CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

REVISED MONITORING AND REPORTING PROGRAM WQ 2014-0153-DWQ-R5287-1

FOR
EAST BAY MUNICIPAL UTILITY DISTRICT
PARDEE RESERVOIR RECREATION AREA
WASTEWATER TREATMENT PLANT
AMADOR COUNTY

This revised Monitoring and Reporting Program (MRP) describes requirements for monitoring influent, ponds, effluent, land application area, groundwater, sludge and water supply. This revised MRP is issued pursuant to Water Code Section 13267. The East Bay Municipal Utility District (Discharger) shall not implement any changes to this revised MRP unless and until another revision is issued by the Executive Officer.

The Discharger operates the wastewater system that is subject to the Notice of Applicability (NOA) of Water Quality Order 2014-0153-DWQ-R5287-1. The reports are necessary to ensure that the Discharger complies with the revised 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 wastewater samples should be representative of the volume and nature of the discharge. The time, date, and location of each grab sample shall be recorded on the sample chain of custody form. Wastewater flow monitoring shall be conducted continuously using a flow meter and shall be reported in cumulative gallons per day.

Field test instruments (such as pH and dissolved oxygen) may be used if:

1. The operator is trained in the proper use of the instrument;

2. The instruments are field calibrated prior to each use;

3. Instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and

4. Field calibration reports are submitted as described in the “Reporting” section of this MRP.

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 monitoring shall be performed at the headworks. Influent monitoring shall include the following:

Constituent	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Flow	gpd	Meter	Continuous	Quarterly
20°C BOD_5 [1]	mg/L	Grab	Monthly	Quarterly

[1] 5-day Biochemical Oxygen Demand.

POND MONITORING

Samples shall be collected from an established sampling station. Freeboard shall be measured vertically from the surface of the water to the lowest elevation of the surrounding berm and shall be measured to the nearest 0.1 feet. Monitoring of each pond shall include, at a minimum, the following:

Constituent	Units	Type of Sample	Sampling Frequenc	Reporting Frequency
Dissolved Oxygen [1]	mg/ L	Grab	Monthly	Quarterly
pH	Standard units	Grab	Monthly	Quarterly
Freeboard	0.1 feet	Measurement	Monthly	Quarterly
Odors	--	Observation	Monthly	Quarterly

[1] If the pond is too low to take a dissolved oxygen reading, then this shall be noted on the monitoring report.

EFFLUENT MONITORING

Effluent samples shall be collected from April through October. The time, date, and location of each grab sample shall be recorded on the sample chain of custody form. Effluent monitoring shall include the following:

Constituent	Units	Type of Sample	Sampling Frequency [1]	Reporting Frequency
Biological Oxygen Demand 5	mg/L	Grab	Weekly	Quarterly
Electrical Conductivity	µmhos/cm	Grab	Monthly	Quarterly
Nitrate as Nitrogen	mg/L	Grab	Monthly	Quarterly
Total Kjeldahl Nitrogen	mg/L	Grab	Monthly	Quarterly
pH	Std units	Grab	Monthly	Quarterly
Formaldehyde	mg/L	Grab	Monthly, May-Sept.	Quarterly
Zinc	mg/L	Grab	Monthly, May-Sept.	Quarterly
Phenol	mg/L	Grab	Monthly, May-Sept.	Quarterly
Standard Minerals [2]	mg/L	Grab	Annually	Annually

[1] Samples shall be collected between the months of April and October, unless described otherwise.

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

LAND APPLICATION AREA MONITORING

Monitoring of the land application area shall be conducted daily when wastewater is applied (April through October), and the results shall be included in the monthly monitoring report. Evidence of erosion, field saturation, runoff, or the presence of nuisance conditions shall be noted in the report. The tailwater collection ditch and valves shall be checked for leaks and overflows. Effluent monitoring results shall be used to calculate loading rates at the application area. Monitoring of the land application area shall include the following:

Constituent	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Flow	Gallons	Meter	Continuous	Quarterly
Rainfall	Inches	Measurement	Daily	Quarterly
Acreage Applied	Acres	Calculated	Daily	Quarterly

Constituent	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Application Rate	gal/acre•day	Calculated	Daily	Quarterly
BOD Loading Rate	lbs/acre•day	Calculated	Monthly	Quarterly
Total Nitrogen Loading Rate	lbs/ac/month	Calculated	Monthly	Quarterly

BOD denotes Biological Oxygen Demand.

GROUNDWATER MONITORING

Groundwater samples shall be collected from each groundwater monitoring well in accordance with an approved groundwater monitoring workplan. Prior to sampling, depth to groundwater shall be measured to the nearest 0.01 feet. Water table elevations shall be calculated and used to determine groundwater gradient and flow direction. Samples shall be collected and analyzed using approved EPA methods or other methods approved by the Central Valley Water Board. Groundwater monitoring shall include, at a minimum, the following:

Constituents	Units	Type of Sample	Sampling and Reporting Frequency
Depth to Groundwater	± 0.01 feet	Measurement	Semi-annually
Groundwater Elevation	± 0.01 feet	Calculated	Semi-annually
Gradient	feet/feet	Calculated	Semi-annually
Gradient Direction	degrees	Calculated	Semi-annually
pH	pH units	Grab	Semi-annually
Chloride	mg/L	Grab	Semi-annually
Sodium	mg/L	Grab	Semi-annually
Total Coliform Organisms	MPN/100 mL	Grab	Semi-annually
Electrical Conductivity	µmhos/cm	Grab	Semi-annually
Nitrate-N	mg/L	Grab	Semi-annually

Constituents	Units	Type of Sample	Sampling and Reporting Frequency
Zinc	mg/L	Grab	Semi-annually
Total Phenols	mg/L	Grab	Semi-annually
Formaldehyde	mg/L	Grab	Semi-annually
Standard Minerals [1]	mg/L	Grab	Annually

[1] Standard Minerals shall include the following compounds: boron, dissolved iron, dissolved manganese, calcium, magnesium, potassium, sulfate, total alkalinity (including alkalinity series), and hardness.

SOLID WASTE AND SLUDGE MONITORING

A log shall be kept of solid waste (grits and screenings) and sludge quantities generated and of handling and disposal activities, and shall be submitted as part of the monthly monitoring reports.

WATER SUPPLY MONITORING

A sampling station shall be established where a representative sample of the municipal water supply can be obtained. Water supply monitoring shall include at least the following:

Constituents	Units	Sampling and Reporting Frequency
Electrical Conductivity	µmhos/cm	Annually
pH	pH units	Annually
Standard Minerals [1]	mg/L	Annually

1. Standard Minerals shall include, at a minimum, the following constituents: boron, iron, manganese, calcium, magnesium, potassium, sulfate, chloride, sodium, 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: East Bay Municipal Utility District, Pardee Reservoir Recreation Area Wastewater Treatment Plant WWTP, Amador County		
Program: Non-15 Compliance	Order: 2014-0153-DWQ-R5287-1	Place ID: 247616

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 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 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.

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 California Registered Engineer or Geologist and signed by the registered professional.

If violations occur, the Discharger shall notify the Central Valley Water Board within 10 business days after receiving the analytical laboratory reports.

A. Quarterly Monitoring Reports

Daily, weekly, and monthly monitoring data shall be reported in quarterly monitoring reports. Quarterly reports shall be submitted to the Regional Board on the **first day of the second month after the quarter ends** (e.g. the January-March Quarterly Report is due by May 1st). At a minimum, the reports shall include:

1. Results of influent, pond, effluent, and land application area monitoring;

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; and

3. If requested by staff, copies of laboratory analytical report(s).

B. Semi-annual Monitoring Reports

In addition to the monthly monitoring reports, the Discharger shall establish quarterly and semi-annual sampling schedules for groundwater monitoring such that samples are obtained approximately every three and six months. Semi-annual monitoring reports shall be submitted to the Board by the **1st day of February and August.** The semi-annual reports shall include the following:

1. Results of groundwater monitoring;

2. A narrative description of all preparatory, monitoring, sampling, and analytical testing activities for groundwater monitoring. The narrative shall be sufficiently detailed to verify compliance with the WDR, this MRP, and the Standard Provisions and Reporting Requirements. The narrative shall be supported by field logs for each well documenting depth to groundwater and method of sampling;

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. Summary data tables of historical and current groundwater table elevations and analytical results;

6. A comparison of monitoring data to the groundwater limitations and an explanation of any violation of those requirements; and

7. Copies of laboratory analytical report(s) for groundwater monitoring.

C. Annual Report

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

1. If requested by staff, tabular and graphical summaries of all data collected during the year;

2. A discussion of compliance and the corrective actions taken, as well as any planned or proposed actions needed to bring the discharge into full compliance with the waste discharge requirements;

3. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program;

4. 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;

5. Summary of information on the disposal of sludge and/or solid waste;

6. The results from any sludge monitoring required by the disposal facility; and

7. The results from annual monitoring of the effluent, groundwater and water supply.

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 begin implementing the above monitoring program on the first day of the month following issuance of the revised MRP WQ 2014 0153-DWQ-R5279-1.

This Order is issued under authority delegated to the Executive Officer by the Central Valley Water Board pursuant to Resolution R5-2018-0057 and is effective upon signature.

Ordered by:

John J. Baum

Digitally signed by John J. Baum
Date: 2022.12.14 11:48:23 -08'00'

Water Boards

for Patrick Pulupa, Executive Officer

12/14/2022

(Date)