



## Central Valley Regional Water Quality Control Board

3 November 2025

Clayton Jordan USDI, NPS-Sequoia and Kings Canyon National Parks 47050 Generals Highway Three Rivers, CA 93721 CERTIFIED MAIL 9589 075270 3240 2786 70

NOTICE OF APPLICABILITY; STATE WATER RESOURCES CONTROL BOARD ORDER WQ 2014-0153-DWQ, GENERAL WASTE DISCHARGE REQUIREMENTS FOR SMALL DOMESTIC WASTEWATER TREATMENT SYSTEMS; UNITED STATES DEPARTMENT OF THE INTERIOR, NATIONAL PARK SERVICE, SEQUOIA AND KINGS CANYON NATIONAL PARKS; ASH MOUNTAIN WASTEWATER TREATMENT FACILITY; TULARE COUNTY

On 13 April 2022, Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff received a Report of Waste Discharge (RWD) submitted on behalf of the United States Department of the Interior, National Park Service, Sequoia – Kings Canyon National Parks (NPS or Discharger). The RWD was submitted for proposed upgrades to the Ash Mountain Wastewater Treatment Facility (WWTF or Facility) that are anticipated to be completed in November 2025 and was prepared pursuant to State Water Resources Control Board (State Water Board) Water Quality Order 2014-0153-DWQ, General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems (hereafter General Order). The Facility is currently regulated by Notice of Applicability (NOA) 97-10-DWQ-R5062, which was issued under the previous General Order (Order 97-10-DWQ) on 8 June 2010. Similarly, Monitoring and Reporting Program (MRP) R5-2010-0806 was issued on 8 June 2010 to monitor discharges at the Facility.

The RWD included a completed and signed Form 200, and a technical report prepared by David Barton Brooke, a California registered civil engineer (RCE 70417). Central Valley Water Board staff (Staff) reviewed the April 2022 RWD and requested additional information associated with the proposed effluent storage tank and disinfection system. An updated RWD was submitted on 18 January 2024 that included the requested information.

Based on Staff's review of the available information, the WWTF (current and proposed upgrades) treats and disposes less than 100,000 gallons of domestic wastewater per day and is eligible for coverage under the General Order. This letter serves as formal notice that the General Order is applicable to your system and the wastewater discharge

NICHOLAS AVDIS, CHAIR | PATRICK PULUPA, EXECUTIVE OFFICER

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described below. The Facility's coverage under the General Order is hereby assigned enrollee number **2014-0153-DWQ-R5410**.

You should familiarize yourself with the entire General Order and its attachments enclosed with this letter, which describe mandatory discharge and monitoring requirements. Sampling, monitoring, and reporting requirements applicable to your treatment and disposal methods must be completed in accordance with the appropriate treatment system sections of the General Order and the attached **Monitoring and Reporting Program No. 2014-0153-DWQ-R5410**. The MRP was developed after consideration of the waste characterization and site conditions described in the RWD. This letter and coverage under the General Order, and the new MRP supersede and terminate NOA 97-10-DWQ-R5062 and MRP R5-2010-0806.

### **PROJECT LOCATION**

The Facility is located at 47050 Generals Highway, Three Rivers, CA, about 5 miles northeast of Three Rivers in Tulare County as shown in **Attachment A** (36.490° N, 118.830° W). The Facility is located within the Tulare Lake Hydrologic Basin Planning Area; however, the Facility does not lie within a designated groundwater basin, the nearest of which is the Kaweah Subbasin (5-022.11), which is approximately 11.5 miles to the southwest.

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 NPS owns and operates the WWTF. Domestic wastewater is generated from a visitor center, offices, maintenance facilities, and employee housing units, and is conveyed to the Facility for treatment and disposal. The current Facility consists of a headworks, outdoor extended aeration package plant, two modified treatment ponds, and a chlorine contact tank. From the chlorine contact tank, disinfected secondary effluent is pumped to a 2.3-acre spray field for disposal. The total available acreage at the spray field is approximately 4.5 acres; however, the Discharger only uses a portion of the spray field.

The upgraded Facility features a covered headworks, an equalization tank, a pre-anoxic tank, two recirculating textile filters, two concrete vaults, a lift station, a 350,000-gallon storage tank, and an existing 4.5-acre spray field for disposal. Currently, approximately 2.3-acres of the spray field receives disinfected secondary effluent, while the remaining 2.2-acres are undeveloped. Settled sludge from the equalization tank will be removed annually using either a pumper truck or contracted hauler and disposed offsite.

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#### **FACILITY-SPECIFIC REQUIREMENTS**

The Discharger shall maintain exclusive control over the discharge and shall comply with the terms and conditions of this NOA, General Order 2014-0153-DWQ, with all attachments, and MRP No. 2014-0153-DWQ-R5410.

In accordance with section B.1 of the General Order, wastewater discharged from the WWTF to the onsite spray field system shall not exceed a **monthly average discharge of 17,500 gpd**. In accordance with the requirements of the General Order, this NOA does not specify a nitrogen effluent limitation since the Facility flow rate is less than 20,000 gpd.

As discussed in the attached memorandum, the Discharger shall comply with the effluent limitations specified in Table 1 below when discharging to the spray field. Compliance with the effluent limitations specified in the General Order for activated sludge, membrane bioreactor, or similar treatment technology is appropriate. Compliance with the effluent limitations specified in Table 1 shall be determined at a point after the disinfection system prior to discharge to the spray field.

**Monthly Average** 7-day Average Constituent Unit Limit Limit Biochemical Oxygen Demand mg/L 30 45 (BOD) Total Suspended Solids 30 mg/L 45 (TSS) Total Coliform Organisms MPN/100 mL 2.2

**Table 1 – Effluent Limitations** 

The General Order states in Section B.1 that the Discharger shall comply with the setbacks as described in Table 3 of the General Order. This table summarizes different setback requirements for wastewater treatment systems equipment, activities, land application areas, and storage and/or treatment ponds from sensitive receptors and property lines where applicable. The Discharger shall comply with the applicable setback requirements, as summarized in Table 2 below.

Table 2 – Site-Specific Applicable Setback Requirements

Equipment or Activity	Domestic Well	Flowing Stream	Ephemeral Stream Drainage	Property Line (See 1 below)
Aerobic Treatment Unit, Treatment System, or Collection System	150 ft.	50 ft.	50 ft.	5 ft.
Spray field	100 ft.	50 ft.	50 ft.	100 ft.

1. No spray irrigation of any recycled water, other than disinfected tertiary recycled water, shall take place within 100 feet of a residence or a place where public exposure could be similar to that of a park, playground, or school yard.

The Discharger shall comply with all applicable sections in the General Order, including:

- 1. Section B.4 Activated Sludge Systems
- 2. Section B.7 Land Application and/or Recycled Water Systems
- 3. Section B.8 Sludge/Solids/Biosolids Disposal
- 4. Section C.1 Groundwater and Surface Water Limitations

Provision E.1 of the General Order requires dischargers enrolled under the General Order to prepare and implement the following reports by 2 February 2026:

- Spill Prevention and Emergency Response Plan (Provision E.1.a)
- Sampling and Analysis Plan (Provision E.1.b)
- Sludge Management Plan (Provision E.1.c)

A copy of the Spill Prevention and Emergency Response Plan, the Sampling and Analysis Plan, and the Sludge Management Plan shall be maintained at the treatment facility and shall be presented to the Regional Water Board Staff upon request. The Sludge Management Plan shall be submitted to the Central Valley Water Board **by 2 February 2026**.

As stated in Section E.2.w., in the event any change in control or ownership of the Facility or Wastewater disposal areas, the Discharger must notify the succeeding owner or operator of the existence of this General Order by letter, a copy of which shall be immediately forwarded to the Central Valley Water Board Executive Officer.

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Failure to comply with the requirements in this NOA, General Order 2014-0153-DWQ, with all attachments, and MRP No. 2014-0153-DWQ-R5410 could result in an enforcement action, as authorized by provisions of the California Water Code. Discharge of wastes other than those described in this NOA is prohibited. If the method of waste disposal changes from that described in this NOA, you must submit a new Report of Waste Discharge describing the new operation.

The required annual fee specified in the annual billing from the State Water Board shall be paid until this NOA is officially terminated. You must notify this office in writing if the discharge regulated by the General Order ceases, so that we may terminate coverage and avoid unnecessary billing.

On 31 May 2018, the Central Valley Water Board adopted Basin Plan amendments incorporating new strategies for addressing ongoing salt and nitrate accumulation in the Central Valley as part of the Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) initiative. Further details of these strategies are discussed in the enclosed memorandum. As these strategies are implemented, the Central Valley Water Board may find it necessary to modify the requirements of this NOA to ensure the goals of the Salt and Nitrate Control Program are met.

#### **DOCUMENT SUBMITTALS**

All regulatory documents, submissions, materials, data, monitoring reports, and correspondence should be converted to a searchable Portable Document Format (PDF) and submitted electronically via the State Water Resources Control Board's GeoTracker database. GeoTracker is an Internet-accessible database system used by the State Water Board, regional boards, and local agencies to track and archive compliance data from authorized or unauthorized discharges of waste to land, or unauthorized releases of hazardous substances from underground storage tanks. This system consists of a relational database, online compliance reporting features, a geographical information system (GIS) interface, and other features that are utilized by regulatory agencies, regulated industries, and the public to input, manage, or access compliance and regulatory tracking data. Guidance for creating an account and submitting reports to the GeoTracker database is provided in the attached MRP.

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

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internet or will be provided upon request. (http://www.waterboards.ca.gov/public\_notices/petitions/water\_quality).

If you have any questions regarding this matter, please contact Cruz Romero by phone at (559) 445-5036 or by email at <a href="mailto:cruz.romero@waterboards.ca.gov">cruz.romero@waterboards.ca.gov</a>.

Original Signed by Alex S. Mushegan For Patrick Pulupa Executive Officer

#### Attachments:

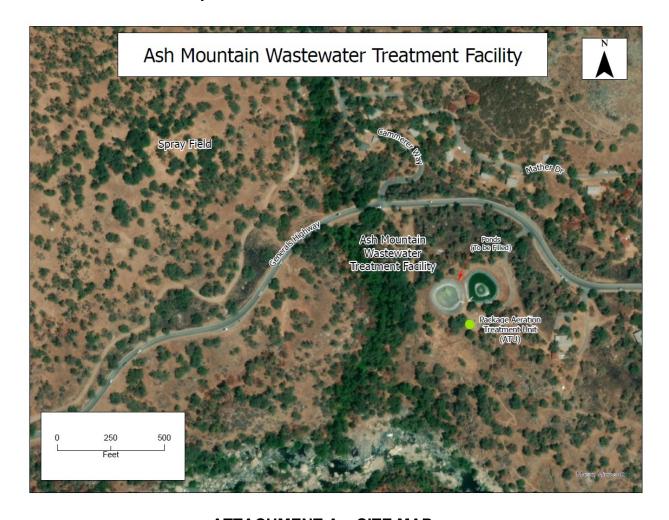
- Attachment A Site Map
- Attachment B Flow Schematic

#### **Enclosures:**

- Monitoring and Reporting Program 2014-0153-DWQ-R5410
- Staff 3 November 2025 Memorandum
- State Water Resources Control Board WQ 2014-0153-DWQ

#### cc w/ attachments and enclosures.:

- Rick Hall, National Park Service (via email)
- Bright Avusuglo-Ahia, National Park Service (via email)
- Jeannie Pham, National Park Service (via email)
- Anthony Kowalski-Dewitt, National Park Service (via email)
- Joshua Adams, National Park Service (via email)
- Adam Forbes, State Water Resources Control Board, DDW (via email)
- Christopher Moskal, State Water Resources Control Board, OCC (via email)
- Stephanie Torres, State Water Resources Control Board, DWQ (via email)
- Rb5s-cvsalts@waterboards.ca.gov
- Omar Mostafa, Central Valley Water Board, (via email)
- Tulare County Environmental Health Department (via email)
- Debbie Webster, CVCWA (via email)
- David Barton Brooke, HECO Engineers (via email)



ATTACHMENT A – SITE MAP

NOTICE OF APPLICABILITY 2014-0153-DWQ-R5410

FOR

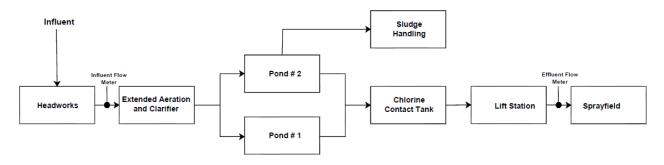
UNITED STATES DEPARTMENT OF THE INTERIOR
ASH MOUNTAIN WASTEWATER TREATMENT FACILITY

**TULARE COUNTY** 

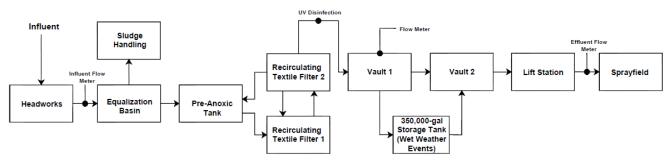
# Existing and New Flow Schematic

National Park Service Sequoia and Kings Canyon National Parks Ash Mountain Wastewater Treatment Facility Tulare County

#### **EXISTING SYSTEM**



#### **NEW SYSTEM**



### ATTACHMENT B - FLOW SCHEMATIC

NOTICE OF APPLICABILITY 2014-0153-DWQ-R5410 FOR

UNITED STATES DEPARTMENT OF THE INTERIOR ASH MOUNTAIN WASTEWATER TREATMENT FACILITY TULARE COUNTY

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

## MONITORING AND REPORTING PROGRAM 2014-0153-DWQ-R5410 FOR

## U.S. DEPARTMENT OF THE INTERIOR, NATIONAL PARK SERVICE SEQUOIA-KINGS CANYON NATIONAL PARK ASH MOUNTAIN WASTEWATER TREATMENT FACILITY TULARE COUNTY

This Monitoring and Reporting Program (MRP) describes requirements for monitoring a wastewater treatment system. This MRP is issued pursuant to Water Code section 13267. The United States Department of the Interior, National Park Service, Sequoia-Kings Canyon National Park (hereafter 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 Executive Officer.

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

"In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports."

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 and operates the Ash Mountain Wastewater Treatment Facility (Facility or WWTF) that is subject to NOA 2014-0153-DWQ-R5410. The NOA enrolls the

MRP No. 2014-0153-DWQ-R5410

WWTF under State Water Resources Control Board Order WQ 2014-0153-DWQ. General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems (General Order). The reports required in this MRP are necessary to ensure that the Discharger complies with the NOA and General Order. Pursuant to Water Code section 13267, the Discharger shall implement this MRP and shall submit the monitoring reports described herein. NOA 2014-0153-DWQ-R5410 supersedes NOA 97-10-DWQ-R5062, and this MRP supersedes MRP R5-2010-0806.

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.
- 4. Field calibration reports are maintained and available for at least three years A glossary of terms used in this MRP is included on the last page.

#### TREATMENT SYSTEM MONITORING

#### A. EFFLUENT MONITORING

Effluent samples shall be collected from a location after treatment but prior to discharge to the spray field. At a minimum, effluent monitoring shall include the monitoring specified in Table 1.

**Table 1 - Effluent Monitoring Requirements** 

Parameter	Units	Sample Type	Sampling Frequency	Reporting Frequency
Flow	gpd	Meter	Continuous (see 1 below)	Quarterly
pH	Std. Units	Grab	Weekly	Quarterly

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Parameter	Units	Sample Type	Sampling Frequency	Reporting Frequency
EC	µmhos/cm	Grab	Weekly	Quarterly
BOD	mg/L	Grab	Monthly	Quarterly
TSS	mg/L	Grab	Monthly	Quarterly
Total Nitrogen	mg/L	Grab	Monthly	Quarterly

<sup>1.</sup> For continuous analyzers, the Discharger shall document routine meter maintenance activities including date, time of day, and duration, in which the analyzer(s) is not in operation.

#### **B. DISINFECTION SYSTEM MONITORING**

Ultraviolet light (UV) disinfection system monitoring shall be collected immediately downstream of the UV system. At a minimum, UV disinfection system monitoring shall include the monitoring specified in Table 2.

Parameter	Units	Sample Type	Sampling Frequency	Reporting Frequency
Total Coliform Organisms	MPN/100 mL	Grab	Monthly	Quarterly
Turbidity (see 2 below)	NTU	Meter	Continuous (see 1 below)	Quarterly
UV Transmittance	Percent (%)	Meter	Continuous (see 1 below)	Quarterly
UV Intensity	mW/cm <sup>2</sup>	Meter	Continuous (see 1 below)	Quarterly
UV Dose (see 3 below)	mW/cm <sup>2</sup>	Calculated	Continuous (see 1 below)	Quarterly

Table 2 – UV Disinfection Monitoring Requirements

- 1. For continuous analyzers, the Discharger shall document routine meter maintenance activities including date, time of day, and duration, in which the analyzer(s) is not in operation.
- 2. The turbidity meter shall be stationed immediately after the filters, prior to the UV disinfection unit. Report daily average turbidity and maximum turbidity.
- 3. Report daily minimum, daily average, and weekly average UV dose.

#### SPRAY FIELD MONITORING

The Discharger shall monitor and visually inspect the spray field when wastewater is applied. If wastewater is not applied during a reporting period, the monitoring report shall so state. Spray field monitoring shall include, at a minimum, the following:

Ash Mountain WWTF MRP No. 2014-0153-DWQ-R5410

**Table 3 - Spray Field Monitoring** 

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Parameter	Units	Sample Type	Sampling Frequency	Reporting Frequency
Wastewater Applied	gpd	Meter (see 1 below)	Monthly	Quarterly
Local Rainfall	Inches	Weather Station (see 2 below)	Monthly	Quarterly
Acreage Applied (see 3 below)	Acres	Calculated	Monthly	Quarterly
Application Rate (see 4 below)	gal/acre/mo	Calculated	Monthly	Quarterly
Soil Erosion Evidence		Observation	Monthly	Quarterly
Containment Berm Condition		Observation	Monthly	Quarterly
Soil Saturation/Ponding		Observation	Monthly	Quarterly
Nuisance Odors/Vectors		Observation	Monthly	Quarterly
Discharge Off-Site		Observation	Monthly	Quarterly

- 1. Meter requires meter reading, a pump run time meter, or other approved method.
- Weather station may be site-specific or nearby governmental weather reporting station.
- 3. Acreage applied denotes the acreage to which wastewater is applied.
- 4. Application rate may also be reported as inch/acre/month.

#### SLUDGE/BIOSOLIDS DISPOSAL

The Discharger shall report the handling and disposal of all solids (e.g., screenings, grit, sludge, biosolids, etc.) generated at the wastewater system. Records shall include the name/contact information for the hauling company, the type and amount of waste transported, the date removed from the wastewater system, the disposal facility names and address, and copies of analytical data required by the entity accepting the waste. These records shall be submitted as part of the annual monitoring report.

## REPORTING REQUIREMENTS

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 discernable. The data shall be summarized to clearly illustrate compliance with the General Order and NOA as applicable. The results of any monitoring done more frequently than required at the locations specified in the MRP

Ash Mountain WWTF MRP No. 2014-0153-DWQ-R5410

shall be reported in the next regularly scheduled monitoring report and shall be included in calculations as appropriate.

**GeoTracker Electronic Reporting Requirements**: All monitoring reports and monitoring results shall be submitted to GeoTracker in accordance with the timeframes specified below and in searchable Portable Document Format (PDF). The Discharger shall follow the applicable Electronic Submittal of Information (ESI) requirements under the Facility-specific **Global Identification Number WDR100036858** at the <u>GeoTracker</u> database (https://geotracker.waterboards.ca.gov/esi/login.asp).

In order to submit reports electronically, the Discharger shall create a secure GeoTracker Electronic Submittal of Information (ESI) account and log in credentials, claim their facility by requesting access in GeoTracker, and finally uploading PDF copies of the required reports via the ESI portal as outlined in the GeoTracker ESI Beginner's Guide for Responsible Parties (Beginner's Guide) linked below. The Discharger may complete the above tasks by accessing the 'Getting Started' section on the GeoTracker ESI webpage (https://www.waterboards.ca.gov/ust/electronic\_submittal/index.html).

Additional GeoTracker support information can be found at the following:

- a. 'Guides/Resources' document link in the "Tools" on the Discharger's GeoTracker ESI account.
- Resources on the GeoTracker ESI website, such as the <u>Beginner's Guide</u>
   (https://www.waterboards.ca.gov/ust/electronic\_submittal/docs/geotracker\_esi\_rp\_beginners\_guide\_revisedoct2019.pdf)
- c. General GeoTracker Help Desk contact information:

Phone: 1-866-480-1028, Email: geotracker@waterboards.ca.gov

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.

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.

National Parks Service Ash Mountain WWTF MRP No. 2014-0153-DWQ-R5410

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. QUARTERLY MONITORING REPORTS

Quarterly reports shall be submitted to the Regional Water Board on the **first day of the second month after the quarter ends** (e.g. the January-March Quarterly Report is due by May 1<sup>st</sup>). The reports shall bear the certification and signature of the Discharger's authorized representative. At the minimum, the quarterly reports shall include:

- 1. Results of all required monitoring.
- A comparison of monitoring data to the requirements (including the flow limitation), disclosure of any violations of the NOA and/or General Order, and an explanation of any violation of those requirements. (Data shall be presented in tabular format).
- 3. Copies of laboratory analytical reports(s) and chain of custody form(s).

#### **B. ANNUAL REPORT**

Annual reports shall be submitted to the Regional Water Board by **March 1**<sup>st</sup> **following the monitoring year.** The annual report shall include the following:

- 1. Tabular and graphical summaries of all monitoring data collected during the year.
- 2. An evaluation of the performance of the wastewater treatment system, including discussion of the capacity issues, nuisance conditions, system problems, and a forecast of the flows anticipated in the next year. A flow rate evaluation, as described in the General Order (Provision E.2.c), shall also be submitted.
- 3. A discussion of compliance and the corrective action taken, as well as any planned or proposed actions needed to bring the discharge into compliance with the NOA and/or General Order.
- 4. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.

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5. The name and contact information for the wastewater operator responsible for operation, maintenance, and system monitoring.

A letter transmitting the monitoring reports shall accompany each 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 beginning 1 December 2025.

Ordered by:

Original signed by Alex S. Mushegan for

For PATRICK PULUPA, Executive Officer

3 November 2025\_

(Date)

#### **GLOSSARY**

BOD<sub>5</sub> Five-day biochemical oxygen demand

EC Electrical conductivity at 25° C

TSS Total suspended solids

NTU Nephelometric Turbidity Unit

MPN/100 mL Most Probable Number [of organisms] per 100 milliliters

mW/cm<sup>2</sup> Milliwatt per centimeter squared

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.

Daily Every day

Monthly Once per calendar month

Quarterly Once per calendar quarter (i.e., January – March).

Annually Once per year.

mg/L Milligrams per liter

mg/kg Milligrams per kilogram µg/L Micrograms per liter

µmhos/cm Micromhos per centimeter

gpd Gallons per day





## Central Valley Regional Water Quality Control Board

**TO**: Alexander Mushegan

Supervising Water Resource Control Engineer

FROM: Bryan Rock

Senior Engineering Geologist

Cruz Romero

Water Resource Control Engineer

**DATE**: 3 November 2025

APPLICABILITY OF COVERAGE UNDER STATE WATER RESOURCES CONTROL BOARD ORDER WQ 2014-0153-DWQ; GENERAL WASTE DISCHARGE REQUIREMENTS FOR SMALL DOMESTIC WASTEWATER TREATMENT SYSTEMS; UNITED STATES DEPARTMENT OF THE INTERIOR, NATIONAL PARK SERVICE, SEQUOIA AND KINGS CANYON NATIONAL PARKS; ASH MOUNTAIN WASTEWATER TREATMENT FACILITY; TULARE COUNTY

On 13 April 2022, Central Valley Regional Water Quality Control Board staff (Staff) received a Report of Waste Discharge (RWD) from Richard Hall (RCE 62034), a California registered civil engineer, on behalf of United States Department of the Interior, National Park Service, Sequoia – Kings Canyon National Parks (NPS or Discharger). The RWD was submitted for proposed upgrades to the Ash Mountain Wastewater Treatment Facility (Facility or WWTF) in Tulare County and requested coverage under State Water Resources Control Board's Water Quality Order 2014-0153-DWQ, General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems (General Order). The RWD includes a Form 200 signed by LT Bright Avusuglo-Ahia, a Public Health Specialist with NPS.

Staff reviewed the April 2022 RWD and provided comments via email on 16 May 2022. HECO Engineers (HECO) submitted a draft basis of design document on 4 October 2022 to address Staff's comments regarding the water balance. On 12 December 2023, HECO provided soil sample results from beneath the liner of the west lagoon collected during the construction of the proposed upgrades at the Facility. The soil samples indicated that fecal coliform organisms were present. HECO staff contended that the fecal coliform counts recorded were incidental to the removal of the liner and not indicative of the soil quality at the site. Staff requested additional samples

NICHOLAS AVDIS, CHAIR | PATRICK PULUPA, EXECUTIVE OFFICER

Staff Memorandum

for fecal coliform and total nitrogen to ensure that the soil was not contaminated by effluent leaking below the lagoon liner. Additional samples collected on 4 January 2024 indicated that fecal coliform was not present; however, Staff still had concerns regarding total nitrogen soil concentrations (450 mg/kg on a dry-weight basis). On 13 February 2024, NPS staff submitted additional soil test results from samples collected on 26 January 2024 and a *Soils Technical Memorandum* prepared by HECO. The soils memorandum indicated that the liner had no significant leakage and the total kjeldahl nitrogen concentrations results collected underneath the liner were of onsite naturally occuring organic material likely being mixed with the soil. A second updated RWD was submitted by HECO on 17 January 2024, which was signed and stamped by David Barton Brooke (RCE 70417). Staff received a 2 May 2025 email from NPS staff stating that the proposed upgrades at the WWTF are anticipated to be completed in November 2025.

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This memorandum provides a summary of the Central Valley Water Board staff's review of the RWD, subsequent submittals, and the applicability of the discharge to be covered under the General Order.

#### **BACKGROUND INFORMATION**

The Discharger owns and operates the WWTF and disposal area (spray field), which are located approximately 5.4 miles northeast of Three Rivers in Tulare County (36.490311°, -118.830268°). The Facility is currently regulated by Notice of Applicability 97-10-DWQ-R5062 for *General Waste Discharge Requirements for Discharges to Land by Small Domestic Wastewater Treatment Systems* (WQ 97-10-DWQ), which was issued to the Discharger on 8 June 2010 and authorizes a maximum flow of up to 17,500 gallons per day (gpd), which is discharged to the spray fields. A site map is shown in **Attachment A** of the Notice of Applicability (NOA). In addition, the Facility was issued Monitoring and Reporting Program (MRP) No. R5-2010-0806 on 1 July 2010.

The WWTF treats and disposes domestic wastewater from a visitor center, park offices, maintenance facilities, and employee housing units. The effluent disposal area is 1,100 feet northwest of the WWTF on the north side of the highway. The existing WWTF utilizes a pond system. The existing WWTF includes an outdoor concrete headworks area (consisting of an inclined bar screen, grinder, and a Parshall flume), one aeration basin with a clarifier, two lined ponds with flotation pumps, a 9,000-gallon chlorine contact tank, a lift station, and a 4.5-acre spray field. Treated effluent is discharged from the ponds (via gravity flow) to a lift station, which pumps the discharge to the spray field. The second pond was used for sludge thickening where the sludge is air-dried for several weeks and manually raked and shoveled from the bottom of the pond into a contracted haulers container. Containers are then picked up by a contract hauler and hauled offsite for composting.

#### **DESCRIPTION OF DISCHARGE**

The April 2022 RWD was submitted for the proposed upgrades to the treatment system. According to the RWD, the Discharger replaced the current open-air concrete

headworks with new concrete inline influent measurement components, and a covered structure will be constructed over the headworks to shield the apparatus from wet weather. Effluent from the headworks will be discharged into an existing aeration basin that has been repurposed to function as an equalization tank. The equalization tank will have a depth of 12 feet and a usable capacity of 19,300 gallons. The existing lined ponds will be filled in to provide pads to build, service, and operate the new treatment system and storage tank. Effluent from the equalization tank will be discharged to a secondary biological treatment system consisting of a pre-anoxic tank followed by a recirculating textile filter (RTF) system featuring two Orenco AX-MAX treatment tanks operating in parallel. After secondary treatment, effluent will flow through a new ultraviolet disinfection (UV) system housed in a new generator/control building. The UV disinfection system is replacing the existing chlorination treatment.

The April 2022 RWD initially proposed to install a 100,000-gallon storage tank to replace the open-air ponds; however, Central Valley Water Board staff (Staff) reviewed the water balance included in the report and had concerns with the Facility's ability to store effluent during wet-weather events. As a result, the basis of design document submitted by HECO Engineers proposed to increase the size of the storage tank to 350,000 gallons to store treated effluent during wet weather events.

Two concrete vaults will be constructed to help facilitate flows into and out of the storage tank. The first concrete vault will house bypass valves, a flow meter, and piping into the storage tank. The second concrete vault will house pipes and valves for effluent discharge from the storage tank following rain events. An existing lift station facility pumps effluent to the spray field. The current pump at the lift station will be replaced with a 50-hp duplex pump system to increase flow discharge capacity and efficiency.

The existing disposal area will be rehabilitated by replacing piping and the spray nozzles. Earthen berms will be constructed on the downslope side of the spray field to capture potential runoff from the site. The spray field currently utilizes 2.3 acres of the available 4.5 acres for effluent discharge. The remaining spray field acreage is currently undeveloped. The January 2024 RWD proposes to add two monitoring wells to the spray field. Staff inquired whether a third (upgradient) monitoring well could be installed; however, due to site conditions (e.g., steep slope) a third monitoring well is infeasible. Due to the cost to install monitoring wells, the Discharger opted not to install any monitoring wells.

Estimated influent and effluent quality information was submitted by HECO Engineers on 26 February 2024 and is presented in Table 1 below. Influent quality is based on data provided to HECO Engineers by NPS staff and anticipated effluent quality data was provided by Orenco Systems® and is based on typical strength domestic influent. Effluent from the RTF system is expected to average less than 10 mg/L for biochemical oxygen demand (BOD) and total suspended solids (TSS) and should achieve 50 percent reduction in total nitrogen.

Table 1 - Estimated Influent and Effluent Quality

Constituent	Unit	Influent	Effluent
Biochemical Oxygen Demand (BOD)	mg/L	200	<10
Total Suspended Solids (TSS)	mg/L	200	<10
Total Nitrogen	mg/L	NA	50% Reduction

## POTENTIAL THREAT TO WATER QUALITY

The Discharger measures the Facility's influent flow using an ultrasonic flow sensor located at the headworks on the pipe near a Parshall flume; however, the Discharger was unable to measure flows from the flume due to construction of the new WWTF between October and December 2024. Average observed flows from 2019 through 2024 are summarized in Table 2 below. The design capacity of the WWTF (current and with the proposed upgrades) is 17,500 gpd.

**Table 2 – Monthly Average Wastewater Flows** 

Month	Units	2020	2021	2022	2023	2024
January	gpd	3,097	3,548	3,290	9,197	2,587
February	gpd	3,862	2,857	2,811	6,482	5,276
March	gpd	2,710	2,839	1,255	14,372	8,964
April	gpd	2,400	2,800	3,400	12,493	5,063
May	gpd	3,097	2,454	2,413	6,778	4,897
June	gpd	1,489	4,667	2,683	3,870	3,528
July	gpd	3,097	4,129	1,410	3,090	2,445
August	gpd	3,613	3,133	1,942	4,175	4,152
September	gpd	2,867	2,600	2,540	4,547	11,010
October	gpd	2,581	2,065	2,929	3,932	
November	gpd	2,867	2,533	3,283	3,663	
December	gpd	2,258	2,323	4,255	7,287	

The Discharger is required per MRP No. R5-2010-0806 to monitor influent and effluent for total nitrogen, and the source water and effluent for electrical conductivity (EC). Table 3 below summarizes monthly average effluent BOD for 2020 through 2024. As

previously mentioned, the proposed treatment system will provide reduced concentrations of BOD in the effluent to less than 10 mg/L.

Table 3 - Effluent BOD Data

Month	2020	2021	2022	2023	2024
January	ND	4.8	ND	ND	3.6
February	6.2	ND	ND	ND	ND
March	2.1	ND	ND	4.9	7.6
April	10.7	7.6	6.5	4.3	6.5
May	5.2	17.8	4.4	8.4	ND
June	ND	21.1	15.1	19.7	ND
July	ND	ND	ND		
August	4.9	ND	ND	37.0	30.9
September	4.6	ND	ND	13.7	ND
October	9.6	ND	ND	10.3	ND
November	16.5	10.5	ND	13.2	ND
December	11.0	ND	11.6	16.0	ND

Monthly average effluent TSS results from January 2020 through December 2024 are summarized in Table 4 below. Projected concentrations for TSS are less than 10 mg/L.

Table 4 – Effluent TSS Data (mg/L)

Month	2020	2021	2022	2023	2024
January	37.0	74.0	59.0	32.0	20.0
February	68.0	66.0	82.0	10.0	10.0
March	56.0	60.0	88.0	28.0	3.0
April	48.0	90.0	116.0	19.0	40.0
May	16.0	110.0	210.0	7.0	38.0
June	11.0	126.0	120.0	56.0	65.0
July	23.0	24.0	27.0		

Month	2020	2021	2022	2023	2024
August	11.0	37.0	41.0	98.0	580.0
September	60.0	53.0	48.0	45.0	3.6
October	49.0	72.0	77.0	83.0	3.0
November	65.0	92.0	52.0	110.0	4.0
December	49.7	95.0	47.0	76.0	3.0

According to additional information submitted by the Discharger, the proposed treatment system will provide a fifty percent reduction of total nitrogen. A summary of reported nitrogen data for 2020 and 2021 is shown in Table 5 below. No samples for total nitrogen were collected for 2022 through 2024.

Table 5 – Nitrogen Data (Influent and Effluent)

Month	2020 Influent Nitrogen (mg/L)	2020 Effluent Nitrogen (mg/L)	2020 Nitrogen Reduction (%)	2021 Influent Nitrogen (mg/L)	2021 Effluent Nitrogen (mg/L)	2021 Nitrogen Reduction (%)
January	40.0	0.0	100	74.0	13.1	83
February	16.0	5.0	69	46.0	1.1	98
March	10.0	2.9	71	0.7	5.4	Negative
April	22.0	3.6	84	172.0	7.1	96
May	52.0	4.8	91	160.0	9.2	95
June	4.0	3.3	18	55.0	12.0	79
July	8.2	8.3	Negative	54.0	7.4	87
August	73.0	6.3	92	110.0	3.0	98
September	15.0	5.6	63	110.0	7.6	94
October	1.0	69.0	Negative	1.2	10.4	Negative
November	11.1	8.1	83	46.0	10.0	79
December	42.0	7.9	82	64.0	13.0	80

Results for the March 2021 and October 2020/2021 effluent monitoring and percent removals are unusual (e.g., negative percent removals and low influent values), perhaps related to high precipitation or inflow and infiltration.

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Observed annual average EC results for source water levels and effluent from January 2020 through December 2024 are summarized in Table 6 below. The RWD did not provide a summary/review of the source water quality constituents other than electrical conductivity (EC), which ranged on average from 226 to 451 µmhos/cm during 2020 through 2024. Annual effluent EC ranged from 432 to 949 µmhos/cm. Source water and effluent EC levels were not collected for the periods of August through December 2023, February 2024, and August through December 2024.

Table 6 – Annual Average Electrical Conductivity (EC) Data

Year	Source Water EC (µmhos/cm)	Effluent EC (μmhos/cm)
2020	381.2	949.4
2021	388.3	812.1
2022	451.7	865.2
2023	317.1	471.6
2024	226.0	432.0

The RWD indicated that soil percolation rates at the spray field vary from 7 to 28 minutes per inch, and soil depths range from 1.5 feet to 3.5 feet. Staff's review of State Water Resources Control Board's Groundwater Ambient Monitoring Assessment Program (GAMA) identified four municipal supply wells within a two-mile radius of the Facility. Screened intervals are only available for two of the GAMA wells (Well No. CA5400940001001 [Well No. 1] and Well No. CA5410513002002 [Well No. 2]). Therefore, only these wells were used to summarize local groundwater quality. Well No. 1 is screened from 0 to 10 feet below ground surface (bgs), while Well No. 2 is screened from 0 to 100 feet bgs. Groundwater quality data collected from these wells in 2019 is summarized in Table 7 below.

**Table 7 - Groundwater Quality** 

Constituent	Unit	Well No. 1 (CA5400940001001) 22 May 2019	Well No. 2 (CA5410513002002) 17 July 2019
Nitrate (as N)	mg/L	1.3	<0.4
EC	µmhos/cm	360	318
Total Dissolved Solids (TDS)	mg/L	250	200
Chloride	mg/L	13	2

Constituent	Unit	Well No. 1 (CA5400940001001) 22 May 2019	Well No. 2 (CA5410513002002) 17 July 2019
Sulfate	mg/L	26	6.5
Alkalinity, Total	mg/L	130	150
Bicarbonate Alkalinity	mg/L	150	190

According to the RWD, the BOD<sub>5</sub> and TSS influent concentrations are both estimated to be 200 mg/L, and the anticipated effluent quality is less than 10 mg/L for both BOD and TSS. Additionally, the proposed treatment system is expected to reduce total nitrogen of the influent by 50 percent. Based on the average observed influent total nitrogen concentration (49.5 mg/L) during 2020 and 2021, the effluent is expected to contain about 24.8 mg/L total nitrogen.

Table 4: Effluent Limitations for Wastewater Treatment Systems of the General Order specifies different technology performance limitations based on the treatment provided. The BOD and TSS limits for activated sludge, MBR, or similar treatment systems are applicable for the Facility's discharge from the RTF system to the spray field (monthly average of 30 mg/L and 7-day average of 45 mg/L). Monitoring is necessary to confirm the RTF system provides the level of treatment proposed in the RWD and to characterize the Facility's discharge.

Finding 6 of the General Order states dischargers enrolled under the General Order must comply with the applicable Basin Plan requirements, and that between the requirements of the General Order and the Basin Plan, the more stringent requirements prevail. The Tulare Lake Basin Plan, Section 3.2.1 contains a water quality objective for bacteria requiring groundwater designated as municipal and domestic supply (MUN) have total coliform of less than 2.2 MPN/100 mL over any 7-day period. Because of the MUN designation and since the Discharger proposes to provide disinfection via UV light disinfection, it is appropriate for the NOA to specify a total coliform limit of 2.2 MPN/100 mL over any 7-day period as specified in the Basin Plan.

#### NITROGEN LIMIT EVALUATION

The General Order requires that wastewater systems with a flow rate greater than 20,000 gallons per day to be evaluated to determine if nitrogen limits are required, as described in Attachment 1 of the General Order. As discussed above, the design capacity of the WWTF is 17,500 gallons per day (gpd). Therefore, a Nitrogen Effluent Limit evaluation is not required for the Facility.

# MONITORING REQUIREMENTS

Staff Memorandum

Monitoring requirements included in the following sections from Attachment C of the General Order are appropriate for this discharge:

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- Activated Sludge Monitoring
- Disinfection System Monitoring
- Land Application Area Monitoring
- Solids Disposal Monitoring

#### SALT AND NITRATE CONTROL PROGRAMS

At its 31 May 2018 Board Meeting, the Central Valley Water Board adopted Basin Plan amendments incorporating new programs for addressing ongoing salt and nitrate accumulation in the Central Valley (Resolution R5-2018-0034). The Basin Plan amendments became effective on 17 January 2020 and were revised by the Central Valley Water Board in 2020 with Resolution R5-2020-0057 (https://www.waterboards.ca.gov/centralvalley/board\_decisions/adopted\_orders/resolutions/r5-2020-0057\_res.pdf). The revisions to the Basin Plan amendments became effective on 10 November 2021.

Pursuant to the Basin Plan amendments, the Discharger was sent a Notice to Comply on 5 January 2021 (CV-SALTS ID: 1787) with instructions and obligations for the Salt Control Program within one year of the effective date of the amendments. The Discharger submitted a Notice of Intent on 14 July 2021 and selected Option 2, (Alternative Option for Salt Permitting) electing to participate in the Prioritization and Optimization Study (P&O Study).

For the Nitrate Control Program, the Facility and disposal area are not within a prioritized basin on the valley floor. Implementation within unprioritized basins/sub-basins that are outside the valley floor will occur at the direction of the Executive Officer. A Notice to Comply with the Nitrate Control Program may be issued at a later date if the Executive Officer determines it is necessary to protect water quality. Under these circumstances, it may be necessary to modify this NOA to incorporate applicable Nitrate Control Program findings and requirements.

More information on the Salt and Nitrate Control Program may be found on the internet (https:cvsalinity.or/public-info).