



Central Valley Regional Water Quality Control Board

5 December 2024

Van Grayer, General Manger
Vaughn Water Company
10014 Glenn Street
Bakersfield, CA 93312

CERTIFIED MAIL
7020 2450 0000 6785 4859

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; VAUGHN WATER COMPANY; HAGEMAN #2 WATER TREATMENT SYSTEM BACKWASH; KERN COUNTY

On 1 August 2024, Vaughn Water Company (Discharger) submitted a Report of Waste Discharge (RWD), for coverage under Resolution R5-2023-0061, *Waiver of Waste Discharge Requirements (WDRs), Reports of Waste Discharge (RWDs), and/or Water Recycling Requirements (WRRs) for Specific Types of Discharge Within the Central Valley Region* (Low Threat Waiver) for discharge of filter backwash water to land from its Hageman #2 Water Treatment System (Facility). Previously, the Facility's discharge was regulated under Resolution R5-2018-0085 by Notice of Applicability R5-2018-0085-0012, which expired on 7 December 2023. The Discharger submitted a Form 200, backwash schedule, effluent sample results from March 2024, and a sketched map of the Facility. According to the RWD, backwash water will be discharged to an unlined sump at the Facility. A 12 September 2024 email from the Discharger confirmed that while the discharge process has not changed, the volume has increased by approximately 20,000 gallons per backwash cycle.

Based on the information provided, the discharge meets the required conditions for Category 13, *Filter Backwash and System Flushing from Water Treatment Systems*, approval under the Low Threat Waiver. You are hereby assigned enrollee number **R5-2023-0061-0028**. 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 Board's website at:

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

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

1685 E Street, Fresno, CA 93706 | www.waterboards.ca.gov/centralvalley

Please familiarize yourself with the contents of the Low Threat Waiver, including the Conditions of Discharge (Low Threat Waiver, Attachment A). The discharge must be managed in accordance with the requirements contained in the Conditions of Discharge, information submitted in RWD, and this Notice of Applicability (NOA). The Low Threat Waiver will expire on **14 December 2028**. Prior to this date, the Discharger shall contact the Central Valley Regional Water Quality Control Board (Central Valley Water Board) and either cease the discharge or submit a new RWD and application fee to continue the discharge under a renewed waiver, general order, or individual waste discharge requirements.

In accordance with the requirements in Attachment A of the Low Threat Waiver for the filter backwash discharges (Table 1, Category 13), this NOA is accompanied by **Monitoring and Reporting Program (MRP) R5-2023-0061-0028** to ensure compliance with the conditions in the Low Threat Waiver.

LOCATION

The Facility is located at 15864 Hageman Road, Bakersfield in Kern County, and is approximately 6.5 miles west of the City of Bakersfield on Assessor's Parcel Number 463-050-65 (Latitude 35.3986°, Longitude -119.1764°).

This portion of Kern County is within the Tulare Lake Basin. The operative *Water Quality Control Plan for the Tulare Lake Basin* designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve water quality objectives for all waters of the Basin.

DESCRIPTION OF DISCHARGE

The Facility provides water service for residents of the Rosedale area, just west of Bakersfield, and was constructed in 2005 to remove hydrogen sulfide from raw well water. A deep well pump with a capacity of 2,250 gallons per minute (gpm) pumps groundwater through an ozone treatment system and then into a 60,000-gallon storage tank. The water is then pumped through three granulated activated carbon (GAC) filters to provide polishing. As part of the routine maintenance for the treatment system, the GAC filters are automatically backwashed once per week to fluff the media and flush out particulate material clogging the filters.

The filter system is backwashed using potable water from the water distribution system. The potable water is treated with sodium hypochlorite to maintain a chlorine residual in the distribution system. The backwash process generates about 15,700 gallons per tank and about 47,000 gallons per cycle of backwash water. Backwash water is then discharged to an on-site unlined sump that has a capacity of approximately 213,000 gallons.

A sample of the backwash water was collected on 18 March 2024 and results were reported in the RWD. These results are presented in the table below, along with

15 September 2022 sample results of the raw well water, and applicable Maximum Contaminant Levels (MCLs) for constituents of concern.

Table 1 – Backwash Water Samples

Parameter	Units	Untreated Well Water (9/15/2022)	Backwash Sample (3/18/2024)	Maximum Contaminant Levels (MCLs)
Total Dissolved Solids	mg/L	390	390	500
EC	µhmos/cm	737	760	900
Nitrate as Nitrogen	mg/L	<0.4	--	10
Sodium	mg/L	138	150	--
Chloride	ug/L	177	190	250
Sulfate	mg/L	0.8	2.3	250
Iron	µg/L	<100	260	300
Manganese	µg/L	<20	ND	50
Arsenic	µg/L	3	--	10

Based on the sampling results, the backwash water is of similar quality to the underlying groundwater, with the exception of iron, though the observed iron concentration in the backwash water is still below the applicable secondary MCL. Therefore, the discharge of backwash water complies with the terms and conditions in the Low Threat Waiver.

FACILITY SPECIFIC REQUIREMENTS

The Low Threat Waiver and this NOA covers the discharge of filter backwash water from the Hageman #2 Water Treatment System. The Discharger shall comply with the requirements specified in the Low Threat Waiver and the facility-specific requirements listed below.

1. Discharge of filter backwash water shall be conducted as described in this NOA 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 comply with the attached Monitoring and Reporting Program (MRP) R5-2023-0061-0028.
4. Runoff or discharge of filter backwash water to a wetland, surface water (other than those storage basins specified above), surface water drainage course, or biologically or culturally sensitive area is prohibited.

5. Failure to comply with the requirements of this NOA, attached MRP, and the Low Threat Waiver, could result in enforcement actions as authorized by provisions of the California Water Code.
6. The Discharger shall notify the Central Valley Water Board of any change in agreement or proposed use of the discharge of backwash water as described in the RWD and this NOA.

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:

Program: Non-15
Place ID: 758255
Facility Name: Hageman #2 Water Treatment System
Order: R5-2023-0061-0028

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
Region 5 - 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 Salvador Vargas. Salvador Vargas can be reached by phone at (559) 444-2488 or by email at Salvador.Vargas@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 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 at [Copies of the laws and regulations applicable to filing petitions](https://www.waterboards.ca.gov/public_notices/petitions/water_quality) (https://www.waterboards.ca.gov/public_notices/petitions/water_quality) or will be provided upon request.

Digitally signed by Alex S. Mushegan on 12/5/2024
For Patrick Pulupa
Executive Officer

Attachments:

- Attachment A – Site Map
- Attachment B – Process Flow Diagram

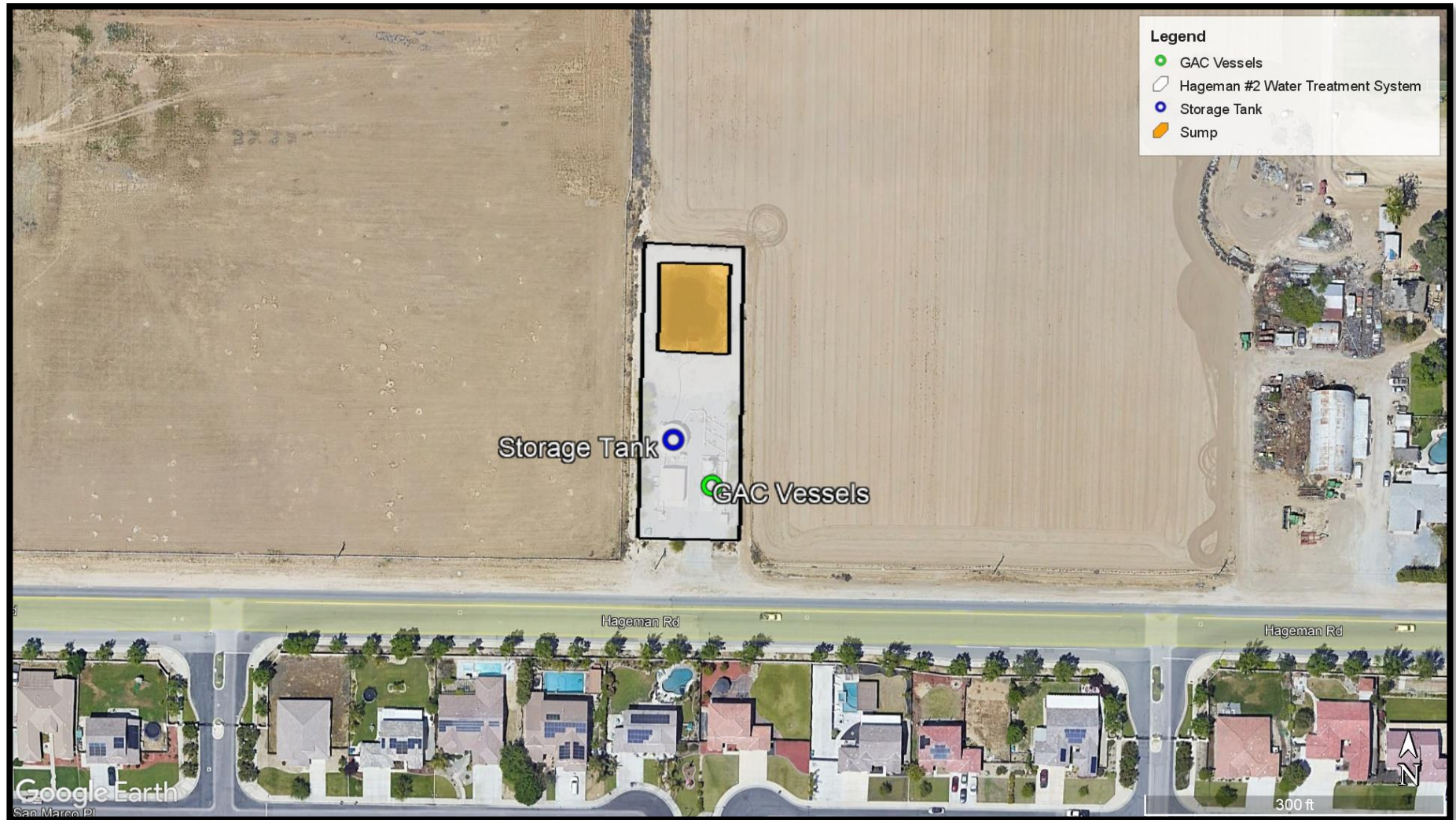
Enclosures:

- Monitoring and Reporting Program 2023-0061-0028
- Low Threat Waiver Resolution R5-2023-0061

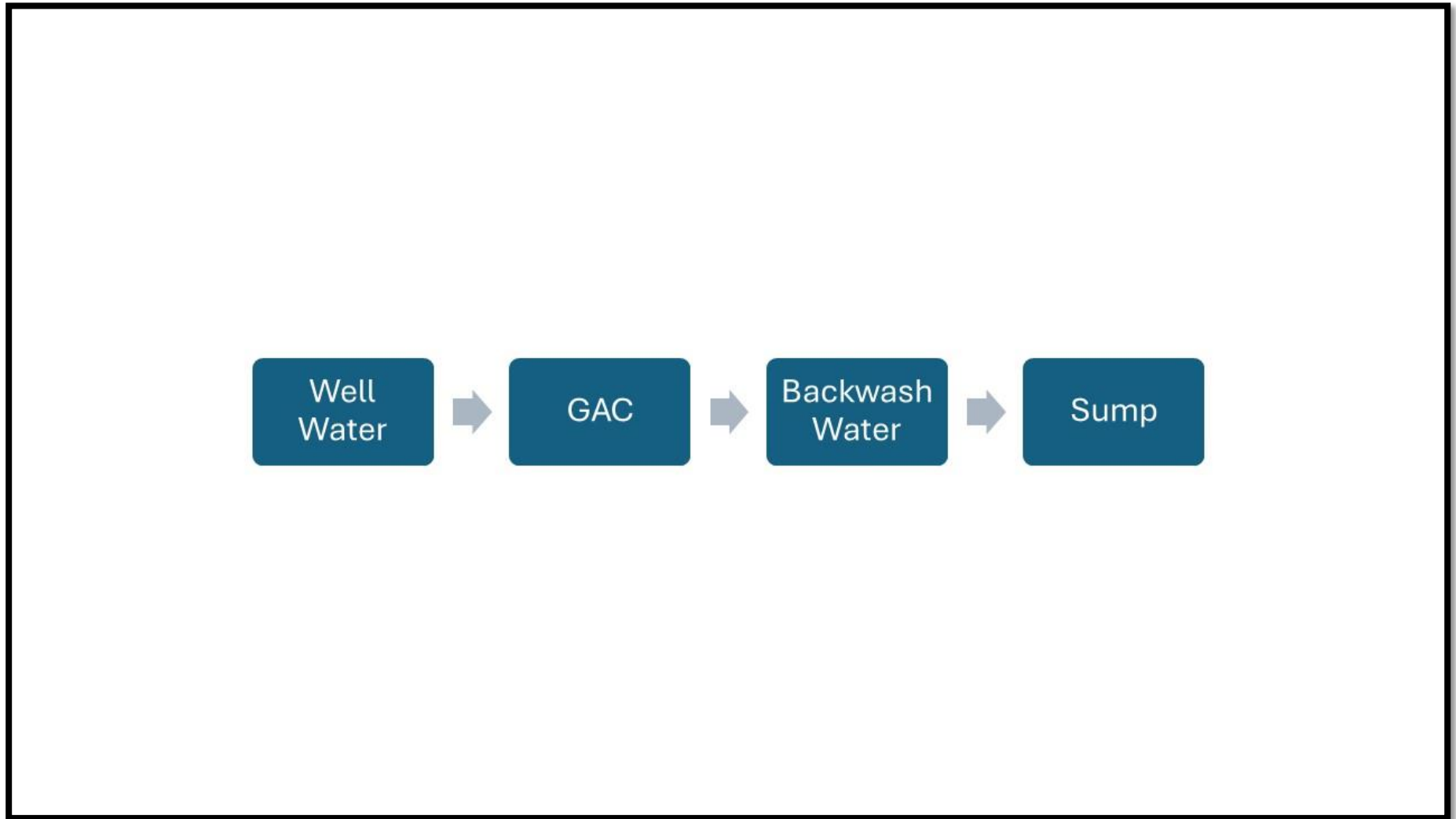
cc's:

- Chris Moskal, State Water Resources Control Board, OCC, Sacramento (via email)
- DWQ-WDR@waterboards.ca.gov
- Kurt Souza, State Water Resources Control Board, Division of Drinking Water (via email)
- Omar Mostafa, Central Valley Water Board, Fresno (via email)
- Kern County Public Works Department, Bakersfield, CA
- Kern County Public Health Department, Bakersfield, CA
- Van Grayer, General Manager, Vaugh Water Company (via email)

ATTACHMENT A – SITE PLAN



ATTACHMENT B – PROCESS FLOW DIAGRAM



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

**MONITORING AND REPORTING PROGRAM NO. R5-2023-0061-0028
FOR
VAUGHN WATER COMPANY
HAGEMAN #2 WATER TREATMENT SYSTEM BACKWASH
KERN COUNTY**

On 5 December 2024 the Central Valley Regional Water Quality Control Board (Central Valley Water Board) Executive Officer issued The Vaughn Water Company (Discharger) Notice of Applicability (NOA) R5-2023-0061-0028, for coverage under Resolution R5-2023-0061, *Waiver of Waste Discharge Requirements (WDRs), Reports of Waste Discharge (RWDs), and/or Water Recycling Requirements (WRRs) for Specific Types of Discharge Within the Central Valley Region (Low Threat Waiver)*. The NOA is for the discharge of filter backwash water to land from the Hageman #2 Water Treatment System. This Monitoring and Reporting Program (MRP) is issued pursuant to 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 of the California Water Code 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.”

Section 13268 of the California Water Code 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 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.”

The Discharger owns the water treatment system subject to NOA R5-2023-0061-0028, and the 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.

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 – Hageman #2 Water Treatment System Monitoring Location

Monitoring Location	Monitoring Location Description
EFF- 001	Location where sample of backwash water discharge can be collected prior to discharge to the unlined sump.
SUMP-001	The onsite unlined sump
SOLIDS	Solids monitoring

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 name of the sampler, sample type (grab) 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.

Field test instruments (such as those used to test pH, dissolved oxygen, and electrical conductivity) may be used provided:

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.

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. SPECIFIC MONITORING REQUIREMENTS

A. EFFLUENT MONITORING (EFF-001)

Samples of the backwash water shall be collected at **EFF-001** before it is discharged to the unlined sump. At minimum, effluent monitoring shall consist of the following:

Table 2 - Effluent Monitoring

Parameter	Units	Sample Type	Sampling Frequency	Reporting Frequency
Flow Rate	gpd	Metered	Continuous	Annually
Electrical Conductivity	µmhos/cm	Grab	Semiannually (see 2 below)	Annually
Total Dissolved Solids	mg/L	Grab	Semiannually	Annually
General Minerals	various	Grab	Once/Three years (see 1 below)	Annually

1. Samples shall be collected once every three years starting in 2025.
2. Samples shall be collected twice per calendar year, in April and October.

B. SUMP MONITORING (SUMP-001)

The Discharger shall inspect the unlined sump monthly. The results of the inspection and photo documentation, where appropriate, shall be included as part of the annual monitoring reports. Sump monitoring shall include the following:

Table 3 - Sump Monitoring

Constituent	Units	Sample Type	Sample Frequency	Reporting Frequency
Freeboard	Feet	Measurement	Monthly	Annually
Nuisance Odors or Vectors	N/A	Observation	Monthly	Annually
Berm Condition	N/A	Observation	Monthly	Annually

C. SOLIDS DISPOSAL MONITORING (SOLIDS)

The Discharger shall report the handling and disposal of all solids associated with the water treatment system and discharge of backwash water (e.g., filter material, sludge from the unlined sump, 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 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 or flash drive and mailed to the following address:

Central Valley Regional Water Quality Control Board
Region 5 – Fresno Office
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: 758255
Facility Name: Hageman #2 Water Treatment System
Order: R5-2023-0061-0028

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 Reports shall be submitted to the Regional Water Board on the **February 1st of each year**. The reports shall bear the certification and signature of the Discharger's authorized representative. At a minimum, the quarterly reports shall include:

1. Results of all required monitoring data shall be presented in tabular format. If no discharge occurred during the calendar year the annual report shall so state.
2. Copies of laboratory analytical report(s) and chain of custody form(s) for in-house and contracted laboratory.
3. The names and contact information for the operator(s) responsible for operation, maintenance, and monitoring of the treatment system and discharge of filter 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. Copies of the [law and regulations applicable to filing petitions](https://www.waterboards.ca.gov/public_notices/petitions/water_quality/) may be found on the internet (https://www.waterboards.ca.gov/public_notices/petitions/water_quality/) or will be provided on request.

The Discharger shall implement the above monitoring program as of the date of this MRP.

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

For PATRICK PULUPA, Executive
Officer

12/5/2024

(Date)

IV. GLOSSARY

EC	Electrical conductivity at 25° C
GAC	Granular Activated Carbon
TDS	Total dissolved solids
TSS	Total suspended solids
Continuous	The specified parameter shall be measured by a meter continuously.
Daily	Every day
Monthly	Once per calendar month
Semiannually	Twice per year
Annually	Once per year
mg/L	Milligrams per liter
MRP	Monitoring and Reporting Program
MCL	Maximum Contaminant Level
MDL	Method detection limit
PQL	Practical quantitation limit
RL	Reporting limit
RWD	Report of Waste Discharge
WDR	Waste Discharge Requirements
WRR	Waste Recycling Requirements
µg/L	Micrograms per liter
µmhos/cm	Micromhos per centimeter
gpd	Gallons per day
mgd	Million gallons per day
General Minerals	Analysis shall include; alkalinity (as CaCO ₃) bicarbonate(asCaCO ₃), boron, calcium, carbonate (as CaCO ₃), chloride, iron, magnesium, manganese, nitrate as N, phosphate, potassium, sodium, sulfate, and verification that the analysis is complete (i.e., cation/anion balance)