

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION**

**REVISED MONITORING AND REPORTING PROGRAM NO.
2014-0153-DWQ-R5330-1**

FOR

**CITY OF BERKELEY
BERKELEY TUOLUMNE CAMP
ONSITE WASTEWATER TREATMENT SYSTEM
TUOLUMNE COUNTY**

This Monitoring and Reporting Program (MRP) describes requirements for monitoring a wastewater treatment system. This MRP is issued pursuant to Water Code section 13267. The City of Berkeley (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. This MRP was initially issued on 21 February 2020 and then revised on 7 June 2022. The June 2022 revisions were made to reflect the Discharger's request to change the sewer effluent monitoring requirements.

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 Discharger owns and will operate the Berkeley Tuolumne Camp and the onsite wastewater treatment system (OWTS or Facility) that is subject to the Notice of Applicability (NOA) of Water Quality Order 2014-0153-DWQ-R5330. 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 (ELAP) 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.

If monitoring consistently shows no significant variation in magnitude of a constituent concentration or parameter after at least 12 months of monitoring, the Discharger may request this MRP be revised to reduce monitoring frequency. The proposal must include adequate technical justification for reduction in monitoring frequency.

SEPTIC TANK MONITORING

Effluent samples shall be taken from a location that represents the septic tank effluent quality distributed to the leachfield system. At a minimum, effluent monitoring shall include the following:

Table 1 - Septic Tank Effluent Monitoring Requirements

Parameter	Units	Sample Type	Sampling Frequency	Reporting Frequency
Flow Rate	gpd	Calculated (see 1 below)	Monthly	Quarterly

Parameter	Units	Sample Type	Sampling Frequency	Reporting Frequency
EC	µmhos/cm	Grab	Monthly	Quarterly
BOD ₅	mg/L	Grab	Monthly	Quarterly
TSS	mg/L	Grab	Monthly	Quarterly
Total Nitrogen (as N)	mg/L	Grab	Monthly	Quarterly

1. The Discharger shall calculate the sewer effluent average daily flow using the daily sewer effluent pump run times. In addition, the Discharger shall report the monthly average domestic water flow.

All septic tanks shall be inspected and/or pumped at least as frequently as described below in table 2. Inspections of sludge and scum depth are not required if the tanks are pumped at least annually.

Table 2 – Septic Tank Monitoring Requirements

Parameter	Units	Measurement Type	Inspection/Reporting Frequency
Sludge depth and scum thickness in each compartment of each tank	Feet	Staff Gauge	Annually
Distance between bottom of scum layer and bottom of outlet device	Inches	Staff Gauge	Annually
Distance between top of sludge layer and bottom of outlet device	Inches	Staff Gauge	Annually
Effluent filter condition (if equipped, clean as needed)	NA	NA	Annually

Septic tanks shall be pumped when any one of the following conditions exists:

1. The combined thickness of sludge and scum exceeds one third of the tank depth of this first compartment.
2. The scum layer is within 3 inches of the outlet device.
3. The sludge layer is within 8 inches

If a septic tank is pumped during the year, the pumping report shall be submitted with the annual report. All pumping reports shall be submitted with the next regularly scheduled monitoring report. At a minimum, the record shall include the date, nature of service, service company name, and service company license number.

SUBSURFACE DISPOSAL AREA

In general, monitoring shall be sufficient to determine if wastewater is evenly applied, the disposal area is not saturated, burrowing animals and/or deep-rooted plants are not present, and odors are not present. Inspection of dosing pump controllers, automatic

distribution valves, etc. is required to maintain optimum treatment in the disposal area. Monitoring of the seepage pits shall, at a minimum, include the monitoring specific in table 3.

Table 3: Subsurface Disposal Area Monitoring Requirements

Constituent	Inspection Frequency	Reporting Frequency
Pump Controllers, Automatic Valves, etc. (see 1. Below)	Quarterly	Quarterly
Nuisance Odor Condition	Quarterly	Quarterly
Saturated Soil Conditions (see 2. Below)	Quarterly	Quarterly
Plant Growth (see 3. Below)	Quarterly	Quarterly
Vectors or Animals Burrowing (see 4. Below)	Quarterly	Quarterly

1. All pump controllers and automatic distribution valves shall be inspected for proper operation as recommended by the manufacturer.
2. Inspect a disposal area for saturated conditions.
3. Shallow-rooted plants are generally desirable, deep-rooted plants such as trees shall be removed as necessary.
4. Evidence of animals burrowing shall be immediately investigated, and burrowing animal populations controlled as necessary.

SLUDGE/BIOSOLIDS MONITORING

The Discharger shall report the handling and disposal of all solids (e.g., screenings, grit, sludge, biosolids, etc.) generated at the wastewater system. Records shall include the name/contact information for the hauling company, the type and amount of waste transported, the date removed from the wastewater system, the disposal facility name and address, and copies of analytical data required by the entity accepting the waste. These records shall be submitted as part of the annual monitoring report.

REPORTING

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., effluent, solids, etc.), and reported analytical or visual inspection results are readily discernable. The data shall be summarized to clearly illustrate compliance with the General Order and NOA 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 regularly scheduled monitoring report and shall be included in calculations as appropriate.

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 50 MB should be emailed to: centralvalleyfresno@waterboards.ca.gov. Documents that are 50 MB or larger should be transferred to a disk and mailed to the appropriate Regional Water Board office, in this case 1685 E Street, Fresno, CA 93706. To ensure that your submittals are routed to

the appropriate staff, the following information block should be included in any email used to transmit documents to this office:

Program: Non-15,
Place ID: 748025,
Facility Name: Berkeley Tuolumne Camp
Order: 2014-0153-DWQ-R5330

A. Quarterly Monitoring Reports

Quarterly reports shall be submitted to the Regional Water 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). The reports shall bear the certification and signature of the Discharger's authorized representative. At the minimum, the quarterly reports shall include:

1. Results of all required monitoring, including the monthly average domestic water meter flow.
2. A comparison of monitoring data to the requirements (including the flow limitation), disclosure of any violations of the NOA and/or General Order, and an explanation of any violation of those requirements. (Data shall be presented in tabular format).
3. Copies of laboratory analytical report(s) and chain of custody form(s).

B. Annual Report

Annual Reports shall be submitted to the Regional Water Board **by March 1st following the monitoring year**. The Annual Report shall include the following:

1. Tabular and graphical summaries of all monitoring data collected during the year.
2. An evaluation of the performance of the wastewater treatment system, including discussion of the capacity issues nuisances' conditions, system problems and a forecast of the flows anticipated in the next year. A flow rate evaluation, as described in the General Order (Provision E.2.c), shall also be submitted.
3. A discussion of compliance and the corrective action taken, as well as any planned or proposed actions needed to bring the discharge into compliance with the NOA and/or General Order.
4. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.
5. The name and contact information for the wastewater operator responsible for operation, maintenance, and system monitoring.

A letter transmitting the monitoring reports shall accompany each report. The letter shall report violations found during the reporting period, and actions taken or planned to

correct the violations and prevent future violations. The transmittal letter shall contain the following penalty of perjury statement and shall be signed by the Discharger or the Discharger's authorized agent:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

The Discharger shall implement the above monitoring program on **7 June 2022**. Until the Camp is constructed, the Discharger shall only need to provide quarterly updates on the status of the Camp construction and the anticipated date of commencing discharge to the Facility.

Ordered by:

Original Signed by Clay L. Rodgers for:
PATRICK PALUPA, Executive Officer

6/7/2022
(Date)

GLOSSARY

BOD ₅	Five-day biochemical oxygen demand
CaCO ₃	Calcium carbonate
DO	Dissolved oxygen
EC	Electrical conductivity at 25° C
FDS	Fixed dissolved solids
TDS	Total dissolved solids
TKN	Total Kjeldahl nitrogen
TSS	Total suspended solids
Continuous	The specified parameter shall be measured by a meter continuously.
24-hr Composite eight aliquots	Samples shall be a flow-proportioned composite consisting of at least over a 24-hour period.
Daily	Every day except weekends or holidays.
Twice Weekly	Twice per week on non-consecutive days.
Weekly	Once per week.
Twice Monthly	Twice per month during non-consecutive weeks.
Monthly	Once per calendar month.
Quarterly	Once per calendar quarter.
Semiannually	Once every six calendar months (i.e., two times per year) during non-consecutive quarters.
Annually	Once per year.
mg/L	Milligrams per liter
mg/kg	Milligrams per kilogram
mL/L	Milliliters [of solids] per liter
µg/L	Micrograms per liter
µmhos/cm	Micromhos per centimeter
gpd	Gallons per day
mgd	Million gallons per day
MPN/100 mL	Most probable number [of organisms] per 100 milliliters
NA	Denotes not applicable