



Central Valley Regional Water Quality Control Board

7 August 2024

James Luther, President Bass Lake Heights Mutual Water Company P.O. Box 684 Oakhurst, CA 93644 CERTIFIED MAIL 7020 2450 0000 6785 4224

NOTICE OF APPLICABILITY; CENTRAL VALLEY WATER BOARD RESOLUTION R5-2023-0061, WAIVER OF WASTE DISCHARGE REQUIREMENTS, REPORTS OF WASTE DISCHARGE, AND/OR WATER RECYCLING REQUIREMENTS FOR SPECIFIC TYPES OF DISCHARGE WITHIN THE CENTRAL VALLEY REGION; BASS LAKE HEIGHTS MUTUAL WATER COMPANY; ARSENIC TREATMENT SYSTEM BACKWASH; MADERA COUNTY

On 15 March 2024, Bass Lake Heights Mutual Water Company submitted a Report of Waste Discharge (RWD) to obtain coverage under Resolution R5-2023-0061, *Waiver of Waste Discharge Requirements, Reports of Waste Discharge, and/or Water Recycling Requirements for Specific Types of Discharge Within the Central Valley Region* (Low Threat Waiver or Waiver) for discharges of filter backwash water to land from backwashing filters used in the treatment system to remove arsenic from its drinking water supply. According to the RWD, backwash water will be captured and used for landscape irrigation on land owned by Jim Luther, president of the Bass Lake Heights Mutual Water Company. Discharges from backwashing the arsenic treatment system were previously regulated under R5-2018-0085, which expired on 5 December 2023. Resolution R5-2023-0061 was adopted by the Central Valley Regional Water Quality Control Board (Central Valley Water Board) on 14 December 2023 and replaces resolution R5-2018-0085. Bass Lake Heights Mutual Water Company requests continued coverage under the renewed waiver.

Based on the information provided in the RWD, the discharge meets the conditions of the Low Threat Waiver. The discharge is hereby enrolled under the Low Threat Waiver and assigned **enrollee number R5-2023-0061-0027**. Please include this number on all correspondence related to this discharge. In accordance with the requirements in Attachment A of the Low Threat Waiver, this Notice of Applicability (NOA) is accompanied by Monitoring and Reporting Program (MRP) R5-2023-0061-0027 to ensure compliance with discharge conditions specified in the Low Threat Waiver. The MRP was developed

MARK BRADFORD, CHAIR | PATRICK PULUPA, ESQ., EXECUTIVE OFFICER

after consideration of your waste characterization and disposal practices described in the RWD.

PROJECT LOCATION

Bass Lake Heights Mutual Water Company's arsenic treatment system at 52682 Cedar Drive, Oakhurst in Madera County is approximately four miles northeast of Oakhurst and one-half mile west of Bass Lake (Assessor's Parcel Numbers 059-120-028 and 059-120-041). This portion of Madera County is within the Sacramento and San Joaquin River Basins.

The Water Quality Control Plan for the Sacramento and San Joaquin River Basins, Fifth Edition, revised May 2018 (hereafter Basin Plan), designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve water quality objectives for all waters of the Basin.

PROJECT DESCRIPTION

The Bass Lake Heights Mutual Water Company (hereafter Discharger) operates a residential water system consisting of three supply wells that provides water to approximately 100 residential homes. Due to arsenic in its supply wells at concentrations above the Primary Maximum Contaminant Level of 0.01 mg/L, the Discharger installed an arsenic treatment system to remove arsenic from its drinking water supply. The arsenic treatment system consists of two 30-inch filtration vessels filled with granular ferric hydroxide (GFH) and a backwash storage tank. As part of the routine maintenance, the treatment system filters are periodically backwashed to flush out particulate material clogging the filter media.

According to the RWD, the filter system is backwashed using treated water from the water storage tanks. The backwash process generally occurs once every ten days to two weeks and generates about 520 to 850 gallons of backwash water. The backwash water is temporarily stored in the backwash storage tank until it is utilized by the neighboring property owner (Jim Luther) for landscape irrigation. An agreement signed by Jim Luther, president of the Bass Lake Heights Mutual Water Company, to accept up to a 1,000 gallons per week of filter backwash water from the Bass Lake Heights Mutual Water Company's arsenic treatment system was included with the RWD.

Samples of the backwash water collected on 26 February 2019, prior to the backwash storage tank, indicate elevated concentrations of arsenic and iron above their respective California Primary Maximum Contaminant Levels (MCLs). Bob Protzman (operator for the water system) stated that the Discharger has a bag filter installed on the discharge line leaving the backwash storage tank to reduce iron concentrations in the discharge. A confirmation sample collected on 9 April 2019, after the bag filter, shows arsenic and iron concentrations below the MCLs. With filtering, the discharge of backwash water complies with the terms and conditions in the Low Threat Waiver.

Samples of the backwash water were collected in 2023 and submitted as part of the 2023 annual self-monitoring report. The results are presented in the table below:

Constituent	Units	Backwash Sample (5/10/23)	Backwash Sample (10/30/23)	Maximum Contaminant Levels (MCLs)
Electrical Conductivity (EC)	µmhos/cm	270	330	900
Total Dissolved Solids (TDS)	mg/L	220		500
Iron (mg/L)	mg/L	ND	ND	0.3
Manganese (mg/L)	mg/L	ND	ND	0.05
Arsenic (mg/L)	mg/L	ND	ND	0.01

Table 1 - Backwash Quality Sampling

FACILITY-SPECIFIC REQUIREMENTS

- 1. Discharge of filter backwash water shall be conducted as described in the RWD and in accordance with the requirements contained in the Low Threat Waiver.
- 2. Discharge of filtered backwash water at a location or in a manner different from that described in this NOA is prohibited.
- 3. The Discharger shall notify the Central Valley Water Board of any change in agreement or use of the discharge of backwash water for landscape irrigation as described in the RWD and this NOA.
- 4. The Discharger shall comply with the attached Monitoring and Reporting Program (MRP) R5-2023-0061-0027.
- 5. Failure to abide by the conditions of this NOA, attached MRP R5-2023-0061-0027, and the Low Threat Waiver, could result in enforcement actions, as authorized by provisions of the California Water Code.

The Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) has gone to a Paperless Office System. 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: centralvalleyfresno@waterboards.ca.gov. Documents that are 50MB or larger should be transferred to a disk and mailed to the Central Valley Water Board office at 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:

7 August 2024

Program: Non-15 Place ID: 757968 Facility Name: Bass Lake Heights Mutual Water Company, Arsenic Treatment System Enrollee Number: R5-2023-0061-0027.

The Low Threat Waiver R5-2023-0061 and this NOA **will expire on 14 December 2028**. Prior to this date, the Discharger shall contact the Central Valley Water Board to submit a new RWD and application fee to continue coverage under a renewed Low Threat Waiver or to obtain individual waste discharge requirements or a waiver.

If you have any questions regarding this NOA, please contact Cruz Romero at (559) 445-5036 or by email at Cruz.Romero@waterboards.ca.gov.

Original Signed by Christina Shupe For Patrick Pulupa Executive Officer

Enclosures:

- Monitoring and Reporting Program R5-2023-0061-0027
- Resolution R5-2023-0061 (Discharger Only)

CC:

- Madera County Environmental Health Department, Madera
- Sudarshan Poudyal, Division of Drinking Water, Fresno (via email)

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM R5-2023-0061-0027 FOR BASS LAKE HEIGHTS MUTUAL WATER COMPANY ARSENIC TREATMENT SYSTEM BACKWASH MADERA COUNTY

On 7 August 2024, Bass Lake Heights Mutual Water Company was issued Notice of Applicability (NOA) R5-2023-0061-0027, for coverage under Resolution R5-2023-0061, *Waiver of Waste Discharge Requirements, Reports of Waste Discharge, and/or Water Recycling Requirements for Specific Types of Discharge Within the Central Valley Region* (Low Threat Waiver or Waiver) for discharge of filter backwash water to land from its arsenic treatment system. This Monitoring and Reporting Program (MRP) is issued pursuant to Water Code section 13267. Bass Lake Heights Mutual Water Company (or Discharger) shall not implement any changes to this MRP unless and until a revised MRP is issued by the Central Valley Regional Water Quality Control Board (Central Valley Water Board) or the Executive Officer.

Section 13267, subsection (b)(1) of the California Water Code states:

"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."

The Discharger owns and operates the treatment and disposal systems that are subject to NOA R5-2023-0061-0027. These reports are necessary to ensure that the Discharger complies with the NOA, and the conditions specified in the Low Threat Waiver. Pursuant to Water Code section 13267, the Discharger shall implement this MRP and submit the monitoring reports described herein.

Section 13268 of the California Water Code states, in part:

"(a)(1) 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."

A glossary of terms used in this MRP is included on the last page.

I. GENERAL MONITORING REQUIREMENTS

A. FLOW MONITORING

Hydraulic flow rates shall be measured at the monitoring points specified in this MRP. All flow monitoring systems shall be appropriate for the conveyance system (i.e., open channel flow or pressure pipeline) and liquid type. The measurements may be based on flow meter readings or pump run time estimate. The method of measurement must be specified. Unless otherwise specified, each flow meter shall be equipped with a flow totalizer to allow reporting of cumulative volume as well as instantaneous flow rate. Flow meters shall be calibrated at the frequency recommended by the manufacturer; typically, at least once per year and records of calibration shall be maintained for review upon request.

B. MONITORING AND SAMPLING LOCATIONS

Samples shall be obtained at the monitoring points specified in this MRP. The Central Valley Water Board's Executive Officer shall approve any proposed changes to sampling locations prior to implementation of the change.

The Discharger shall monitor the following locations to demonstrate compliance with the requirements of this MRP.

Monitoring Location	Monitoring Location Description
EFF-001	Location where a sample of the wastewater can be collected after the bag filter on the backwash storage tank.
LAA-001	Designated land application area.

Table 1 - Monitoring Locations

C. SAMPLING AND SAMPLE ANALYSIS

All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. Except as specified otherwise in this MRP, grab

> samples will be considered representative of water, wastewater, soil, solids/sludges and groundwater. The time, date, and location of each sample shall be recorded on the sample chain of custody form. Field test instruments (such as those used to measure pH, temperature, electrical conductivity, dissolved oxygen, wind speed, and precipitation) may be used provided that:

- 1. The operator is trained in proper use and maintenance of the instruments;
- 2. The instruments are field calibrated at the frequency recommended by the manufacturer;
- 3. The 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.

Laboratory analytical procedures shall comply with the methods and holding times specified in the following (as applicable to the medium to be analyzed):

- 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 most recently approved for use by the United States Environmental Protection Agency (US EPA) or the State Water Resources Control Board (State Water Board), Division of Drinking Water's Environmental Laboratory Accreditation Program (ELAP). 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.

II. GENERAL MONITORING REQUIREMENTS

A. EFFLUENT MONITORING (EFF-001)

Effluent samples shall be taken of the backwash water from a location after the bag filter on the backwash storage tank that represents the effluent quality

distributed to the land application area. At a minimum, effluent monitoring shall consist of the following:

Constituent	Units	Sample Type	Sample Frequency
Flow Rate	Gpd (see 1 below)	Meter (see 2 below)	Continuous
Electrical Conductivity	µmhos/cm	Grab	Semi-Annually (see 3 below)
Arsenic	ug/L	Grab	Semi-Annually (see 3 below)
Iron	mg/L	Grab	Semi-Annually (see 3 below)
Manganese	mg/L	Grab	Semi-Annually (see 3 below)
General Minerals (see 4 below)	various	Grab	1/three years (see 5 below)

Table 2 - Effluent Monitoring

 gpd=gallons per day; μmhos/cm=micromhos per centimeter; ug/L = micrograms per liter; mg/L= milligrams per liter

2. Flow rate may be metered or estimated. Basis for estimates should be provided in annual monitoring reports.

- 3. Semi-annual sampling shall be conducted in April and October unless otherwise specified.
- 4. General Mineral analysis shall include, alkalinity (as CaCO₃), bicarbonate (as CaCO₃), boron, calcium, carbonate (as CaCO₃), chloride, hardness, magnesium, nitrate as nitrogen, phosphate, potassium, sodium, sulfate, total dissolved solids, and include verification that the analysis is complete (i.e., cation/anion balance).
- 5. Sample shall be collected once every three years starting in 2024.

B. LAND APPLICATION AREA MONITORING

The Discharger shall inspect the Land Application Area (LAA) daily when backwash water is being applied. The results of the inspection shall be provided in tabular format and be included as part of the annual monitoring report. If no backwash water is applied during a reporting period, the monitoring report shall so state. LAA monitoring shall include the following:

Constituent	Sample Type	Sample Frequency
Saturated Soils/Ponding	Observation	Daily
Soil Erosion	Observation	Daily
Nuisance Odors or Vectors	Observation	Daily
Evidence of Runoff	Observation	Daily

C. SOLIDS DISPOSAL MONITORING

The Discharger shall report the handling and disposal of all solids associated with the arsenic treatment system and discharge of backwash water (e.g., filter material, sludge from the backwash storage tank, filter bags, etc.). Records shall include the name/contact information for the hauling company, the type and amount of waste transported, the date removed, the disposal facility name and address, and copies of any analytical data required by the entity accepting the waste. These records shall be submitted as part of the annual monitoring report.

III. REPORTING REQUIREMENTS

All monitoring reports should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be emailed to: <u>centralvalleyfresno@waterboards.ca.gov</u>. 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 Region 5 – Fresno Office 1685 "E" St. Fresno, California 93706

To ensure that your submittal is routed to the appropriate staff person, the following information should be included in the body of the email or transmittal sheet:

Program: Non-15 Facility Name: Bass Lake Heights Mutual Water Company, Arsenic Treatment System Place ID: 757968 Order: R5-2023-0061-0027

A transmittal letter shall accompany each monitoring report. The letter shall include a discussion of all violations of this MRP during the reporting period and actions taken or planned for correcting each violation. If the Discharger has previously submitted a report describing corrective actions taken and/or a time schedule for implementing the corrective

actions, reference to the previous correspondence will be satisfactory. The transmittal letter shall contain a statement by the Discharger or the Discharger's authorized agent certifying under penalty of perjury that the report is true, accurate and complete to the best of the signer's knowledge. In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., effluent, groundwater, 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 in the next scheduled monitoring report. Laboratory analysis reports shall be included in the monitoring reports. All laboratory reports must also be retained for a minimum of three years. For a discharger conducting any of its own analyses, reports must also be signed and certified by the chief of the laboratory.

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.

All monitoring reports that involve planning, investigation, evaluation or design, or other work requiring interpretation and proper application of engineering or geologic sciences, shall be prepared by or under the direction of persons registered to practice in California pursuant to California Business and Professions Code sections 6735, 7835, and 7835.1.

A. Annual Monitoring Reports

The Annual monitoring report shall be submitted to the Central Valley Water Board by **February 1st of each year**. The report shall bear the certification and signature of the Discharger or his/her authorized representative. At a minimum, the annual report shall include the following information.

- 1. Results of all required monitoring data shall be presented in tabular format.
- 2. Copies of all laboratory analytical report(s) and chain of custody form(s) for in-house and contracted laboratory analyses.
- 3. The names and contact information for the operator(s) responsible for operation, maintenance, and monitoring of the arsenic treatment system and discharge of backwash water.
- 4. A discussion and summary of the compliance record for the reporting period identifying all corrective actions taken, as well as any planned or proposed actions needed to bring the discharge into compliance with the NOA and/or Low Threat Waiver.
- 5. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.

If, in the opinion of the Executive Officer, the Discharger fails to comply with the NOA and the conditions specified in the Low Threat Waiver, the Executive Officer may refer this matter to the Attorney General for judicial enforcement, may issue a complaint for administrative civil liability, or may take other enforcement actions. Failure to comply with this Order may result in the assessment of Administrative Civil Liability of up to \$1,000 per violation, per day, depending on the violation, pursuant to the Water Code section 13268. The Central Valley Water Board reserves its right to take any enforcement actions authorized by law.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Resources Control Board to review the action in accordance with California Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Resources Control Board must receive the petition by 5:00 p.m., 30 days after the date of this MRP, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Resources Control Board by 5:00 p.m. on the next business day. <u>Copies of the law and regulations applicable to filing petitions</u> may be found on the internet

(http://www.waterboards.ca.gov/public_notices/petitions/water_quality) or will be provided on request.

The Discharger shall implement the above monitoring program in the first month following the date of this MRP.

Ordered by:

<u>Original Signed by Christina Shupe</u> For PATRICK PULUPA, Executive Officer

7 August 2024

DATE