
Lahontan Regional Water Quality Control Board

March 10, 2015

WDID No. 6B360107001

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**AMENDED MONITORING AND REPORTING PROGRAM NO. R6V-2009-0037-A1,
LAKE ARROWHEAD COMMUNITY SERVICES DISTRICT, LAKE ARROWHEAD,
SAN BERNARDINO COUNTY**

The California Regional Water Quality Control Board, Lahontan Region (Water Board) has amended the Monitoring and Reporting Program for the Lake Arrowhead Community Services District (District) to delete the monthly requirements to submit information related to infiltration/inflow activities. The District is providing this information separately as required by Cease and Desist Order No. R6V-2013-0022. Enclosed is the amended Monitoring and Reporting Program No. R6V-2009-0037-A1.

We look forward to working with you in your efforts to protect water quality. If you have questions, please contact Mike Coony, P.E., Water Resources Control Engineer at (760) 241-7353 mcoony@waterboards.ca.gov, or Jehiel Cass, P.E., Senior Water Resources Control Engineer, at (760) 241-2434 jcass@waterboards.ca.gov.



PATTY Z. KOUYOUMDJIAN
EXECUTIVE OFFICER

Enclosure: MRP No. 2009-0037-A1

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**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION**

**AMENDED MONITORING AND REPORTING PROGRAM
NO. R6V-2009-0037-A1**

WDID NO. 6B360107001

FOR

**LAKE ARROWHEAD COMMUNITY SERVICES DISTRICT
DOMESTIC WASTEWATER TREATMENT FACILITIES**

San Bernardino County

I. MONITORING

A. Flow Monitoring

1. The following shall be recorded for the flows from the Collection System to the Grass Valley Wastewater Treatment Plant (WWTP):
 - a. Maximum instantaneous flow rate (million gallons per day) for each day;
 - b. Total volume (million gallons) for each day;
 - c. Total volume (million gallons) for each month; and
 - d. Average flowrate (million gallons per day) for each month.
2. The following shall be recorded for flows to the Irrigation Area and Percolation Ponds:
 - a. Total volume (million gallons) for each day;
 - b. Total volume (million gallons) for each month; and
 - c. Average flowrate (million gallons per day) for each month.
3. The Discharger shall measure and record the freeboard (distance from the top of the lowest part of the dike to the wastewater surface in pond) in each Percolation Pond each month. If a Percolation Pond does not contain wastewater, indicate that it is empty.

B. Effluent Monitoring

Samples of effluent from the Grass Valley WWTP shall be collected and analyzed to determine the magnitude of the following parameters:

<u>Parameter</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Frequency</u> ¹
BOD ²	mg/L	Grab	Weekly
Methylene Blue	mg/L	Grab	Weekly
Active Substances			

C. Outfall Monitoring

The Discharger shall collect samples of effluent from the Outfall Pipeline System at the Hesperia Disposal Site. (In lieu of sampling at the Hesperia Effluent Management Site, the Discharger may collect effluent samples at the Grass Valley WWTP.) The samples shall be analyzed to determine the magnitude of the following parameters:

<u>Parameter</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Frequency</u> ¹
BOD ²	mg/L	6-hour composite ³	Weekly
Chemical Oxygen Demand (COD)	mg/L	6-hour composite ³	Weekly
Methylene Blue Active Substances	mg/L	6-hour composite ³	Weekly
Dissolved Oxygen (DO)	mg/L	Grab	Weekly
pH	pH units	Grab	Weekly
Nitrate Nitrogen	mg/L as N	6-hour composite ³	Weekly
Kjeldahl Nitrogen	mg/L as N	6-hour composite ³	Weekly
Ammonia Nitrogen	mg/L as N	6-hour composite ³	Weekly
Total Organic Carbon	mg/L	6-hour composite ³	Monthly
Chloride	mg/L	24-hour composite ³	Quarterly
Sodium	mg/L	24-hour composite ³	Quarterly
Sulfate	mg/L	24-hour composite ³	Quarterly
Total Dissolved Solids	mg/L	24-hour composite ³	Quarterly
Total Trihalomethane Constituents (THMs) ⁷	mg/L	Grab	Quarterly
Total Haloacetic Acid Constituents (HAA5s) ⁷	mg/L	Grab	Quarterly
Total Chromium ⁴	mg/L	24-hour composite ³	Annually
Hexavalent Chromium ⁴	mg/L	24-hour composite ³	Annually
Heavy Metals ⁵	mg/L	24-hour composite ³	Annually
Semivolatile Organic Compounds (SVOCs) ⁶	mg/L	24-hour composite ³	Annually
Volatile Organic Compounds (VOCs) ⁷	mg/L	Grab	Annually
Gross Alpha	pCi/L	24-hour composite ³	Annually ⁸
Gross Beta	pCi/L	24-hour composite ³	Annually ⁸

D. Ground Water Monitoring Hesperia Disposal Site

Grab samples of ground water shall be collected from the following wells:

<u>Well No.</u>	<u>Type</u>
PW-2	Private water supply well
PW-3 or PW-3A	Private water supply well
PW-4A	Hesperia Lakes Park supply well
MW-5	Ground water monitoring well
MW-1	Ground water monitoring well
MW-2	Ground water monitoring well
MW-3	Ground water monitoring well
MW-4	Ground water monitoring well
MW-6	Ground water monitoring well
MW-7	Ground water monitoring well
TW-1	Ground water monitoring well
TW-2	Ground water monitoring well
TW-3	Ground water monitoring well
TW-4	Ground water monitoring well
TW-5	Ground water monitoring well
TW-6	Ground water monitoring well

The frequency of well sampling shall be as described below, and the samples shall be analyzed to determine the magnitude of the parameters listed below.

<u>Parameter</u>	<u>Frequency</u> <u>(MW-1, 2, 3, 4,</u> <u>5, 6 & 7)</u>	<u>Frequency</u> <u>(TW- 1, 2, 3, 4,</u> <u>5 & 6)</u>	<u>Frequency</u> <u>(PW-2 & 4A</u> <u>and PW 3 or</u> <u>3A)</u>
Kjeldahl Nitrogen	Quarterly	Quarterly	Semiannually
Ammonia Nitrogen	Quarterly	Quarterly	Semiannually
Nitrate Nitrogen as N	Quarterly	Quarterly	Semiannually
Total Dissolved Solids	Quarterly	Quarterly	Semiannually
BOD ²	Quarterly	Semiannually	Semiannually
Chloride	Quarterly	Semiannually	Semiannually
COD	Quarterly	Semiannually	Semiannually
Methylene Blue Active Substances	Annually	Annually	Annually
Total Trihalomethane Constituents (THMs) ⁷	Semiannually ⁹	Semiannually ⁹	Annually
Total Haloacetic Acid Constituents (HAA5s) ⁷	Semiannually ⁹	Semiannually ⁹	Annually
Sodium	Quarterly	Semiannually	Semiannually
Sulfate	Quarterly	Semiannually	Semiannually
Total Organic Carbon	Quarterly	Semiannually	Semiannually
VOCs ⁷	Annually	Annually	Annually
Gross Alpha	Annually	Annually	Annually
Gross Beta	Annually	Annually	Annually

The Discharger shall sufficiently purge each monitoring well before sampling. Purging shall be in accordance with generally accepted sampling practice, to obtain a "representative" ground water sample. If a non-purging method is used, the method proposed must be approved, in advance, by Water Board staff.

Quarterly, the Discharger shall measure and record the depth below the ground surface and determine the elevation above mean sea level of the ground water surface in the ground water monitoring wells listed above.

Annually, the Discharger shall plot the above-described elevations and elevation isopleths (ground water elevation contours) on an 11" x 17" copy of a site plan, which shows the boundaries of the Hesperia Disposal Site and locations of the above listed wells; and calculate and record the ground water gradient, the direction of the gradient, and velocity of ground water flow at the authorized disposal/recycle sites.

Quarterly, the Discharger shall monitor the wells for the following field parameters:

<u>Parameter</u>	<u>Units</u>
Electrical Conductivity (E _c)	µMHOS/CM
Ph	Ph Units
Temperature	° F or °C
Turbidity	NTU

E. Sludge Monitoring

In the last quarterly report of the calendar year, the Discharger shall describe the methods used to dispose/recycle biosolids. Disposal/recycling must be in accordance with the provisions in the Discharger's Sludge Management Plan and US EPA regulations.

F. Supply Water Monitoring

For each semiannual period, a report shall be submitted to the Water Board detailing a chemical analysis that is representative of the average supply water used within the pertaining sewered areas. Supply water samples for this analysis shall be collected concurrently with effluent samples.

G. Operation and Maintenance

A brief summary of any operational problems and maintenance activities shall be submitted to the Water Board with each monitoring report.

This summary shall discuss:

1. Any modifications or additions to the wastewater conveyance system, treatment facilities, or disposal facilities;
2. Any major maintenance conducted on the wastewater conveyance system, treatment facilities, or disposal facilities;
3. Any major problems occurring in the wastewater conveyance system, treatment facilities, or disposal facilities; and
4. The calibration of any wastewater flow measuring devices.

I. REPORTING

A. General Provisions

1. The Discharger shall comply with the "General Provisions for Monitoring and Reporting," dated September 1, 1994, which is attached to and made part of this Monitoring and Reporting Program.
2. In accordance with Provision No. 3.a. of the General Provisions for Monitoring and Reporting, the Discharger shall make a compliance statement in each submitted monitoring report, noting each violation that occurred during the reporting period and actions taken and/or proposed to return into compliance.
3. The names and grades of treatment facility operators, certified in accordance with Provision No. II.D shall be reported to the Water Board's Victorville office by **March 30th** of each year.

B. Sampling and Analysis Plan

Pursuant to General Provision No. 1d. of the General Provisions for Monitoring and Reporting, the Discharger shall submit to the Regional Board by October 31, 2009, a Sampling and Analysis Plan (SAP) for consideration of approval. The SAP shall include a detailed description of procedures and techniques for:

- i. Sample collection, including purging techniques, sampling equipment, and decontamination of sampling equipment;
- ii. Sample preservation and shipment;
- iii. Analytical procedures;
- iv. Chain of custody control; and
- v. Quality assurance/quality control (QA/QC).

C. Quarterly Reports

Beginning on **July 31, 2009**, quarterly monitoring reports including the preceding information shall be submitted to the Water Board before the end of the month following each quarterly monitoring period.

D. Annual Report

By **March 30th** of each year, the Discharger shall submit an annual report to the Water Board with the following information:

1. The compliance record and the corrective actions taken or planned, which may be needed to bring the discharge into full compliance with the discharge requirements.
2. A time schedule for additional proposed compliance actions.
3. Any needed updates to the SAP.
4. Graphical and tabular data for the monitoring data obtained for the previous year.
3. Graphical and tabular data for the monitoring data obtained for the previous year.

Ordered by:



PATTY Z. KOUYOUMDJIAN
EXECUTIVE OFFICER

Dated: March 10, 2015

Attachment: A General Provisions for Monitoring and Reporting Program

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- 1 Samples shall be collected at a time during the day when the flowrate is at a maximum. At least one half of the samples that are collected on a weekly frequency shall be collected on weekends.
 - 2 BOD (5-day, 20°C) conducted on an unfiltered sample.
 - 3 Samples shall be collected at least every hour and composited in proportion to the flowrate.
 - 4 Use appropriate USEPA approved methods that will quantify concentrations down to 0.001 mg/L for hexavalent chromium and 0.0025 mg/L for total chromium.
 - 5 Analyze for the metals listed in Table II of Section 66261.24(a)(2)(A), Title 22, California Code of Regulations. Use appropriate USEPA approved methods with a minimum quantification limit equal to the background concentration of each metal in ground water. In no case shall the quantification limit be more than the Detection Limits for the Purposes of Reporting (DLRs). The California Department of Health Services establishes DLRs for analyses conducted on samples collected from drinking water supply systems.
 - 6 Use either USEPA Method 625 or 8027.
 - 7 Use an appropriate USEPA Method with a Detection Limit for the Purposes of Reporting (DLR) of 0.5 micrograms per liter or less.
 - 8 Samples shall be taken after disclosure of backwash from deionization unit and there has been adequate time for the release to travel to the sampling point.
 - 9 Frequency is annually following two consecutive years of non-detect results.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

GENERAL PROVISIONS
FOR MONITORING AND REPORTING

1. SAMPLING AND ANALYSIS

- a. All analyses shall be performed in accordance with the current edition(s) of the following documents:
 - i. Standard Methods for the Examination of Water and Wastewater
 - ii. Methods for Chemical Analysis of Water and Wastes, EPA
- b. All analyses shall be performed in a laboratory certified to perform such analyses by the California State Department of Health Services or a laboratory approved by the Regional Board Executive Officer. Specific methods of analysis must be identified on each laboratory report.
- c. Any modifications to the above methods to eliminate known interferences shall be reported with the sample results. The methods used shall also be reported. If methods other than EPA-approved methods or Standard Methods are used, the exact methodology must be submitted for review and must be approved by the Regional Board prior to use.
- d. The Discharger shall establish chain-of-custody procedures to insure that specific individuals are responsible for sample integrity from commencement of sample collection through delivery to an approved laboratory. Sample collection, storage, and analysis shall be conducted in accordance with an approved Sampling and Analysis Plan (SAP). The most recent version of the approved SAP shall be kept at the facility.
- e. The Discharger shall calibrate and perform maintenance procedures on all monitoring instruments and equipment to ensure accuracy of measurements, or shall insure that both activities will be conducted. The calibration of any wastewater flow measuring device shall be recorded and maintained in the permanent log book described in 2.b, below.
- f. A grab sample is defined as an individual sample collected in fewer than 15 minutes.
- g. A composite sample is defined as a combination of no fewer than eight individual samples obtained over the specified sampling period at equal intervals. The volume of each individual sample shall be proportional to the discharge flow rate at the time of sampling. The sampling period shall equal the discharge period, or 24 hours, whichever period is shorter.

2. OPERATIONAL REQUIREMENTS

a. Sample Results

Pursuant to California Water Code Section 13267(b), the Discharger shall maintain all sampling and analytical results including: strip charts; date, exact place, and time of sampling; date analyses were performed; sample collector's name; analyst's name; analytical techniques used; and results of all analyses. Such records shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Regional Board.

b. Operational Log

Pursuant to California Water Code Section 13267(b), an operation and maintenance log shall be maintained at the facility. All monitoring and reporting data shall be recorded in a permanent log book.

3. REPORTING

- a. For every item where the requirements are not met, the Discharger shall submit a statement of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time, and shall submit a timetable for correction.
- b. Pursuant to California Water Code Section 13267(b), all sampling and analytical results shall be made available to the Regional Board upon request. Results shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Regional Board.
- c. The Discharger shall provide a brief summary of any operational problems and maintenance activities to the Board with each monitoring report. Any modifications or additions to, or any major maintenance conducted on, or any major problems occurring to the wastewater conveyance system, treatment facilities, or disposal facilities shall be included in this summary.
- d. Monitoring reports shall be signed by:
 - i. In the case of a corporation, by a principal executive officer at least of the level of vice-president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates;
 - ii. In the case of a partnership, by a general partner;
 - iii. In the case of a sole proprietorship, by the proprietor; or

- iv. In the case of a municipal, state or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.
- e. Monitoring reports are to include the following:
 - i. Name and telephone number of individual who can answer questions about the report.
 - ii. The Monitoring and Reporting Program Number.
 - iii. WDID Number.
- f. Modifications

This Monitoring and Reporting Program may be modified at the discretion of the Regional Board Executive Officer.

4. NONCOMPLIANCE

Under Section 13268 of the Water Code, any person failing or refusing to furnish technical or monitoring reports, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in an amount of up to one thousand dollars (\$1,000) for each day of violation under Section 13268 of the Water Code.