



Central Valley Regional Water Quality Control Board

6 January 2025

Willy Weyneveld
Hageman Properties, LLC
2911 Landco Drive
Bakersfield, CA 93308

CERTIFIED MAIL
7021 1970 0001 5446 2548

NOTICE OF APPLICABILITY

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

HAGEMAN PROPERTIES, LLC CREEKSIDE RV PARK – REVERSE OSMOSIS DISCHARGE KERN COUNTY (ENROLLEE # R5-2023-0061-0032)

On 31 May 2024, Jacob Harris with Dee Jaspar and Associates, Inc. submitted a Report of Waste Discharge (RWD) on behalf of Hageman Properties, LLC (or Discharger) for discharge of reverse osmosis (RO) brine waste to an onsite septic system 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) at the Creekside RV Park in Kern County. Additional information to support the RWD was received on 3 July, and 9 September 2024. On 5 November 2024, the Discharger submitted a revised RWD with updated details for the RO water treatment system design.

Based on the information provided in the revised RWD, the discharge meets the required conditions for approval under the Low Threat Waiver. You are hereby assigned **enrollee number R5-2023-0061-0032**. Please include this number on all correspondence related to this discharge. A [copy of the Low Threat Waiver](#) is enclosed and available on the Central Valley Water Boards website at:

https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2023-0061.pdf

Please familiarize yourself with the contents of the Low Threat Waiver, including the Conditions of Discharge. The discharge must be managed in accordance with the

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

requirements contained in the Conditions of Discharge (Low Threat Waiver, Attachment A, Table 1, Category 13 - Filter Backwash and System Flushing for Water Treatment Systems specific for RO discharges to an onsite septic system) and with the information submitted in the RWD and this Notice of Applicability (NOA). Note that the Low Threat Waiver will expire on **14 December 2028**. After which you will need to cease the discharge or submit a new RWD and application fee to seek coverage under a renewed waiver, general order, or individual waste discharge requirements.

In accordance with the requirements in Attachment A of the Low Threat Waiver (Table 1, Category 13), this NOA is accompanied by a Monitoring and Reporting Program (MRP) to ensure compliance with the conditions in the Low Threat Waiver.

LOCATION

Creekside RV Park is a new development that provides water, power, and sewer connections for 181 RV spaces on approximately 37 acres of land, about 30 miles south of Bakersfield, at 4949 Dennis McCarthy Drive in Kern County (35° 00' 30" N, 118° 57' 21" W; Assessor's Parcel Number [APN] 238-081-16). A site map is provided in **Attachment A**.

This portion of Kern County is within the Tulare Lake Basin. The operative Water Quality Control Plan for the Tulare Lake Basin (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.

DISCHARGE DESCRIPTION

The Creekside RV Park plans to install an RO water treatment system to provide potable water for the development. The RO treatment system will have a designed treatment capacity of about 21,000 gallons per day (gpd). The treatment system will consist of multiple pressure tanks that force raw water through semi-permeable membrane filters to remove salts and other contaminants. The removed contaminants will be concentrated in the RO brine waste, which will then be discharged to the onsite septic system. The RWD estimates that the average discharge of RO waste to the septic system will be around 5,500 gpd depending on daily water use. The treatment system will include a Zeolite pre-treatment filter which will also discharge approximately 125 gallons of backwash water to the onsite septic system about every two days. **Attachment B** includes a process flow schematic for the proposed water treatment system.

The onsite septic system consists of four parallel septic tanks that discharge to an 11,088 square foot leach field. The system's design capacity is 24,250 gpd with an average daily flow of about 16,400 gpd. The system is regulated under the State Water Resource Control Board's Order 2014-0153-DWQ, *General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems*, Notice of Applicability (NOA) 2014-0153-DWQ-R5376.

Based on the estimated flow, the RO discharge would make up about 25 percent of the average flow discharged to the septic system (or 22 percent of the design flow). This meets the requirement of less than 50 percent of the design flow under the Low Threat Waiver.

Source water for the RV Park is provided by an onsite well that was constructed in April 2007 and completed to a depth of 860 feet below site grade (bsg). Depth to groundwater in the area is reportedly around 525 feet bsg, from the [SGMA Data Viewer \(ca.gov\) website](https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer#gwlevels) (<https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer#gwlevels>).

The well is screened between 560 and 860 feet bsg. Sampling shows elevated concentrations of iron, aluminum, sulfate, and total dissolved solids (TDS) in the source water. In addition, nitrate as nitrogen was detected near or just above the primary maximum contaminant level (MCL) of 10 mg/L. Table 1 provides water quality data for the onsite well and anticipated quality of the RO brine waste.

Table 1. Water Quality
(Concentration in milligrams per liter (mg/L) unless otherwise noted)

Constituent	Raw Source Water (see 1 below)	Anticipated RO Brine Waste (see 2 below)
pH	7.7	7.9
Electrical Conductivity (µmhos/cm)	1,560	5,737
Total Dissolved Solids	1,140	4,025
Nitrate as N	8 - 11.8	38
Chloride	87	306
Sodium	162	545
Sulfate	580	2,069
Calcium	101	345
Magnesium	62	212
Boron	0.61	1.42
Silica	19.7	70
Aluminum	<0.2	--
Arsenic	0.004	--
Iron	0.56	--
Manganese	0.02	--

1. Raw source water samples collected from the onsite well in October 2022.
2. Anticipated RO brine waste concentrations calculated assuming a concentration rate of about 71 percent.

Electrical conductivity, boron, nitrate, sodium, chloride, sulfate, and total dissolved solids in the RO brine waste exceeds applicable water quality objectives. However, the overall mass balance between the concentrated RO brine waste entering the

septic system will be similar to that of the raw source water. In addition, the pH of the brine waste is expected to be within the acceptable range (i.e., between 6.5 and 8.5).

Salinity in the discharge to the septic system is expected to increase slightly as a result of the backwash from the zeolite pre-treatment filter. However, the increase in the salinity of the discharge to the septic system from the backwash is expected to be minimal given the small volume of backwash water (i.e., less than two percent of the flow through the system, or about 500 gallons per week). In addition, many visitors to the RV Park may bring in water from other sources thus reducing the load on the water treatment system.

Given that the depth to groundwater is greater than 500 feet and the average percolation rate of 2.4 inches per day, this discharge is not expected to significantly impact groundwater quality. In addition, the site is within the White Wolf subarea overlying Class II irrigation water. Per the Tulare Lake Basin Plan discharges to land overlying Class II irrigation water within the White Wolf subarea shall not exceed an electrical conductivity (EC) of 2,000 $\mu\text{mhos/cm}$, or chloride of 350 mg/L. Given the existing raw water quality (EC of 1,560 $\mu\text{mhos/cm}$ and chloride of 87 mg/L) the slight change in salinity from the filter backwash is not expected to exceed these limits. The Notice of Applicability (NOA) for the septic system 2014-0145-DWQ-R5376 requires monthly effluent monitoring for EC.

FACILITY-SPECIFIC REQUIREMENTS

The Low Threat Waiver and this NOA covers the discharge of RO brine waste to the onsite septic system at the Creekside RV Park. The Discharger shall comply with the requirements specified in the Low Threat Waiver and the facility specific requirements listed below.

1. The discharge shall be conducted as described in the RWD and in accordance with the requirements in the Low Threat Waiver.
2. Discharge of RO brine waste to the onsite septic system shall not exceed 50 percent of the total annual flow to the system.
3. The pH of the RO discharge shall not be less than 6.5 or greater than 8.5.
4. The Discharger shall comply with the attached Monitoring and Reporting Program (MRP) R5-2023-0061-0032.
5. The Discharger shall notify the Central Valley Water Board of any change in the RO treatment system or nature/volume of the discharge.

Please review this Notice of Applicability carefully to ensure that it completely and accurately reflects the facility name, location, and details of the proposed discharge. Failure to comply with the requirements of the Low Threat Waiver, this NOA or

attached MRP may result in enforcement action as authorized by provisions of the California Water Code, which could include civil liability.

DOCUMENT SUBMITTALS

All monitoring reports and other 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.

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 any documentation submitted to the mailing address for this office:

Facility Name: Creekside RV Park – RO Discharge
Program: NON-15
Resolution: R5-2023-0061-0032
CIWQS Place ID: 897246

Documents that are 50 MB or larger should be transferred to a CD, DVD, or flash drive and mailed to:

Central Valley Regional Water Quality Control Board - Fresno Office
1685 E Street
Fresno, CA 93706

All documents, including responses to inspections and written notifications, submitted to comply with this Waiver shall be directed, via the paperless office system, to the Compliance and Enforcement Unit, attention to Omar Mostafa. Mr. Mostafa can be reached at (559) 445-5197 or Omar.Mostafa@waterboards.ca.gov. Questions regarding the permitting aspects of the Waiver, and notification for termination of coverage under the Waiver, shall be directed, via the paperless office system, to the WDR Permitting Unit, attention Katie Carpenter. Ms. Carpenter can be reached at (559) 445-5551 or by email at Katie.Carpenter@waterboards.ca.gov.

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 NOA, except that if the thirtieth day following the date of this NOA 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. [Copies of the law and regulations applicable to filing petitions](#) may be found on the internet or will be provided upon request. (http://www.waterboards.ca.gov/public_notices/petitions/water_quality).

Original signed by Alex S. Mushegan
For Patrick Pulupa,
Executive Officer

Attachments: Attachment A – Site Map
Attachment B – Water Treatment System Schematic

Enclosures: Monitoring and Reporting Program R5-2023-0061-0032
Low Threat Waiver, Resolution R5-2023-0061

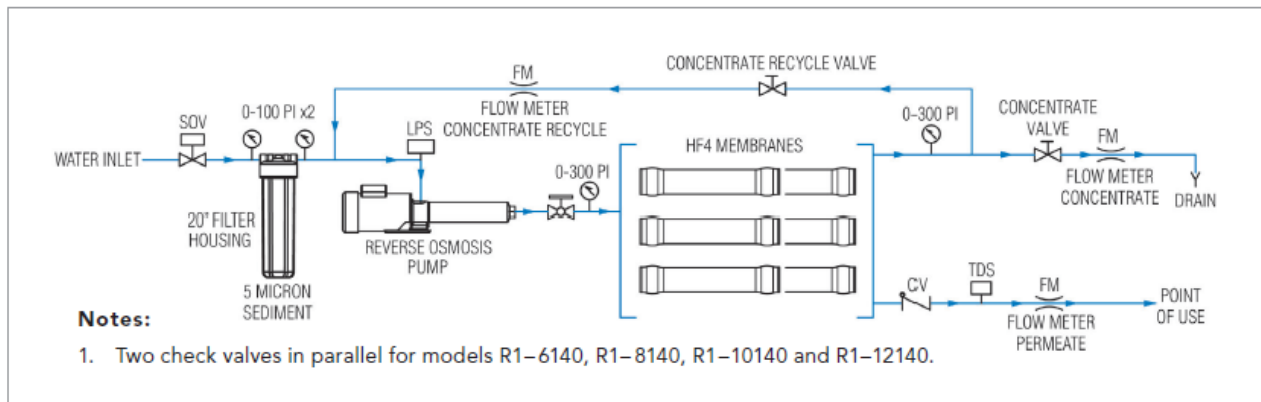
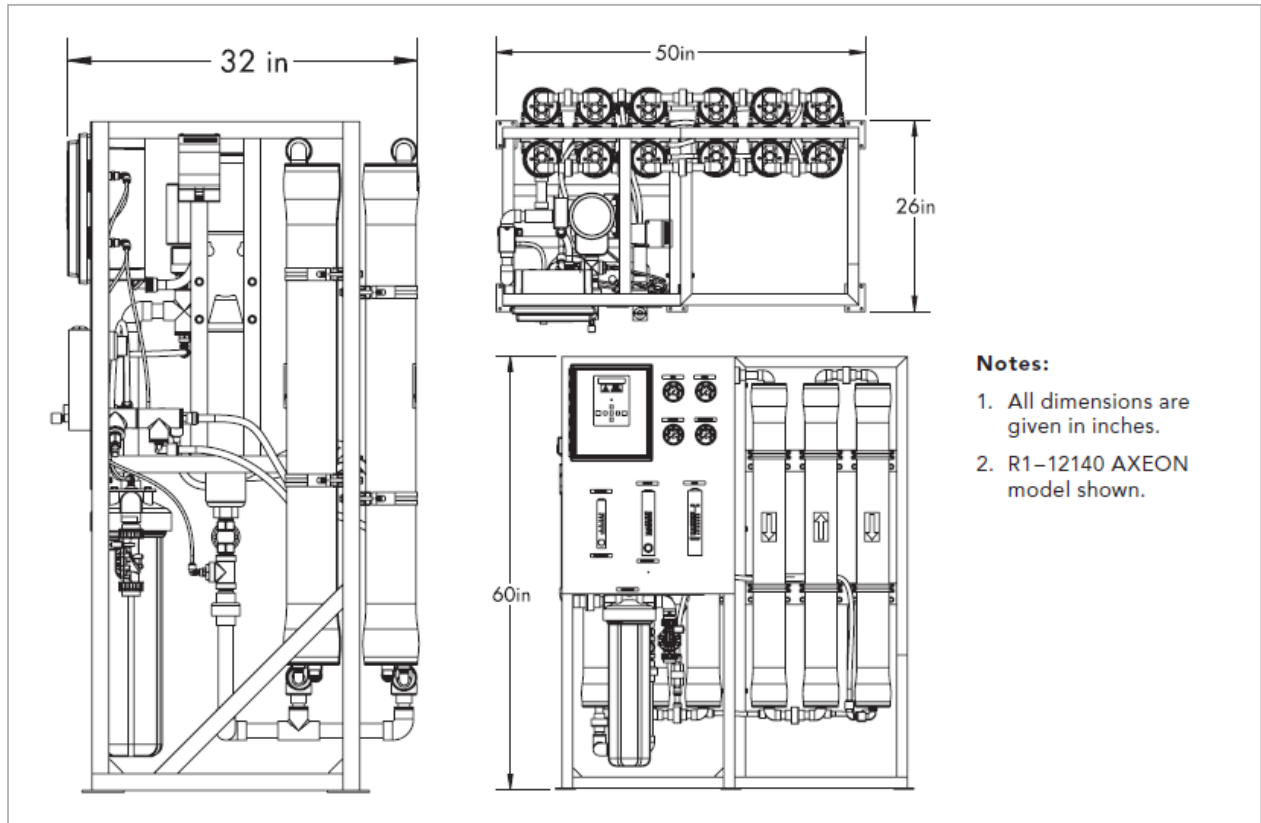
cc w/o enc.:

- Chris Moskal, State Water Resources Control Board, OCC (via email)
- Omar Mostafa, Central Valley Water Board, Fresno, (via email)
- Adam Forbes, State Water Resources Control Board, Division of Drinking Water, (via email)
- Jesse Dhaliwal, State Water Resources Control Board, Division of Drinking Water, (via email)
- Kern County Environmental Health Department, Bakersfield
- Jacob Harris, Dee Jasper and Associates, Inc., (via email)

ATTACHMENT A – SITE MAP



ATTACHMENT B – WATER TREATMENT SYSTEM SCHEMATIC



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

**MONITORING AND REPORTING PROGRAM R5-2023-0061-0032
FOR
HAGEMAN PROPERTIES, LLC
CREEKSIDE RV PARK REVERSE OSMOSIS DISCHARGE
KERN COUNTY**

On 6 January 2025 the Central Valley Regional Water Quality Control Board (Central Valley Water Board) Executive Officer issued Hageman Properties, LLC (Discharger) Notice of Applicability (NOA) R5-2023-0061-0032, for coverage under Resolution R5-2023-0061, *Waiver of Waste Discharge Requirements, Reports of Waste Discharge, and/or Water Reclamation Requirements for Specific Types of Discharge Within the Central Valley Region* (Low Threat Waiver or Waiver). The NOA regulates the discharge of reverse osmosis (RO) brine waste to an onsite septic system at the Creekside RV Park at 4949 Dennis McCarthy Drive in Kern County. This Monitoring and Reporting Program (MRP) is issued pursuant to California Water Code section 13267. The Discharger shall not implement any changes to this MRP unless and until the Central Valley Water Board adopts, or the Executive Officer issues, a revised MRP.

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 system subject to NOA R5-2023-0061-0032, and monitoring reports are necessary to ensure the Discharger complies with the NOA and the conditions specified in the Low Threat Waiver. Pursuant to Water Code section 13268, the Discharger shall implement this MRP and shall 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, failing or refusing to furnish

a statement of compliance as required by subdivision (b) of Section 13399.2, or falsifying and 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 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:

Table 1. Monitoring Locations

Monitoring Location	Monitoring Location Description
SW-01	Location where a sample of the raw source water for the Creekside RV Park can be collected prior to any treatment.
RO-001	Discharge of RO brine waste to the onsite septic system.

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 that are currently 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. SPECIFIC MONITORING REQUIREMENTS

A. SOURCE WATER MONITORING (SW-001)

Samples of the source water shall be taken from the source water well prior to any treatment. At a minimum, source water monitoring shall consist of the following:

Table 2. Source Water Monitoring

<u>Constituent/Parameter</u>	<u>Units</u>	<u>Sample Type</u>	<u>Reporting Frequency</u>
Flow	Gallons	Meter (see 1 below)	Monthly
pH	Std. Units	Grab	Quarterly
Electrical Conductivity (EC)	µmhos/cm	Grab	Quarterly
General Minerals (see 2 below)	mg/L	Grab	Annually
Arsenic	µg/L	Grab	Annually

1. Flow shall be metered or estimated using pump run time or similarly approved method. The method of calculation shall be reported.
2. At a minimum general minerals analysis shall include: alkalinity (as CaCO₃), bicarbonate (as CaCO₃), boron, carbonate (as CaCO₃), calcium, chloride, iron, magnesium, manganese, nitrate (as NO₃-N), potassium, sodium, sulfate, total dissolved solids, and a cation/anion balance.

B. REVERSE OSMOSIS MONITORING

The Discharger shall collect a sample of the RO brine waste prior to discharge to the onsite septic system. At a minimum, RO monitoring shall include the following:

Table 3. RO Monitoring

<u>Parameter</u>	<u>Units</u>	<u>Sample Type</u>	<u>Reporting Frequency</u>
Flow	gpd	Meter (see 1 below)	Monthly
pH	Std. Units	Grab	Quarterly
Electrical Conductivity	µmhos/cm	Grab	Quarterly

<u>Parameter</u>	<u>Units</u>	<u>Sample Type</u>	<u>Reporting Frequency</u>
General Minerals (see 2 below)	mg/L	Grab	Quarterly/Annually (see 3 below)
Arsenic	µg/L	Grab	Quarterly/Annually (see 3 below)

1. Flows may be metered or estimated based on pump run time, tank capacity, or other acceptable method. The method used to calculate flows shall be reported.
2. At a minimum general minerals analysis shall include: alkalinity (as CaCO₃), bicarbonate (as CaCO₃), boron, carbonate (as CaCO₃), calcium, chloride, iron, magnesium, manganese, nitrate (as NO₃-N), potassium, sodium, sulfate, and total dissolved solids.
3. Samples for General Minerals and Arsenic shall be collected Quarterly for the first year following startup of the system and annually thereafter.

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: centralvalleyfresno@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
 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: Creekside RV Park – RO Discharge
Order: R5-2023-0061-0032
County: Kern
CIWQS Place ID: 897246

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

Annual Monitoring Reports shall be submitted to the Central Valley Water Board by **February 1st** of each year. The Annual Monitoring Report shall include the following:

1. Results of all required monitoring. Data shall be presented in tabular format. If no discharge occurs during the reporting period a letter confirming that no discharge has occurred shall be provided.
2. Copies of all laboratory analytical report(s) and chain of custody form(s) for in-house and contracted laboratory analyses.
3. Evaluation of the total and monthly average discharge into the septic system compared to the total and monthly average discharge of RO brine waste to the septic system.
4. The names and contact information for the operator(s) responsible for operation, maintenance, and monitoring of the RO treatment system.

5. A discussion and summary of the compliance record for the reporting period identifying any corrective actions taken, as well as any planned or proposed actions needed to bring the discharge into compliance with the NOA and Low Threat Waiver.
6. 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 \$10,000 per violation, per day, depending on the violation, pursuant to the Water Code, including sections 13268, 13350 and 13385. 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. [Copies of the law and regulations applicable to filing petitions](#) 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 begin implementing the above monitoring program as of the date of this MRP.

Ordered by: *Original signed by Alex S. Mushegan*

For PATRICK PULUPA, Executive Officer

1/8/2025

(Date)

IV. GLOSSARY

CaCO ₃	Calcium carbonate
EC	Electrical conductivity at 25° C
TDS	Total dissolved solids
Continuous	The specified parameter shall be measured by a meter continuously
Daily	Every day except weekends or holidays
Weekly	Once per week
Monthly	Once per calendar month
Quarterly	Once per calendar quarter (i.e., Jan-Mar, Apr-Jun, Jul-Sep, Oct-Dec)
Annually	Once per year. Annual samples shall be collected in the third quarter between July and September
gpd	Gallons per day
mg/L	Milligrams per liter
mL/L	Milliliters [of solids] per liter
NO ₃ -N	Nitrate as nitrogen
µg/L	Micrograms per liter
µmhos/cm	Micromhos per centimeter
RO	Reverse osmosis
General Minerals	Analysis shall include; alkalinity (as CaCO ₃), bicarbonate (asCaCO ₃), boron, calcium, carbonate (as CaCO ₃), chloride, iron, magnesium, manganese, nitrate (as NO ₃ -N), potassium, sodium, sulfate, total dissolved solids, and verification that the analysis is complete (i.e., cation/anion balance)