyzed.

INFLUENT MONITORING

Influent samples shall be collected prior to discharge into the treatment ponds. Influent monitoring shall include the following:

Constituent	Units	Sample Type	Sampling Frequency	Reporting Frequency
Flow	gpd	Meter Observation	Daily	Monthly
BOD ₅	mg/L	Grab	Monthly	Monthly

BOD₅ presents five -day biochemical oxygen demand.

EFFLUENT MONITORING

Samples of effluent shall be collected prior to discharge into the effluent storage ponds. The effluent sampling station is shown on Attachment C. At a minimum, effluent monitoring shall consist of the following:

Constituent	Units	Sample Type	Sampling Frequency	Reporting Frequency
pH	Standard Units	Grab	Monthly	Monthly
BOD ₅	mg/L	Grab	Monthly	Monthly
Total Dissolved Solids	mg/L	Grab	Quarterly	Quarterly
Nitrate a Nitrogen	mg/L	Grab	Quarterly	Quarterly
Total Kjeldahl Nitrogen	mg/L	Grab	Quarterly	Quarterly
Ammonia	mg/L	Grab	Quarterly	Quarterly
Standard Minerals	mg/L	Grab	Annually	Annually

Standard minerals shall include, at a minimum, the following elements and compounds: arsenic, boron, calcium, chloride, dissolved iron, magnesium, dissolved manganese, potassium, sodium, sulfate, total alkalinity (including alkalinity series), and hardness.

Quarterly results shall be reported in the Monthly Monitoring Report for the month during which sampling occurs.

STORAGE POND MONITORING

Each storage pond shall be monitored as follows. If the pond(s) is empty on the scheduled monitoring date, the Discharger shall report the freeboard monitoring result as "dry".

Constituent	Units	Sample Type	Sampling Frequency	Reporting Frequency
Dissolved Oxygen	mg/L	Grab	Weekly	Monthly
Freeboard	0.1 feet	Measurement	Weekly	Monthly
Odors	--	Observation	Weekly	Monthly
Levee condition	--	Observation	Weekly	Monthly

Samples shall be collected at a depth of one foot, opposite the inlet. Containment levees shall be observed for signs of seepage or surfacing water along the exterior toe of the levees.

LAND APPLICATION AREA MONITORING

Monitoring of the LAAs shall be conducted when the disposal areas are used, and the results shall be included in the monthly monitoring report. Evidence of erosion, saturation, irrigation runoff, or the presence of nuisance conditions shall be noted in the report. Effluent monitoring results shall be used in calculations to ascertain loading rates at the spray disposal areas. Monitoring of the LAAs shall include the following:

Constituent	Units	Sample Type	Sampling Frequency	Reporting Frequency
Flow	gallons	Continuous	Daily	Monthly
Rainfall	inches	Observation	Daily	Monthly
Acreage Applied	acres	Calculated	Daily	Monthly
Water Application Rate	gal/acre/day	Calculated	Daily	Monthly

At least once per week when the LAAs are being used, the entire LAAs shall be inspected to identify any equipment malfunction or other circumstances that might allow irrigation runoff to leave the irrigation area and/or create ponding conditions. A daily log of each inspection shall be kept at the facility and be submitted with the monthly monitoring reports. If the LAAs are not used, then the monthly monitoring reports shall state so.

GROUNDWATER MONITORING

Prior to sampling, depth to groundwater measurements shall be measured in each monitoring well to the nearest 0.01 feet. Groundwater elevations shall then be calculated to determine groundwater gradient and flow direction. Monitoring wells to be sampled shall be purged of at least three well volumes until temperature, pH, and electrical conductivity have stabilized. Low or no-purge sampling methods are acceptable, if described in an approved *Sampling and Analysis Plan*. Samples shall be collected and analyzed using standard EPA methods. Groundwater monitoring shall include, at a minimum, the following:

Constituent	Units	Sample Type	Sampling Frequency	Reporting Frequency
Groundwater Elevation	0.01 feet	Measurement	Semi-annually	Semi-annually
Depth to Groundwater	0.01 feet	Calculated	Semi-annually	Semi-annually
Gradient	feet/feet	Calculated	Semi-annually	Semi-annually
Gradient Direction	degrees	Calculated	Semi-annually	Semi-annually
Total Coliform Organisms	MPN/100 mL	Grab	Semi-annually	Semi-annually
Nitrate as Nitrogen	mg/L	Grab	Semi-annually	Semi-annually
Total Kjeldahl Nitrogen	mg/L	Grab	Semi-annually	Semi-annually
Total Dissolved Solids	mg/L	Grab	Semi-annually	Semi-annually
Dissolved Iron	mg/L	Grab	Semi-annually	Semi-annually
Dissolved Manganese	mg/L	Grab	Semi-annually	Semi-annually
pH	pH units	Grab	Semi-annually	Semi-annually
Standard Minerals	mg/L	Grab	Annually	Annually

Groundwater elevations shall be based on depth-to-water data using a surveyed measuring point elevation on the well and a surveyed reference elevation.

Standard Minerals shall include, at a minimum, the following elements and compounds: arsenic, boron, calcium, chloride, magnesium, potassium, sodium, sulfate, total alkalinity (including alkalinity series), and hardness. Samples for metals shall be filtered prior to preservation and digestion using a 0.45-micron filter.

SLUDGE AND SOLID WASTE MONITORING

Prior to the removal of sludge from any tank or the storage pond, a composite sample shall be collected in accordance with EPA's POTW Sludge Sampling and Analysis Guidance Document (August 1989) and tested for the following metals: Cadmium, Copper, Nickel, Chromium, Lead, and Zinc.

Sampling records shall be retained for a minimum of five years. A log shall be kept of solid waste (grits and screenings) and sludge quantities generated and of handling and disposal activities. The frequency of entries is discretionary; however, the log should be complete enough to serve as a basis for part of the annual report.

WATER SUPPLY MONITORING

A sampling station shall be established where a representative sample of the municipal water supply can be obtained. Water supply monitoring may be substituted with the annual report of the supplying agency. Water supply monitoring shall include at least the following:

Constituent	Units	Sample Type	Sampling and Reporting Frequency
Total Dissolved Solids	mg/L	Grab	Annually
Standard Minerals	mg/L	Grab	Annually

Standard Minerals shall include, at a minimum, the following elements and compounds: boron, calcium, iron, magnesium, manganese, sodium, potassium, chloride, sulfate, total alkalinity (including alkalinity series), and hardness.

REPORTING

All regulatory documents, submissions, materials, data, monitoring reports, and correspondence should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be emailed to: centralvalleysacramento@waterboards.ca.gov

Documents that are 50 MB or larger should be transferred to a CD, DVD, or flash drive and mailed to the following address:

Central Valley Regional Water Quality Control Board
ECM Mailroom
11020 Sun Center Drive, Suite 200
Rancho Cordova, California 95670

To ensure that your submittals are routed to the appropriate staff, the following information block should be included in any correspondence used to transmit documents to this office:

Facility Name: Camanche North Shore Wastewater Treatment Plant
Program: Non-15 Compliance
Order: WQ 2014-0153-DWQ-R338
CIWQS Place ID: CW-212847

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., effluent, pond, 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 the NOA and General Order and spatial or temporal trends, as applicable. The results of any monitoring done more frequently than required at the locations specified in the MRP shall be reported in the next scheduled monitoring report.

In addition to the requirements of Standard Provision C.3, monitoring information shall include the method detection limit (MDL) and the Reporting limit (RL) or practical quantitation limit (PQL). If the regulatory limit for a given constituent is less than the RL (or PQL), then any analytical results for that constituent that are below the RL (or PQL) but above the MDL shall be reported and flagged as estimated.

A. Monthly Monitoring Reports

Monthly reports shall be submitted to the Regional Board by the **1st day of the second month** following the end of the reporting period (i.e. the January monthly report is due by 1 March). At a minimum, the reports shall include:

1. Results of the influent, effluent, pond, land application area, and solid wastes and sludge monitoring;
2. Copies of inspection logs;
3. A comparison of the monitoring data to the discharge specifications and an explanation of any violation of those requirements;
4. If requested by staff, copies of laboratory analytical report(s), and
5. Date(s) on which the monitoring instruments were calibrated.

B. Semi-annual Monitoring Report

The Discharger shall establish a semi-annual sampling schedule for effluent monitoring such that samples are obtained approximately every six months. Semi-Annual Monitoring Reports shall be submitted to the Central Valley Water Board by the **1st day of February and August**. The Semi-Annual Monitoring Reports shall include the following:

1. Results of groundwater monitoring;
2. A narrative description of all preparatory, monitoring, sampling, and analytical testing activities for the groundwater monitoring. The narrative shall be sufficiently detailed to verify compliance with the NOA, this MRP, and the Standard Provisions and Reporting Requirements. The narrative shall be supported by field logs for each well documenting depth to groundwater; parameters measured before, during, and after purging; method of purging; calculation of the casing volume; and total volume of water purged.
3. Calculation of groundwater elevations, an assessment of the groundwater flow direction and gradient on the date of measurement, comparison to previous flow direction and gradient data, and discussion of seasonal trends, if any.
4. A narrative discussion of the analytical results for all media and locations monitored, including spatial and temporal trends, with reference to summary data tables, graphs, and appended analytical reports (as applicable).
5. A comparison of monitoring data to the discharge specifications, groundwater limitations and surface water limitations, and explanation of any violation of those requirements.
6. Summary data tables of historical and current water table elevations and analytical results.
7. A scaled map showing relevant structures and features of the facility, the locations of monitoring wells and other sampling stations, and groundwater elevation contours referenced to mean sea level datum.
8. Copies of laboratory analytical report(s).

C. Annual Report

In addition to the semi-annual monitoring reports, an Annual shall be prepared. The Annual Report shall be submitted to the Central Valley Water Board by **1 February** each year. The Annual Report shall include the following:

1. The results from annual monitoring of the effluent, groundwater, and water supply;
2. Annual total influent flow and average dry weather flow;
3. The results from any sludge monitoring required by the disposal facility;
4. 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 NOA and General Order;
5. A discussion of any data gaps and potential deficiencies/redundancies in the

monitoring system or reporting program;

6. Tabular and graphical summaries of all data collected during the year, and
7. A copy of the certification for each certified wastewater treatment plant operator working at the facility and a statement about whether the Discharger is in compliance with Title 23, CCR, Division 3, Chapter 26.

A letter transmitting the self monitoring reports shall accompany each report. Such a 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 on the first day of the month following adoption of this Order.

This Order is issued under authority delegated to the Executive Officer by the Central Valley Water Board pursuant to Resolution R5-2009-0027 and is effective upon signature.

Ordered by: _____
PATRICK PULUPA, Executive Officer

12 June 2020

Date