7 July 2025

Talle Lopez, Director
California Water Service Company
1720 N. First Street
San Jose, CA 95112
(email: tlopez@calwater.com)

CERTIFIED MAIL
7020 2450 0000 6785 9205

NOTICE OF APPLICABILITY

CENTRAL VALLEY WATER BOARD RESOLUTION R5-2023-0061-0038; WAIVER OF WASTE DISCHARGE REQUIREMENTS, REPORTS OF WASTE DISCHARGE, AND/OR WATER RECYCLING REQUIREMENTS FOR SPECIFIC TYPES OF DISCHARGE WITHIN THE CENTRAL VALLEY REGION; CALIFORNIA WATER SERVICE COMPANY; BAKERSFIELD DISTRICT 2 STATIONS 125-01, 133-01, AND 135-01; KERN COUNTY

On 11 March 2025, the California Water Service Company (hereafter Cal Water or Discharger) submitted a Report of Waste Discharge (RWD) 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) for the discharge of backwash water to land from three wellhead treatment systems used to remove 1,2,3-trichloropropane (1,2,3-TCP) in Bakersfield in Kern County. The wellhead treatment systems are identified as Stations 125-01, 133-01, and 135-01. The application fee was received on 14 March 2025.

Based on the information provided in the RWD the discharge meets the required conditions for approval under the Low Threat Waiver. You are hereby assigned **enrollee number R5-2023-0061-0038**. 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 Waiver, including the Conditions of Discharge. The discharge must be managed in accordance with the 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) 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

Cal Water's Bakersfield District 2 consists of three well pump stations in Bakersfield, Kern County. These well pump stations (Stations 125-01, 133-01, and 135-01) and associated discharge locations are all located within a one-half mile radius in southeast Bakersfield centered at 965 Madison Street (35^{o} 20' 41.51" N, 118^{o} 59' 38.43" W) as shown in **Attachment A**.

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

Cal Water installed wellhead treatment systems at all three well pump stations to remove 1,2,3-TCP to meet drinking water standards. The wellhead treatment systems consist of one or two treatment trains, with two granular activated carbon (GAC) vessels in each train operated in series. Raw well water travels through the first (or lead) GAC vessel then through the second (or lag) GAC vessel to remove 1,2,3-TCP before being disinfected and released into the water distribution system.

GAC media backwashing serves two purposes, it fluffs the system and removes sediment and accumulated calcium and biofilm build up in the vessel to return normal flow to the system. Multiple vessels at the station may be backwashed within a short period of time. Cal Water has determined that backwashing events are necessary when differential pressure in the vessels reaches approximately 10 pounds per square inch. According to the RWD, the frequency of backwashing is projected to occur about once a year. However, backwashing may occur more frequently at individual well stations depending on the drinking water system demand and the quality of the raw water.

The backwash flow rate will be about 832 gallons per minute (gpm) for approximately of 45 to 60 minutes. During a backwash event, treated water from the distribution system is pushed back through the GAC vessel to break up and dislodge accumulated debris. Backwash discharges from Station 125-01 will flow to an onsite sump, while discharges from Stations 133-01 and 135-01 will be discharged to terminal storm

water retention basins operated by the City of Bakersfield. Temporary piping will be installed at Station 135-01 to direct the backwash water to a storm drain that discharges to a nearby storm water retention basin. Table 1 provides a list of the Bakersfield District 2 Stations, estimated discharge volumes, storm water retention basin and sump identification numbers, and approximate storage capacities of the sump and retention basins.

Table 1 – Bakersfield District 2 Stations

Station	Discharge Volume (gallons) (see 1 below)	Basin	Storage Capacity (gallons)
125-01	37,440 – 74,880	Sump-01	127,504
133-01	37,440 – 149,760	RB-163	1,638,292
135-01	37,440 – 149,760	RB-309	6,355,000

1. Discharge volume estimate based on backwash of one or all GAC vessels at each station at the recommended rate of 832 gpm for 45 minutes.

The RWD includes a signed user agreement from the City of Bakersfield for discharges to the storm water retention basins.

Backwash Characterization

This is a new discharge so there is no data available on water quality following a backwash of these treatment systems. However, the RWD compiled sampling data from other similar wellhead treatment systems in the Bakersfield area collected between 2022 and 2024. Table 2 provides results of backwash sampling from similar systems.

Table 2 – Backwash Sampling Results

Constituent	Units	Average	Range
pH	Std. units	--	6.5 – 8.2
Electrical Conductivity (EC)	µmhos/cm	270	190 – 350
Total Suspended Solids	mg/L	47	<5 - 78
Arsenic	µg/L	<2	<2
1,2,3-TCP	µg/L	0.00065	<0.0007 – 0.00086

According to the RWD, Cal Water will implement the following best management practices to minimize potential impacts to the retention basins, including;

1. Sweeping the area near the basin inlets prior to the discharge to remove any debris.
2. Filtering backwash water prior to discharge to remove suspended sediment.

3. Implement de-chlorination measures if total residual chlorine is present at concentrations greater than 0.09 mg/L in the discharge. Initial sample to be taken from the treated water tank prior to starting the backwash cycle.

FACILITY-SPECIFIC REQUIREMENTS

The Low Threat Waiver and this NOA covers the discharge of filter backwash water to land from Bakersfield District 2, Stations 125-01, 133-01, and 135-01 in southeast Bakersfield. 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 filter backwash water at a location or in a manner different from that described in the RWD and this NOA is prohibited.

3. Runoff or discharge of backwash water to a wetland, surface water (other than the stormwater retention basins or onsite sump listed in Table 1 above), surface water drainage course, or biologically or culturally sensitive areas is prohibited.

4. The Discharger shall comply with the attached Monitoring and Reporting Program (MRP) R5-2023-0061-0038.

5. 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 or this NOA.

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: Cal Water Bakersfield District 2 Backwash
Program: NON-15
Resolution: R5-2023-0061-0038
CIWQS Place ID: 900507

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 Waver 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

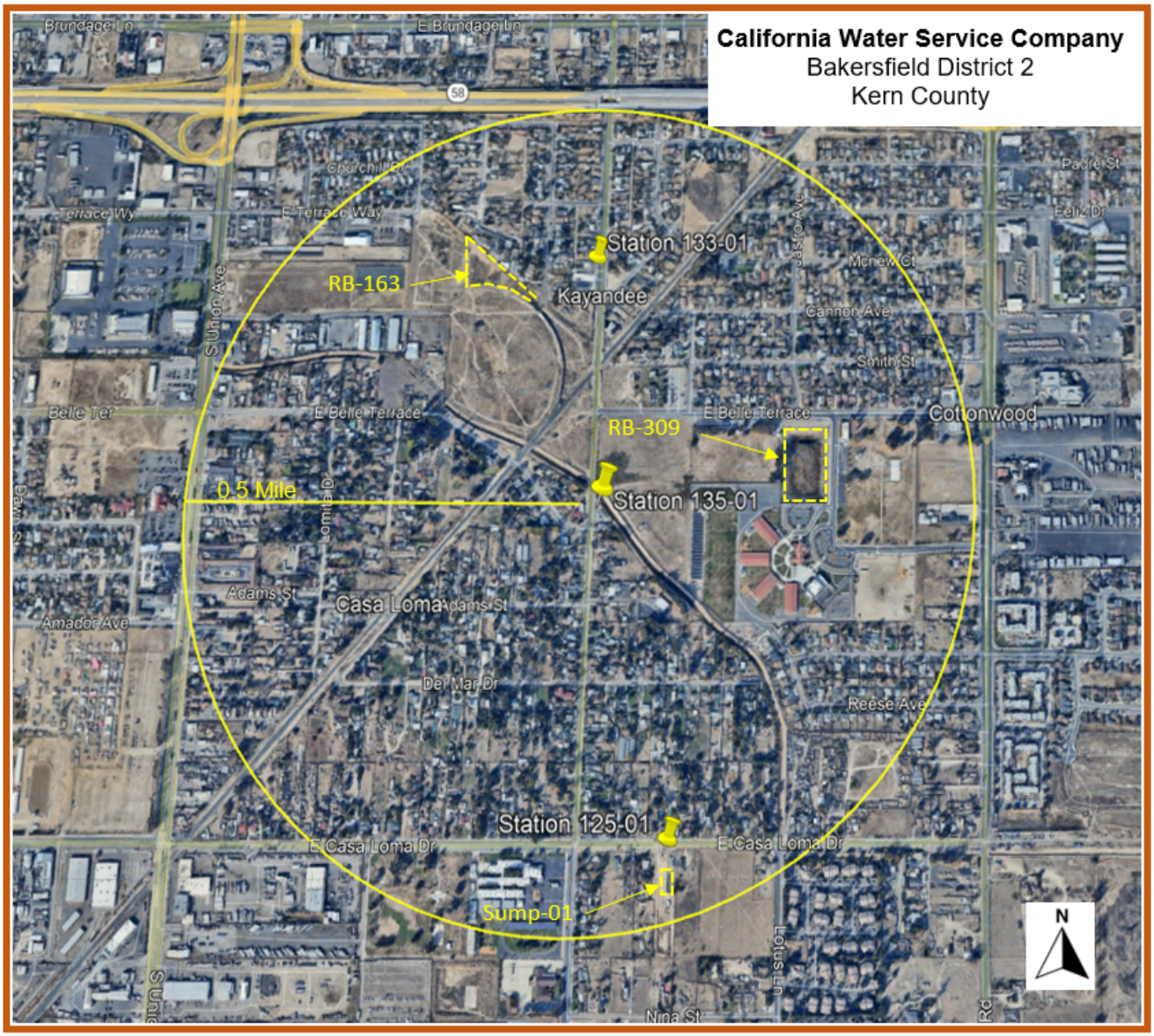
Attachments: Attachment A – Site Plan

Enclosures: Monitoring and Reporting Program R5-2023-0061-0038
Low Threat Waiver, Resolution R5-2023-0061

cc w/o enc.:

- Adam Forbes, State Water Resources Control Board, DDW (via email)
- Christopher Moskal, State Water Resources Control Board, OCC (via email)
- Jessie Dhaliwal, State Water Resources Control Board, DDW (via email)
- Omar Mostafa, Central Valley Water Board, Fresno (via email)
- Kern County Environmental Health Department, Bakersfield
- Jason Solf, City of Bakersfield, Bakersfield (via email)

ATTACHMENT A – SITE PLAN



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM R5-2023-0061-0038 FOR CALIFORNIA WATER SERVICE BAKERSFIELD DISTRICT 2 – BACKWASH STATIONS 125-01, 133-01, AND 135-01 KERN COUNTY

On **7 July 2025** the Central Valley Regional Water Quality Control Board (Central Valley Water Board) Executive Officer issued the California Water Service (Cal Water or Discharger) a Notice of Applicability (NOA) R5-2023-0061-0038, for coverage under Resolution R5-2023-0061, *Approving 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 backwash water to land from wellhead treatment systems used to remove 1,2,3-trichloropropane (1,2,3-TCP) from Cal Water's Bakersfield District 2 in Kern County (i.e., Stations 125-01, 133-01, and 135-01). 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."*

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."

The Discharger owns and operates the area subject to NOA R5-2023-0061-0038, 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. Monitoring Locations

Monitoring Location	Monitoring Location Description
Station 125-01, 133-01, and 135-01	Location where a sample of the backwash water can be collected after any treatment but before discharge to an onsite sump or storm water drain.
Sump-0X, or RB-XXX	Discharge sump or storm water retention basin.

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 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. BACKWASH MONITORING (Station-125-01, 133-01, and 135-01)

Grab samples of the backwash water shall be collected at each station prior to discharge to the onsite sump or stormwater drain. At a minimum, backwash monitoring shall consist of the following:

Table 2. Backwash Monitoring

Constituent/Parameter	Units	Sample Type	Frequency
Flow	Gallons	Meter (see 1 below)	Continuous
pH	Std. Units	Grab	1/event (see 2 below)
Electrical Conductivity (EC)	µmhos/cm	Grab	1/event (see 2 below)
Total Chlorine Residual	mg/L	Grab	1/event (see 2 below)
Total Suspended Solids	mg/L	Grab	1/Year (see 2 and 3 below)
1,2,3-TCP	µg/L	Grab	1/Year (see 2 and 3 below)
General Minerals (see 4 below)	mg/L	Grab	Once (see 5 below)

1. Flows shall be metered or estimated using pump run time or similarly approved method. The method used to calculate flows shall be reported.
2. Samples shall be collected at each station approximately 10 minutes after the start of each backwash event.
3. Samples shall be collected from each station annually during the first backwash event of the year. If no backwash event occurs during the year no sample shall be collected, and it shall be reported as such in the Annual Monitoring Report.
4. See Glossary for list of General Minerals constituents to be analyzed.
5. Samples for General Minerals shall be collected at each station during the first backwash event following issuance of this MRP.

B. SUMP/RETENTION BASIN MONITORING

The Discharger shall inspect the onsite sumps and the storm water retention basins for each station prior to and during each backwash event. The results shall be reported in the Annual Monitoring Report. At a minimum, the monitoring shall include the following:

Table 3. Sump and Basin Monitoring

Parameter	Units	Sample Type	Reporting Frequency
Freeboard	Feet	Measurement (see 1 below)	1/event
Berm Condition	--	Observation	1/event
Nuisance Odors/Vectors	--	Observation	1/event

1. Freeboard shall be monitored to the nearest 0.5 feet following each backwash event. Measurements shall be taken from the top of the water surface to the lowest part of the berm.

C. SOLIDS DISPOSAL REQUIREMENTS

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 media/material change out, sludge from unlined basin, etc.). Records shall include the name and contact information for the hauling company, the type and amount of waste transported, the date removed, the disposal facility, 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 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: Cal Water Bakersfield District 2 - Backwash
Order: R5-2023-0061-0038
Place ID: 900507

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 occurred during the calendar year the report shall so state.
2. Copies of all laboratory analytical report(s) and chain of custody form(s) for in-house and contracted laboratory analyses.
3. Field calibration records
4. The names and contact information for the operator(s) responsible for operation, maintenance, and monitoring of the system during backwash events.
5. A discussion and summary of the compliance record for the reporting period identifying 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.
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 the date of this MRP.

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

FOR PATRICK PULUPA, Executive Officer

July 7, 2025

(Date)

GLOSSARY

EC	Electrical conductivity at 25° C
TSS	Total suspended solids
1,2,3-TCP	1,2,3 Trichloropropane
Continuous	The specified parameter shall be measured by a meter continuously.
24-hr Composite	Samples shall be a flow-proportioned composite consisting of at least eight aliquots over a 24-hour period.
1/event	Once per event
1/Year	Once per year or Annually
mg/L	Milligrams per liter
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 (as$CaCO_3$), boron, calcium, carbonate (as $CaCO_3$), chloride, iron, magnesium, manganese, nitrate as N, phosphate, potassium, sodium, sulfate, total dissolved solids, and verification that the analysis is complete (i.e., cation/anion balance).