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JARED BLUMENFELD  
SECRETARY FOR  
ENVIRONMENTAL PROTECTION

## Central Valley Regional Water Quality Control Board

14 May 2019

James Luther, President  
Bass Lake Heights Mutual Water Company  
P.O. Box 684  
Oakhurst, CA 93644

**CERTIFIED MAIL**  
**7018 1830 0001 0015 2089**

### NOTICE OF APPLICABILITY

#### **CENTRAL VALLEY WATER BOARD RESOLUTION R5-2018-0085, APPROVING WAIVER OF REPORTS OF WASTE DISCHARGE AND WASTE DISCHARGE REQUIREMENTS FOR SPECIFIC TYPES OF DISCHARGE WITHIN THE CENTRAL VALLEY REGION; BASS LAKE HEIGHTS MUTUAL WATER COMPANY; ARSENIC TREATMENT SYSTEM BACKWASH; MADERA COUNTY**

On 5 March 2019, Bass Lake Heights Mutual Water Company submitted a Report of Waste Discharge (RWD) to obtain coverage under Resolution R5-2018-0085, *Approving Waiver of Reports of Waste Discharge and Waste Discharge 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.

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 R5-2018-0085-0006**. 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 NOA is accompanied by Monitoring and Reporting Program (MRP) R5-2018-0018-0006 to ensure compliance with the conditions in the Low Threat Waiver. This MRP was developed 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 half a 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 Company or 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 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 were collected and submitted as part of the RWD. The results are presented in the table below:

Constituent	Units	Untreated Well Water (10/10/2018 and 2/21/2018)	Backwash Sample (2/26/2019)	Filtered Backwash Sample (4/09/2019)	Maximum Contaminant Levels (MCLs)
Electrical Conductivity (EC)	umhos/cm		260		900
Total Dissolved Solids (TDS)	mg/L		170		500
Nitrate as Nitrogen	mg/L	<0.23 <sup>1</sup>			
Iron	mg/L		2.5	<0.03	0.3
Manganese	mg/L		0.047		0.05
Arsenic	ug/L	25.7 <sup>2</sup>	22	9.2	10

umhos/cm=micromhos per centimeter, mg/L=milligrams per liter, and ug/L=micrograms per liter

1. Sample from Well 1 collected on 10 October 2018.
2. Average of samples collected from all three supply wells prior to arsenic treatment (20 mg/L in Well 1; 35 mg/L in Well 2; and 22 mg/L in Well 3).

Samples of the backwash water collected on 26 February 2019 prior to the backwash storage tank shows elevated concentrations of arsenic and iron above their respective Maximum Contaminant Levels (MCLs). Bob Protzman (operator for the water system) stated that the Company 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.

## 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) R5-2018-0085-0006.
5. Failure to abide by the conditions of this NOA, attached MRP R5-2018-0085-0006, 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](mailto: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:

Program: Non-15, Place ID: 757968, Facility Name: Bass Lake Heights Mutual Water Company, Arsenic Treatment System, Enrollee Number: R5-2018-0085-0006.

The Low Threat Waiver R5-2018-0085 and this NOA **will expire on 7 December 2023**. 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 Katie Carpenter at (559) 445-5551 or by email at [katie.carpenter@waterboards.ca.gov](mailto:katie.carpenter@waterboards.ca.gov).

*Original Signed by Clay L. Rodgers for*

Patrick Pulupa  
Executive Officer

Enclosures: Monitoring and Reporting Program R5-2018-0085-0006  
Resolution R5-2018-0085 (Discharger Only)

cc: Bob Protzman, Protzman Enterprises, Sacramento (via email)  
Madera County Environmental Health Department, Madera  
State Water Resources Control Board, Division of Drinking Water, Fresno

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

**MONITORING AND REPORTING PROGRAM R5-2018-0085-0006  
FOR  
BASS LAKE HEIGHTS MUTUAL WATER COMPANY  
ARSENIC TREATMENT SYSTEM BACKWASH  
MADERA COUNTY**

On 14 May 2019 Bass Lake Heights Mutual Water Company was issued Notice of Applicability (NOA) R5-2018-0085-0006, for coverage under Resolution R5-2018-0085, *Approving Wavier of Reports of Waste Discharge and Waste Discharge 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 Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) or the 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)(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.”

The Discharger owns and operates the treatment and disposal systems that are subject to NOA R5-2018-0085-0006. 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 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.

## ARSENIC TREATMENT SYSTEM BACKWASH

### Effluent Monitoring

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:

<u>Constituent</u>	<u>Units</u>	<u>Sample Type</u>	<u>Sample Frequency</u>
Flow Rate	gpd	Meter <sup>1</sup>	Continuous
Electrical Conductivity	µmhos/cm	Grab	Semi-Annually <sup>2</sup>
Arsenic	ug/L	Grab	Semi-Annually <sup>2</sup>
Iron	mg/L	Grab	Semi-Annually <sup>2</sup>
Manganese	mg/L	Grab	Semi-Annually <sup>2</sup>
General Minerals <sup>3</sup>	various	Grab	1/three years <sup>4</sup>

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

1. Flow rate may be metered or estimated. Basis for estimate should be provided in annual monitoring reports.
2. Semi-annual sampling shall be conducted in April and October unless otherwise specified.
3. General Mineral analysis shall include, alkalinity (as CaCO<sub>3</sub>), bicarbonate (as CaCO<sub>3</sub>), boron, calcium, carbonate (as CaCO<sub>3</sub>), 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).
4. Sample shall be collected once every three years starting in 2020.

### 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:

<u>Constituent</u>	<u>Units</u>	<u>Sample Type</u>	<u>Sample Frequency</u>
Saturated Soils/Ponding	---	Observation	Daily
Soil Erosion	---	Observation	Daily
Nuisance Odors or Vectors	--	Observation	Daily
Evidence of Runoff	--	Observation	Daily

### 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.

### 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 discernible. The data shall be summarized to clearly illustrate compliance with the Low Threat Waiver 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.

The 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](mailto:centralvalleyfresno@waterboards.ca.gov). Documents that are 50MB 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;

Facility Name: Bass Lake Heights Arsenic Treatment System Backwash;

Place ID: 757968;

Order: R5-2018-0085-0006.

### A. Annual Monitoring Reports

The Annual monitoring report shall be submitted to the Central Valley Water Board by **February 1<sup>st</sup> 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.

A transmittal letter shall accompany each monitoring 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 in the first month following the date of this MRP.

Ordered by:

Original Signed by Clay L. Rodgers for  
\_\_\_\_\_  
PATRICK PULUPA, Executive Officer

5/14/2019

\_\_\_\_\_  
DATE