



Central Valley Regional Water Quality Control Board

5 May 2021

Douglas Plitt, Park Manager
U.S. Army Corp of Engineers
Hensley Lake
25207 Road 407
Raymond, California 93653

CERTIFIED MAIL
7018 3090 0001 1080 5771

NOTICE OF APPLICABILITY (NOA), STATE WATER RESOURCES CONTROL BOARD ORDER WQ 2014-0153-DWQ-R5358, GENERAL WASTE DISCHARGE REQUIREMENTS FOR SMALL DOMESTIC WASTEWATER TREATMENT SYSTEMS; U.S. ARMY CORP OF ENGINEERS; HENSLEY LAKE WASTEWATER TREATMENT FACILITIES; MADERA COUNTY

On 14 August 2020, the United States Army Corp of Engineers (Discharger), submitted a Report of Waste Discharge (RWD) for the Hensley Lake Wastewater Treatment Facilities (WWTFs) at Hidden View Campground and Buck Ridge Recreation Area. The WWTFs are currently regulated by Waste Discharge Requirements (WDRs) Order 90-152. The Discharger is requesting coverage under the State Water Resources Control Board (State Water Board) Water Quality Order 2014-0153-DWQ, *General Water Discharge Requirements for Small Domestic Wastewater Treatment Systems* (General Order). The RWD included a completed and signed Form 200 for both Hidden View Campground and Buck Ridge Recreation Area and a technical report prepared and signed by Ryan Sinnott, a California registered civil engineer with the U.S. Army Corp of Engineers (RCE 90345).

Based on the information provided and a review of available information, the WWTFs treat and dispose of less than 100,000 gallons of domestic wastewater per day and are eligible for coverage under the General Order. This letter serves as formal notice that the General Order is applicable to your systems and the wastewater discharge described. You are hereby assigned enrollee number **2014-0153-DWQ-R5358**. After WDRs Order 90-152, has been rescinded, coverage under General Order 2014-0153-DWQ will become effective.

KARL E. LONGLEY ScD, P.E., CHAIR | PATRICK PULUPA, ESQ., EXECUTIVE OFFICER

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

You should familiarize yourself with the entire General Order and its attachments enclosed with this letter, which describes 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 (MRP) No. **2014-0153-DWQ-R5358**. This MRP was developed after consideration of your waste characterization and site conditions described in the attached memorandum.

DISCHARGE DESCRIPTION

The U.S. Army Corps of Engineers owns and operates Hensley Lake and the associated recreation areas, including the WWTFs at Hidden View Campground and Buck Ridge Recreation Area. Hensley Lake is located 17 miles northeast of Madera in Madera County (Section 27, Township 9 South, Range 19 East, Mount Diablo Baseline and Meridian). Hensley Lake provides recreational activities such as fishing, boating, swimming, camping, and sightseeing in the Sierra Nevada foothills on the Fresno River.

Hidden View Campground, located on the west side of Hensley Lake, has four restroom facilities including showers that serves 55 campsites. The wastewater treatment system consists of two septic tanks, a lift station and lined evaporation pond. The pond liners are more than 40 years old and their condition is unknown. Average daily flows for the Hidden View Campground are estimated at about 1,200 gpd. Buck Ridge Recreation Area, located on the east side of Hensley Lake, has four restroom facilities without showers that serves 35-day use sites. The wastewater treatment system consists of two septic tanks, a lift station, and lined evaporation pond. Average daily flows for Buck Ridge Recreation Area are estimated at about 1,575 gpd. According to the RWD, wastewater at each location is treated in the septic tanks then pumped to the lined evaporation ponds for disposal. Source water for Hidden View Campground and Buck Ridge Recreation Area is treated surface water from Hensley Lake.

FACILITY SPECIFIC REQUIREMENTS AND EFFLUENT LIMITATIONS

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-R5358.

In accordance with section B.1 of the General Order, **the monthly average daily discharge to the evaporation ponds shall not exceed 8,000 gpd (or 4,000 gpd at either the Hidden View Campground or Buck Ridge Recreation Area)**. In accordance with the requirements of the General Order, this NOA does not specify a nitrogen effluent limitation since the combined Facility flow rate is less than 20,000 gpd.

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 the

different setback requirements for wastewater treatment system 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 requirements, as summarized in the following table.

Table 1: Site Specific Applicable Setback Requirements

Equipment or Activity	Domestic Well	Flowing Stream	Ephemeral Stream Drainage	Property Line	Lake or Reservoir
Impoundment (undisinfected secondary wastewater)	150 ft.	150 ft	150 ft.	50 ft	200 ft
Septic Tank, Treatment System, and Collection System	150 ft.	50 ft	50 ft.	5 ft	50 ft (see 1 below)

1. The existing septic tanks do not meet the minimum setback (200 feet) for septic tanks and collection systems from a lake or reservoir established by the OWTS Policy in Table 3 of the General Order. As discussed in the attached memorandum, based on site specific conditions, a reduced setback of 39 feet is acceptable for the existing septic tanks.

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

2. Septic System requirements specified in Section B.2 of the General Order.
3. Pond Systems requirements specified in Section B.5 of the General Order;
4. Sludge/Solids/Biosolids Disposal requirements specified in Section B.8 of the General Order; and
5. Groundwater and Surface Water Limitations specified in Section C.1 of the General Order.

Provision E.1 of the General Order requires dischargers enrolled under the General Order to prepare and implement the following reports within **90 days** of the issuance of the NOA (**3 August 2021**):

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

The General Order requires that copies of the Spill Prevention and Emergency Response Plan and the Sampling and Analysis Plan shall be maintained at the

treatment facility and shall be presented to the Regional Water Board staff upon request.

As stated in Section E.2.w., in the event of a 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 Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) Executive Officer.

Failure to comply with the requirements in this NOA, General Order 2014-0153-DWQ, with all attachments, and MRP No. 2014-0153-DWQ-R5358 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 Central Valley Water Board adopted Basin Plan amendments incorporating new programs for addressing ongoing salt and nitrate accumulation in the Central Valley at its 31 May 2018 Board Meeting (i.e., Salt and Nitrate Control Programs) as part of the Central Valley Salinity Alternatives for Long-Term Sustainability (**CV-SALTS**) initiative. These Basin Plan amendments became effective on 17 January 2020. A Notice to Comply for the Salt Control Program was issued to the U.S. Army Corp of Engineers for the WWTFs (CV-SALTS ID 2121) on 5 January 2021. As required by the Notice to Comply, you must submit a **Notice of Intent by 15 July 2021** informing the Central Valley Water Board of your choice between Option 1 (Conservative Option for Salt Permitting) or Option 2 (Alternative Option for Salt Permitting). Further details of the Salt and Nitrate Control Programs are discussed in the enclosed memorandum. As these programs 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 Programs are met. For more information regarding the Salt and Nitrate Control Programs, you are encouraged to go to the [CV-SALTS Info Webpage](https://www.cvsalinity.org/public-info) (<https://www.cvsalinity.org/public-info>).

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.

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 and mailed to the Central Valley Water Board office at 1685 E

Street, Fresno, CA 93706. To ensure that your submittals are routed to the appropriate staff, the following information block should be included in any email used to transmit documents to this office:

Program: Non-15,
Place ID: 230092,
Facility Name: U.S. Army Corps of Engineers Hensley Lake WWTFs,
Order: 2014-0153-DWQ-R5358

All documents, including responses to inspections and written notifications, submitted to comply with this NOA shall be directed, via the paperless office system, to the Compliance and Enforcement Unit, attention to Russell Walls. Mr. Walls can be reached at (559) 488-4392 or Russell.Walls@waterboards.ca.gov. Questions regarding the permitting aspects of the NOA, and notification for termination of coverage under the Small Domestic General Order, 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 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 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 or will be provided upon request.
(http://www.waterboards.ca.gov/public_notices/petitions/water_quality).

In order to conserve paper and reduce mailing costs, a paper copy of the General Order has been sent only to the Discharger. Others are advised that the [General Order](#) is available on the State Water Board's website
(http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2014/wqo2014_0153_dwq.pdf).

Original Signed by Clay L. Rodgers for:
Patrick Pulupa
Executive Officer

(see next page for list of Attachments, Enclosures, and cc's)

Attachments:

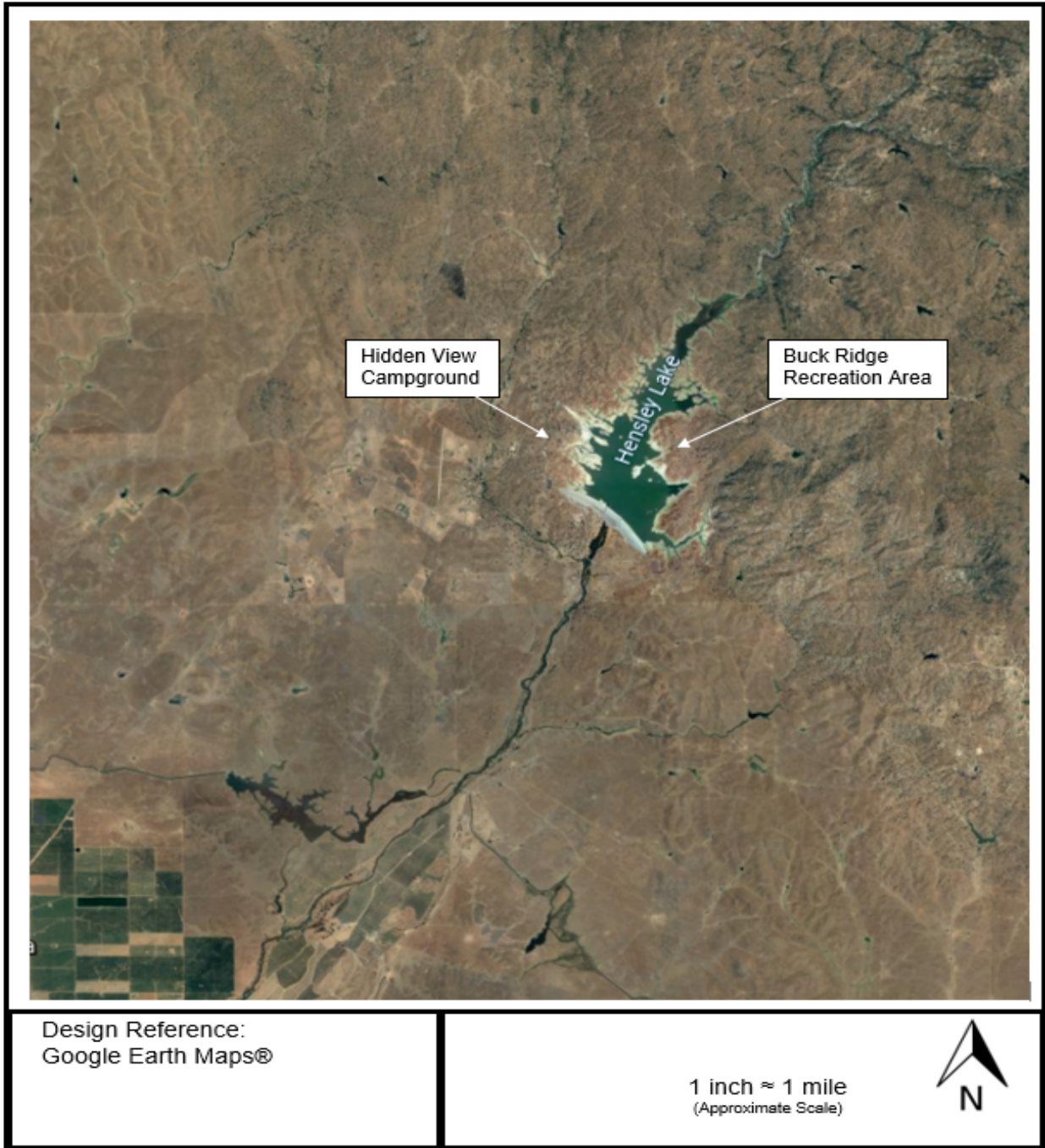
- Attachment A – Site Map
- Attachment B – Hidden View Campground
- Attachment B – Buck Ridge Recreation Area

Enclosures:

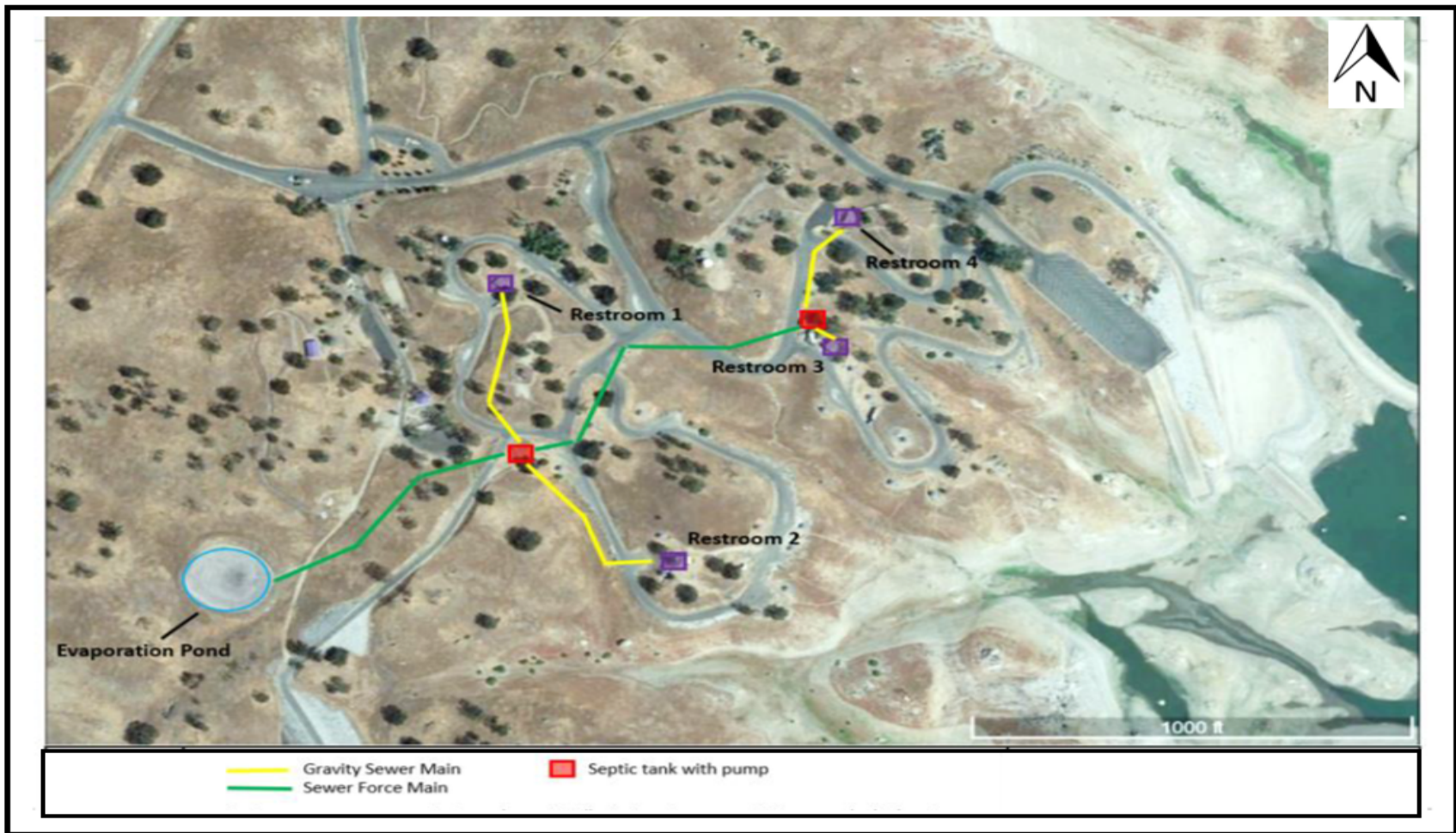
- Monitoring and Reporting Program 2014-0153-DWQ-R5358
- Review Memorandum of U.S. Army Corps of Engineers, Hensley Lake Wastewater Treatment Facilities
- State Water Resources Control Board WQ 2014-0153-DWQ (Discharger Only)

cc:

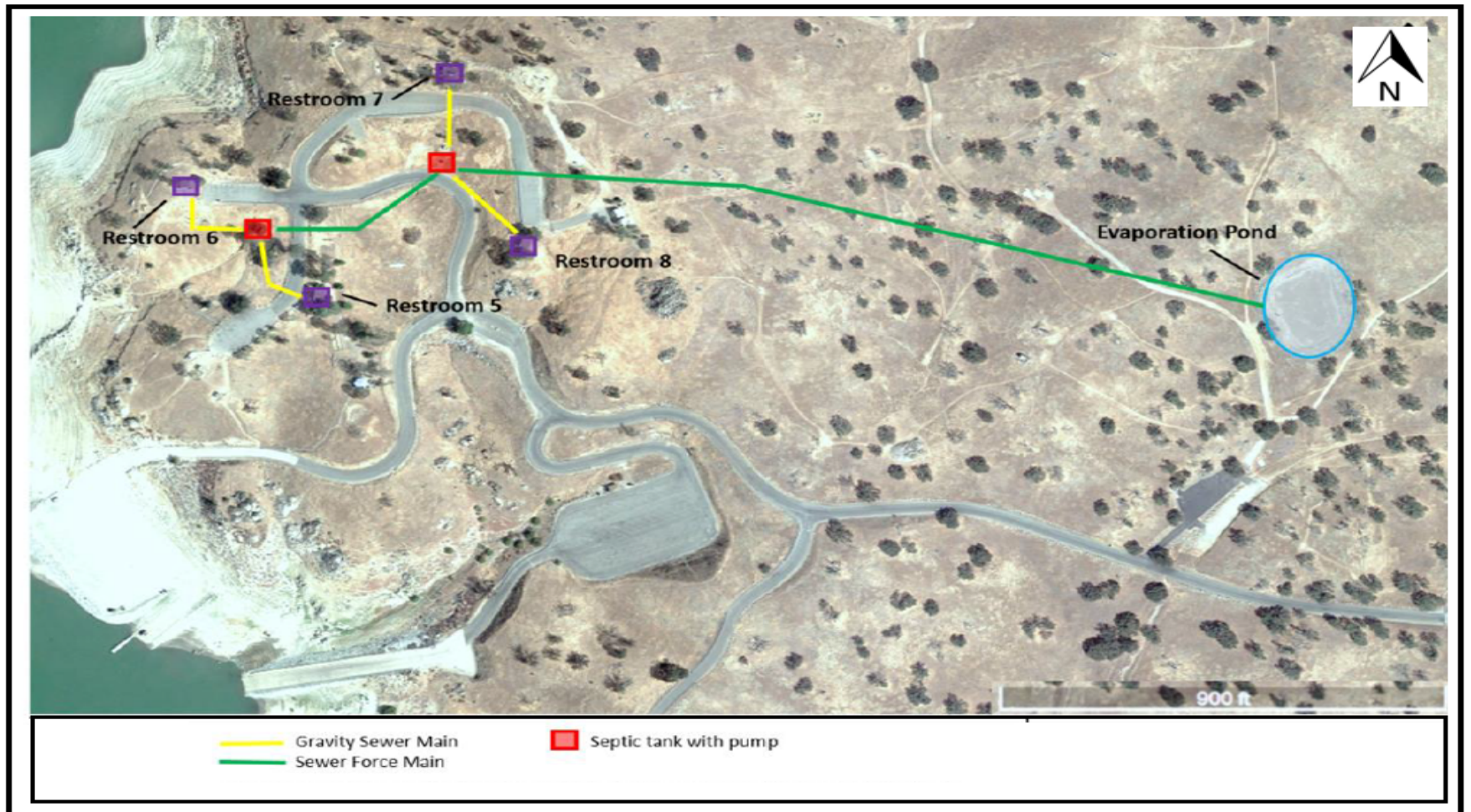
- Nancy Lam, U.S. Army Corps of Engineers, (via email)
- Laurel Warddrip, State Water Resources Control Board, Division of Water Quality, Fresno (via email)
- Russel Walls, Senior Engineer, Central Valley Water Board, Compliance and Enforcement Unit, Fresno (via email)
- Madera County Environmental Health, 200 West 4th Street, Madera, CA 93637
- Debbie Webster, Central Valley Clean Water Association (CVCWA), Sacramento (via email)



ATTACHMENT A – SITE MAP
NOTICE OF APPLICABILITY 2014-0153-DWQ-R5358
FOR
U.S. ARMY CORPS OF ENGINEERS
HENSLEY LAKE WASTEWATER TREATMENT FACILITIES
MADERA COUNTY



ATTACHMENT B – HIDDEN VIEW CAMPGROUND
NOTICE OF APPLICABILITY 2014-0153-DWQ-R5358
FOR
U.S. ARMY CORPS OF ENGINEERS
HENSLEY LAKE WASTEWATER TREATMENT FACILITIES
MADERA COUNTY



ATTACHMENT C – BUCK RIDGE RECREATION AREA
 NOTICE OF APPLICABILITY 2014-0153-DWQ-R5358
 FOR
 U.S. ARMY CORPS OF ENGINEERS
 HENSLEY LAKE WASTEWATER TREATMENT FACILITIES
 MADERA COUNTY

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

**MONITORING AND REPORTING PROGRAM NO. 2014-0153-DWQ-R5358
FOR
U.S. ARMY CORP OF ENGINEERS
HENSLEY LAKE
WASTEWATER TREATMENT FACILITIES
MADERA COUNTY**

This Monitoring and Reporting Program (MRP) describes requirements for monitoring the wastewater treatment systems at Hidden View Campground and Buck Ridge Recreation Area at Hensley Lake in Madera County. This MRP is issued pursuant to Water Code section 13267. The U.S. Army Corp of Engineers (USACE or Discharger) shall not implement any changes to this MRP unless and until a revised MRP is issued by the Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) or Executive Officer.

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 and operates the Hensley Lake Wastewater Treatment Facilities (WWTFs) at the Hidden View Campground and Buck Ridge Recreation Area that are subject to Notice of Applicability (NOA) 2014-0153-DWQ-R5358 enrolling the Facilities under State Water Resources Control Board (State Water Board) Water Quality Order 2014-0153-DWQ, *General Water Discharge Requirements for Small Domestic Wastewater Treatment Systems* (General Order). The reports 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.

All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. The name of the sampler, sample type (grab or composite), time, date, location, bottle type, and any preservative used for each sample shall be recorded on the sample chain of custody form. The chain of custody form must also contain all custody information including date, time, and to whom samples were relinquished. If composite samples are collected, the basis for sampling (time or flow weighted) shall be approved by Central Valley Water Board staff.

Field test instruments (such as those used to test pH, dissolved oxygen, and electrical conductivity) may be used provided that they are used by a State Water Resources Control Board, Environmental Laboratory Accreditation Program (ELAP) certified laboratory, or:

1. The user is trained in proper use and maintenance of the instruments.
2. The instruments are field calibrated prior to monitoring events at the frequency recommended by the manufacturer.
3. Instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
4. Field calibration reports are maintained and available for at least three years.

If monitoring consistently shows no significant variation in magnitude of a constituent concentration or parameter after at least 12 months of monitoring, the Discharger may request this MRP be revised to reduce monitoring frequency. The proposal must include adequate technical justification for reduction in monitoring frequency.

SEPTIC TANK MONITORING

Septic tanks shall be inspected and/or pumped at least as frequently as described below. Inspections of sludge and scum depth are not required if the tanks are pumped at least annually.

Table 1. Septic Tank Monitoring

Parameter	Units	Measurement Type	Inspection/Reporting Frequency
Sludge depth and scum thickness in each compartment of each tank	Feet	Staff Gauge	Annually
Distance between bottom of scum layer and bottom of outlet device	Inches	Staff Gauge	Annually
Distance between top of sludge layer and bottom of outlet device	Inches	Staff Gauge	Annually
Filter condition (if equipped, clean as needed)	NA	NA	Annually

Septic tanks shall be pumped when any one of the following conditions exists:

1. The combined thickness of sludge and scum exceeds one-third of the tank depth of the first compartment.
2. The scum layer is within 3 inches of the outlet device.
3. The sludge layer is within 8 inches of the outlet device.

If a septic tank is pumped during the year, the pumping report shall be submitted with the next regularly scheduled monitoring report. At a minimum, the record shall include the date, nature of service, service company name, and service company license number.

POND SYSTEM MONITORING

Effluent Monitoring

Effluent samples shall be taken at a location that provides representative samples of the wastewater and flow rate prior to discharge to the evaporation ponds at both Hidden View Campground and Buck Ridge Recreation Area. Effluent monitoring shall only occur when the WWTFs are in use and wastewater is being discharged to the ponds. At a minimum, effluent monitoring shall consist of the following:

Table 2. Effluent Monitoring

Constituent	Units	Sample Type	Sample Frequency	Reporting Frequency
Flow Rate	gpd	Metered (see 1 below)	Continuous	Quarterly

Constituent	Units	Sample Type	Sample Frequency	Reporting Frequency
pH	pH units	Grab	Monthly	Quarterly
EC	µmhos/cm	Grab	Monthly	Quarterly
BOD ₅	mg/L	Grab	Monthly	Quarterly
Total Nitrogen	mg/L	Grab	Annually	Annually

1. Flow rate may be metered or estimated based on potable water supply meter readings or other approved method. Flow rates may be measured as influent or effluent flow. The method of measurement should be reported.

Wastewater Pond Monitoring

All wastewater ponds (lined and unlined) shall be monitored as specified below:

Table 3. Wastewater Pond Monitoring

Constituent	Units	Sample Type	Sample Frequency	Reporting Frequency
Dissolved Oxygen (see 1 below)	mg/L	Grab	Monthly	Quarterly
Freeboard	Feet	Measurement	Monthly	Quarterly
Odors	--	Observation	Monthly	Quarterly
Berm Condition	--	Observation	Monthly	Quarterly
Liner Condition	--	Observation	Monthly	Quarterly

1. DO shall be measured between 8:00 am and 10:00 am and shall be taken opposite the pond inlet at a depth of approximately one foot, when there is sufficient water in the pond(s). If there is insufficient water in the pond(s) no sample shall be collected and the reason provided in the quarterly monitoring report. Should the DO be below 1.0 mg/L during a monthly sampling event, the Discharger shall take all reasonable steps to correct the problem and commence daily DO monitoring in the affected ponds until the problem has been resolved.

SOLIDS DISPOSAL MONITORING

The Discharger shall report the handling and disposal of all solids (e. g., screenings, grit, sludge, biosolids, etc.) generated at the WWTFs. 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

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

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 50 MB should be emailed to: centralvalleyfresno@waterboards.ca.gov. Documents that are 50 MB or larger should be transferred to a disk and mailed to the appropriate Regional Water Board office, in this case 1685 E Street, Fresno, CA 93706. To ensure that your submittals are routed to the appropriate staff, the following information block should be included in any email used to transmit documents to this office:

Program: Non-15,

Place ID: 230092

Facility Name: U.S. Army Corp of Engineers Hensley Lake WWTFs,

Order: 2014-0153-DWQ-R5358

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 1st). 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.
2. A comparison of monitoring data to the requirements (including flow limitations), disclosure of any violations of the NOA and/or General Order, and an explanation of any violation of those requirements.
3. Copies of all laboratory analytical report(s) and chain of custody form(s).

B. Annual Report

Annual Reports shall be submitted to the Regional Water Board **by March 1st following the monitoring year**. The reports shall bear the certification and signature of the Discharger's authorized representative. 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 systems, including discussion of the capacity issues nuisances' 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 actions 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.
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 begin implement the above monitoring program in the first month following the date WDRs Order 90-152 is rescinded.

Ordered by:

Original Signed by Clay L. Rodgers for:
PATRICK PALUPA, Executive Officer

5/5/2021
(Date)

GLOSSARY

BOD ₅	Five-day biochemical oxygen demand
CaCO ₃	Calcium carbonate
DO	Dissolved oxygen
EC	Electrical conductivity at 25° C
FDS	Fixed dissolved solids
TDS	Total dissolved solids
TKN	Total Kjeldahl nitrogen
TSS	Total suspended solids
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 except weekends or holidays.
Twice Weekly	Twice per week on non-consecutive days.
Weekly	Once per week.
Twice Monthly	Twice per month during non-consecutive weeks.
Monthly	Once per calendar month.
Quarterly	Once per calendar quarter.
Semiannually	Once every six calendar months (i.e., two times per year) during non-consecutive quarters.
Annually	Once per year.
mg/L	Milligrams per liter
mg/kg	Milligrams per kilogram
mL/L	Milliliters [of solids] per liter
µg/L	Micrograms per liter
µmhos/cm	Micromhos per centimeter
gpd	Gallons per day
mgd	Million gallons per day
MPN/100 mL	Most probable number [of organisms] per 100 milliliters
NA	Denotes not applicable

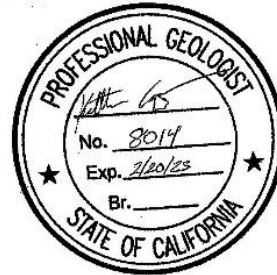


Central Valley Regional Water Quality Control Board

TO: Scott J. Hatton
Supervising Water Resource Control Engineer

FROM: Alexander S. Mushegan
Senior Water Resource Control Engineer
RCE 84208

Kathleen Carpenter
Engineering Geologist
PG 8014



DATE: 5 May 2021

APPLICABILITY OF COVERAGE UNDER STATE WATER RESOURCES CONTROL BOARD ORDER WQ 2014-0153-DWQ; GENERAL WASTE DISCHARGE REQUIREMENTS FOR SMALL DOMESTIC WASTEWATER TREATMENT SYSTEMS; U.S. ARMY CORPS OF ENGINEERS; HENSLEY LAKE WASTEWATER TREATMENT FACILITIES; MADERA COUNTY

On 12 August 2020, Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff received a Report of Waste Discharge (RWD) for the United States Army Corps of Engineers' Hensley Lake Wastewater Treatment Facilities (or WWTFs) at Hidden View Campground and Buck Ridge Recreation Area. The RWD included a completed and signed Form 200 for both Hidden View Campground and Buck Ridge Recreation Area and a technical report prepared and signed by Ryan Sinnott (RCE 90345), a California registered professional civil engineer with the Army Corps of Engineers. This memorandum provides a summary of the applicability of this discharge for coverage under the State Water Resources Control Board's WQ Order 2014-0153-DWQ, *General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems* (General Order).

KARL E. LONGLEY ScD, P.E., CHAIR | PATRICK PULUPA, ESQ., EXECUTIVE OFFICER

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

BACKGROUND INFORMATION

Hensley Lake provides recreational activities such as fishing, boating, swimming, camping, and sightseeing in the Sierra Nevada foothills on the Fresno River about 17 miles northeast of Madera in Madera County. The WWTFs consists of two treatment systems located on opposite sides of Hensley Lake, known as Hidden View Campground and Buck Ridge Recreation Area (see **Attachment A** of the Notice of Applicability [NOA]).

The U.S. Army Corps of Engineers (hereafter Discharger) owns and operates the Hensley Lake WWTFs. The WWTFs provides wastewater treatment and disposal for the Hidden View Campground on the west side of Hensley Lake (37° 7' 15.80" N, 119° 53' 47.78" W) and Buck Ridge Recreation Area on the east side of Hensley Lake (37° 7' 19" N, 119° 52' 25" W). The discharges are currently regulated by Waste Discharge Requirements (WDRs) Order 90-152, which authorizes a discharge of up to 4,000 gallons per day (gpd) to evaporation ponds at both the Hidden View Campground and Buck Ridge Recreation Area.

DESCRIPTION OF DISCHARGE

Hensley Lake is open year-round. However, there is limited use and services during the off season from October to February. According to the RWD, the design flow for each system is about 4,000 gallons per day (gpd) for a combined flow of 8,000 gpd. Source water for Hidden View Campground and Buck Ridge Recreation Area is provided by a surface water treatment plant that draws water from Hensley Lake.

Hidden View Campground has four restroom facilities including showers that serve 55 campsites. Wastewater generated from the restrooms flows to either a 4,500-gallon or 6,000-gallon septic tank. From the septic tanks, the wastewater is pumped to the 350,000-gallon lined evaporation pond. Estimated average daily flows for the Hidden View Campground are about 1,200 gpd (calculated based on the average number of visitors [\approx 40 per day] and typical flows of 30 gallons per person per day from the California Plumbing Code).

Buck Ridge Recreation Area has four restroom facilities without showers that serve 35-day use sites. Wastewater generated from the restrooms flows to either a 6,000-gallon or 7,500-gallon septic tank. From the septic tanks, the wastewater is pumped to the 350,000-gallon lined evaporation pond. Estimated average daily flows for Buck Ridge Recreation Area are about 1,575 gpd (calculated based on the average number of visitors [\approx 105 per day] and typical flows of 15 gallons per person per day from the California Plumbing Code).

According to the RWD, the septic tanks are pumped out annually and the solids taken to a permitted facility for disposal. In addition, both locations are equipped with fish cleaning stations and there is a RV dump station at Hidden View Campground. The fish cleaning stations and RV dump station discharge to onsite holding tanks separate from

the wastewater treatment systems. These holding tanks are routinely pumped out and the waste taken to a permitted facility for disposal.

POTENTIAL THREAT TO WATER QUALITY

Hensley Lake is a 1,500-acre manmade lake in the foothills of the Sierra Nevada. At an elevation around 540 feet above mean seal level, the area consists of shallow soils overlying igneous and metamorphic bedrock. Groundwater in the area is present in fractured bedrock at various depths ranging from 20 to 200 feet below site grade (bsg). There is limited soil data for the area. However according to the RWD, given actual flows at Hidden View Campground and Buck Ridge Recreation Area, the evaporation ponds generally operate at about 50% capacity and no overflow issues have been reported. According to the Discharger the evaporation ponds were constructed in the 1970's and equipped with an 8-mil PVC liner and covered by a 6-inch gravel layer. The condition of the liners is unknown; however, given their age some deterioration is expected.

According to the Discharger, the distance from the evaporation ponds to Hensley Lake at both locations is greater than 2,000 feet. This distance meets the minimum setback requirements specified in Table 3: *Summary of Wastewater System Setbacks* in the General Order. However, the OWTS Policy requires a minimum setback of 200 feet for septic tanks and collection systems from a lake or reservoir. Based on the available data the existing septic tanks at the Hidden View Campground at 170 and 39 feet from the high-water mark do not meet this setback. According to Discharger there have been no reports of odor or nuisance conditions and no instances of these septic tanks being flooded as a result of high water from the lake. In addition, the tanks are pumped out annually to prevent overflows. Therefore, these existing septic tanks for not appear to pose a threat to nearby Lake Hensley and the setback for these existing septic tanks is sufficient.

According to the RWD, the Discharger does not sample its wastewater and both WWTFs are currently closed (Hidden View Campground is closed due to the COVID-19 Pandemic, and Buck Ridge Recreation Area has been closed since 2014 for refurbishing) so there is no effluent water quality data. However, the discharge to the WWTFs has no commercial or industrial component and is expected to be similar to that of a residential use with similar wastewater solids and chemical loading. According to Table 1 of the General Order, typical residential wastewater ranges from 155-330 mg/L for total suspended solids (TSS), from 155-286 mg/L for biochemical oxygen demand (BOD₅), and from 26-75 mg/L for total nitrogen (U.S. Environmental Protection Agency, 2005). Septic tanks are expected to achieve 60-80% removal of solids from raw wastewater with solids remaining in septic tank, and BOD removal is expected to be around 30-50%.

In accordance with Attachment 1 of the General Order, with a combined flow less than 20,000 gpd a nitrogen effluent evaluation is not required.

MONITORING REQUIREMENTS

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

- Septic Tank Monitoring
- Pond System Monitoring
- Solids Disposal Monitoring

SALT AND NITRATE CONTROL PROGRAMS

As part of the Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) initiative, the Central Valley Water Board adopted Basin Plan amendments (Resolution R5-2018-0034) incorporating new programs for addressing ongoing salt and nitrate accumulation in the waters and soils of the Central Valley at its 31 May 2018 Board Meeting. On 16 October 2019, the State Water Resources Control Board adopted Resolution No. 2019-0057 conditionally approving the Central Valley Water Board Basin Plan amendments and directed the Central Valley Water Board to make targeted revisions to the Basin Plan amendments within one year following approval by the Office of Administrative Law. The Office of Administrative Law approved the Basin Plan amendments on 15 January 2020 (OAL Matter No. 2019-1203-03).

Pursuant to the Basin Plan amendments, A Notice to Comply for the Salt Control Program was issued to the Discharger on 5 January 2021. The Discharger must submit a **Notice of Intent by 15 July 2021** informing the Central Valley Water Board of their choice between Option 1 (Conservative Option for Salt Permitting) or Option 2 (Alternative Option for Salt Permitting). Under Option 1, the discharge will need to comply with a stringent salinity requirement of 700 $\mu\text{mhos/cm}$ to protect beneficial uses. If the discharge cannot comply with this requirement, the Discharger will need to meet performance-based requirements and participate in a basin-wide planning effort to develop a long-term salinity strategy for the Central Valley (i.e., participate in the Priority and Optimization Study per Option 2). The level of participation required of dischargers whose discharges do not meet stringent salinity requirements will vary based on factors such as the amount of salinity in the discharge, local conditions, and type of discharge. With an average EC of about 1,024 $\mu\text{mhos/cm}$ (based on limited data from the 1990's), the Discharger will likely need to select Option 2.

For the Nitrate Control Program, the Facility falls outside a prioritized groundwater basin. The closest prioritized basin is Groundwater Basin 5-022.06. (San Joaquin Valley - Madera) a Priority 2 basin. Implementation within a non-prioritized basin/sub-basin will occur as directed by the Central Valley Water Board Executive Officer. More information related to the Salt and Nitrate Control Programs can be found at the [CV-SALTS Website](https://www.cvsalinity.org/public-info) (<https://www.cvsalinity.org/public-info>).