



Central Valley Regional Water Quality Control Board

14 August 2018

Brian Anderluh Evergreen Destination Holdings, LLC 33160 Evergreen Road Groveland, CA 95321

CERTIFIED MAIL 7018 0040 0000 1911 5630

NOTICE OF APPLICABILITY (NOA); STATE WATER RESOURCES CONTROL BOARD ORDER WQ 2014-0153-DWQ-R5272; GENERAL WASTE DISCHARGE REQUIREMENTS FOR SMALL DOMESTIC WASTEWATER TREATMENT SYSTEMS; EVERGREEN DESTINATION HOLDINGS, LLC; EVERGREEN LODGE WASTEWATER TREATMENT FACILITY; TUOLUMNE COUNTY

On 25 October 2017, Evergreen Destination Holdings, LLC (Discharger) submitted a Form 200 and supplemental information for Evergreen Lodge Wastewater Treatment Facility (Facility). Based on the information provided, the onsite wastewater treatment system (OWTS) treats and disposes of less than 100,000 gallons per day (gpd), and is therefore eligible for coverage under the general and specific conditions of the State Water Resources Control Board (State Water Board) Water Quality Order 2014-0153-DWQ *General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems* (General Order). This letter serves as formal notice that the General Order is applicable to your system and the wastewater discharge described below upon the rescission of Waste Discharge Requirements Order 5-00-132. You are hereby assigned General Order 2014-0153-DWQ-R5272 for your system.

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 (MRP) No. 2014-0153-DWQ-R5272. This MRP was developed after consideration of your waste characterization and site conditions described in the attached memorandum.

DISCHARGE DESCRIPTION

The Facility is located at 33160 Evergreen Road, Groveland in Tuolumne County, approximately 20 miles east of Groveland and five miles north of Highway 120. The OWTS consists of 18 individual septic systems with pressure-dosed leach fields. There are a total of 40 septic tanks, two grease traps, and 5,500 linear feet of leach field. The septic tanks are linked to guest cabins, smaller septic systems are approximately 1,000 to 1,500-gallon tanks. The larger cabins can have up to two septic tanks built in series. Each cabin consists of a shower, toilet, and sink, but do not have kitchens. The septic system serving the restaurant and staff cafeteria has multiple 2,000-gallon grease traps and septic tanks.

FACILITY SPECIFIC REQUIREMENTS

The Discharger will 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-R5272 in accordance with the requirements of the General Order, discharges with flow rates greater than 20,000 gpd must be evaluated as described in Attachment 1 of the General Order to determine if nitrogen effluent limits are required.

In accordance with Section B.1 of the General Order, treated wastewater discharged **shall not exceed 14,040 gpd as a monthly average.**

The General Order states in Section B.1.I that the Discharger shall comply with the setbacks as described in Table 3. This table summarizes different setback requirements for wastewater 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 setback requirements, as summarized in the following table:

Site Specific Applicable Setback Requirements				
Equipment or Activity	Domestic Well	Flowing Stream⁴	Ephemeral Stream Drainage ⁷	Property Line
Septic Tank, Treatment System, and Collection System ⁵	150 ft. ¹	50 ft. ²	50 ft.	5 ft. ²
Leach Field ⁶	100 ft. ^{2, 3}	100 ft. ²	50 ft.	5 ft. ²

- ^{1.} Setback established by Onsite Wastewater Treat System Policy, section 7.5.6.
- ² Setback established by California Plumbing Code, Table K-1.
- 3. California Well Standards, part II, section 8.
- 4 A flowing stream shall be measured from the ordinary high-water mark established by fluctuations of water elevation and indicated by characteristics such as shelving, changes in soil character, vegetation type, presence of litter or debris, or other appropriate means.
- ^{5.} Septic Tank, Treatment System, or Collection System addresses equipment located below ground or that impedes leak detection by routine visual inspection.
- ⁶ Leach Field includes all subsurface dispersal systems.
- Ephemeral Stream Drainage denotes a surface water drainage feature that flows only after rain or snow-melt and does not have sufficient groundwater seepage (baseflow) to maintain a condition of flowing surface water. The drainage shall be measured from a line that defines the limit of the ordinary high-water mark (described in "4" above). Irrigation canals are not considered ephemeral streams drainage features. The ephemeral stream shall be a "losing stream" (discharging surface water to groundwater) at the proposed wastewater system site.

In particular, the Discharger shall comply with the septic systems requirements specified in Section B.2. of the General Order. Section B.2.c states that to the maximum extent possible, RV, portable toilet, or similar wastes shall not be discharged to a septic tank or functionally equivalent system (e.g., Imhoff tank) without subsequent additional treatment (e.g., aerated pond, recirculating sand filter, etc.) prior to disposal.

In particular, the Discharger shall comply with Section B.2.d that septic tanks shall be pumped when any of the following conditions exists:

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

The General Order includes subsurface disposal system requirements in Section B.6. The Facility's OWTS includes leach fields; therefore, the Discharger must comply with the requirements in Section B.6. The Discharger must comply with USEPA Underground Injection Control requirements as specified in Section B.6.g. of the General Order.

Failure to comply with the requirements in this NOA, General Order 2014-0153-DWQ, with all attachments, and MRP No. 2014-0153-DWQ-R5272 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. If flow to the Facility substantially increases and approaches 20,000 gpd, you must contact Central Valley Water Board staff to determine if further analysis is required.

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 this NOA (by 13 November 2018):

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

The General Order requires the Sludge Management Plan to be submitted to the Central Valley Water Board within 90 days of the issuance of this NOA.

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.

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.

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. These programs, once effective, could change how the Central Valley Water Board permits discharges of salt and nitrate.

The Central Valley Water Board has gone to a Paperless Office System. 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 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, WDID: 5C551046001, Facility Name: Evergreen Lodge Wastewater Treatment Facility, Order: 2014-0153-DWQ-R5272.

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 web site at:

http://www.waterboards.ca.gov/board decisions/adopted orders/water quality/2014/wqo2014 0153 dwq.pdf

Please note that WDRs Order 5-00-132 is proposed to be rescinded at the **6/7 December 2018** meeting of the Central Valley Water Board. Upon rescission of your individual WDRs, coverage for your facility under the General Order shall become applicable subject to this Notice of Applicability.

If you have any questions regarding this matter, please contact Jeff Robins by phone at (559) 445-5976 or email at Jeff.Robins@Waterboards.ca.gov.

Patrick Pulupa
Executive Officer

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Attachments:

Attachment A – Location Map

Attachment B - Location of Monitoring Wells

State Water Resources Control Board Order WQ 2014-0153-DWQ

(Discharger Only)

Monitoring and Reporting Program No. 2014-0153-DWQ-R5272

Review Memorandum of Evergreen Lodge Wastewater Treatment Facility

Report of Waste Discharge

CC:

Tuolumne County Environmental Health Services, Tuolumne Tuolumne County Planning Development Department, Tuolumne

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. 2014-0153-DWQ-R5272

FOR

EVERGREEN DESTINATION HOLDINGS, LLC EVERGREEN LODGE WASTEWATER TREATMENT FACILITY TUOLUMNE 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. Evergreen Destination Holdings, LLC (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.

Water Code section 13267 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."

Water Code section 13268 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, or failing or refusing to furnish a statement of compliance as required by subdivision (b) of section 13399.2, or falsifying any 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 Evergreen Lodge Wastewater Treatment Facility (Facility) that is subject to the Notice of Applicability (NOA) of Water Quality Order 2014-015-DWQ-R5272. 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.

SEPTIC TANK MONITORING

Monitoring of each septic tank system shall include the following:

Parameter	Units	Sample Type	Sample Frequency	Reporting Frequency
Flow Rate	gpd	Metered ^a	Continuous	Monthly

gpd denotes gallons per day.

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

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
Effluent filter condition (clean as needed)	NA	NA	Annually

NA denotes not applicable.

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 annual report. All pumping reports 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.

a. Flow rate may be metered or estimated based on potable water supply meter readings or other approved method.

SUBSURFACE DISPOSAL AREA

In general, monitoring of the subsurface disposal areas shall be sufficient to determine if wastewater is evenly applied, the disposal area is not saturated, burrowing animals and/or deep-rooted plants are not present, and odors are not present. Inspection of dosing pump controllers, automatic distribution valves, etc. is required to maintain optimum treatment in the disposal area (and any sand or media filter if present). Monitoring shall include, at a minimum, the following:

Constituent	Inspection Frequency	Reporting Frequency
Pump Controllers, Automatic Valves, etc. ^a	Quarterly	Quarterly
Nuisance Odor Conditions	Quarterly	Quarterly
Saturated Soil Conditions ^b	Quarterly	Quarterly
Plant Growth ^c	Quarterly	Quarterly
Vectors or Animal Burrowing d	Quarterly	Quarterly

- a. All pump controllers and automatic distribution valves shall be inspected for proper operation as recommended by the manufacturer.
- b. Inspect each disposal area for saturated conditions. If a mound system is used, inspect perimeter base for signs of wastewater seepage or saturated soil conditions.
- Shallow-rooted plants are generally desirable, deep-rooted plants such as trees shall be removed as necessary.
- d. Evidence of animals burrowing shall be immediately investigated and burrowing animal populations controlled as necessary.

Effluent Monitoring

Effluent samples shall be collected from at least five sand trench systems annually in such a manner that each system is sampled every four years. Samples shall be collected from the outlet structure of the sand bed. Monitoring shall include, at minimum, the following:

Constituent	Units	Sample Type	Reporting Frequency
Biological Oxygen Demand	mg/L	Grab	Annually
Total Suspended Solids	mg/L	Grab	Annually
Total Nitrogen	mg/L	Grab	Annually
Electrical Conductivity	µmhos/cm	Grab	Annually

mg/L denotes milligrams per liter; µmhos/cm denotes micromhos per centimeter.

SOLIDS DISPOSAL MONITORING

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 name 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.

Groundwater Monitoring

The Discharger shall conduct monitoring of its groundwater monitoring network as specified in this section. The monitoring well network currently consists of monitoring well (MW) – 1, MW-2, and MW-3 (see Attachment B of the NOA for approximate locations). Consistent with the Business and Professions Code, groundwater monitoring reports, well construction workplans, etc. shall be

prepared under the supervision of a California licensed civil engineer or geologist. Prior to construction of any new groundwater monitoring wells in the future, the Discharger shall submit plans and specifications to the Central Valley Water Board staff for review and approval. Once installed, all monitoring wells designated as part of the monitoring network shall be sampled and analyzed according to the schedule below.

The data from routine groundwater monitoring events shall be submitted quarterly. Analysis of the data and groundwater flow directions shall be performed at least annually and shall be performed under the supervision of a California licensed professional (as described above). The Discharger may request a reduced monitoring and reporting schedule once adequate data has been collected to characterize the site. Typically, two years of quarterly sampling is required for adequate characterization.

Prior to sampling, groundwater elevations shall be measured and the wells shall be purged of at least three well volumes and until pH and electrical conductivity have stabilized. No-purge, low-flow, or other sampling techniques are acceptable if they are described in an approved Sampling and Analysis Plan. Depth to groundwater shall be measured to the nearest 0.01 feet. Groundwater elevations shall be calculated. Samples shall be collected using approved USEPA methods. Groundwater monitoring shall include, at a minimum, the following:

Constituent	<u>Units</u>	Sample	Sampling/Reporting
		<u>Type</u>	Frequency b,c
Groundwater Elevation ^a	0.01 Feet	Calculated	Semi-Annual
Depth to Groundwater	0.01 Feet	Measurement	Semi-Annual
Gradient	Feet/Feet	Calculated	Semi-Annual
Gradient Direction	degrees	Calculated	Semi-Annual
Electrical Conductivity	µmhos/cm	Grab	Semi-Annual
pH	Std. Units	Grab	Semi-Annual
Total Dissolved Solids	mg/L	Grab	Semi-Annual
Nitrate as Nitrogen	mg/L	Grab	Semi-Annual
Sodium	mg/L	Grab	Semi-Annual
Chloride	mg/L	Grab	Semi-Annual
Total Coliform Organisms	MPN/100 mL	Grab	Semi-Annual
Zinc ^b	mg/L	Grab	Semi-Annual
Phenol ^b	mg/L	Grab	Semi-Annual
Formaldehyde ^b	mg/L	Grab	Semi-Annual

MPN/100 mL denotes most probable number per 100 mL sample. Std. Units denotes standard units. mg/L denotes milligrams per liter. µmhos/cm denotes micromhos per centimeter.

- a. Groundwater elevation shall be based on depth to water using a surveyed measuring point elevation on the well and a surveyed reference elevation.
- b. Monitoring of the constituents zinc, phenol, and formaldehyde are required only when recreational vehicles were allowed to discharge to the wastewater system in the previous 12 months.
- Analysis of data by a California licensed professional is required at least annually,

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 discernible. 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. The Central Valley Water Board has gone to a Paperless Office System. 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, WDID: 5C551046001, Facility Name: Evergreen Lodge Wastewater Treatment Facility, Order: 2014-0153-DWQ-R5272.

A. Quarterly Monitoring Reports

Quarterly reports shall be submitted to the Central Valley 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 discharge specifications, flow limit, 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. If requested by staff, copies of laboratory analytical report(s) and chain of custody form(s).

B. Annual Report

Annual Reports shall be submitted to the Central Valley Water Board by **March 1**st **following the monitoring year**. The Annual Report shall include the following:

- 1. Tabular and graphical summaries of all monitoring data collected during the year.
- Calculation of the annual average nitrogen removal rate using the arithmetic mean of nitrogen in
 effluent samples collected over the calendar year as a percentage of the arithmetic mean of the
 values of influent samples collected.
- An evaluation of the performance of the wastewater treatment system, including discussion of 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.
- 4. 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.
- 5. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.
- 6. The name and contact information for the wastewater operator responsible for operation, maintenance, and system monitoring.
- 7. A groundwater monitoring report prepared by a California licensed professional. This report may be prepared separately from the rest of the Annual Report. The report shall contain an analysis of groundwater data collected during the year. The analysis shall include a description of the sample events, copies of the field logs, purge method and volume, groundwater elevation and trend, a groundwater elevation map for each sample event, summary tables showing results for parameters measured, comparison of groundwater quality parameters to standards in the NOA.

chain-of-custody forms, calibration logs for field equipment used, and a general evaluation of any impacts the wastewater discharge is having on groundwater quality.

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 the 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 upon the rescission of Waste Discharge Requirements Order 5-00-132.

Ordered by:

lay L. Kodgers

for PATRICK PULUPA, Executive Officer

DATE



Central Valley Regional Water Quality Control Board

TO:

Scott J. Hatton

Supervising Water Resource Control Engineer

RCE 67889

FROM:

Alexander S. Mushegan

Senior Water Resource Control Engineer

RCE 84208

Lovdeep Singh

Water Resource Control Engineer

DATE:

14 August 2018

SUBJECT:

APPLICABILITY OF COVERAGE UNDER STATE WATER RESOURCES CONTROL BOARD ORDER WQ 2014-0153-DWQ; GENERAL WASTE DISCHARGE REQUIREMENTS FOR SMALL DOMESTIC WASTEWATER TREATMENT SYSTEMS; EVERGREEN DESTINATION HOLDINGS, LLC; **EVERGREEN LODGE WASTEWATER TREATMENT FACILITY; TUOLUMNE**

COUNTY

On 25 October 2017, Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff received a Form 200 and supplemental information from Evergreen Destination Holdings, LLC (Discharger) for Evergreen Lodge Wastewater Treatment Facility (Facility). Additional information was provided on 18 April 2018 by Brian Anderluh, the owner of Evergreen Lodge. The Facility is located at 33160 Evergreen Road, Groveland in Tuolumne County (Section 11, Township 1 South, Range 19 East MDB&M), and approximately 20 miles east of Groveland and five miles north of Highway 120. The information provided by the Discharger includes a Form 200 and a facility description. This memorandum provides a summary of Central Valley Water Board's review of the information provided and the applicability of this discharge to be covered under State Water Resources Control Board Order WQ 2014-0153-DWQ, General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems (General Order).

BACKGROUND INFORMATION

Evergreen Lodge is a resort that consists of 88 guest cabins, 16 tent campgrounds, a restaurant, a tavern, a general store, a swimming pool, a commercial and staff laundry, an onsite staff housing, and a staff cafeteria. The onsite wastewater treatment system (OWTS) is currently permitted under Waste Discharge Requirements (WDR) Order No. 5-00-132 for an average dry weather discharge flow of 13,000 gallons per day. Since the adoption of Order No. 5-00-132, the Discharger has expanded Evergreen Lodge. The project was accomplished in four phases. Phase I added 34 cabins, two pools, a spa, and a 1,500-square foot recreation building to the west portion of the property. Phase II added 20 cabins and a lounge to the east end of the property. Phase III added 15 duplexes and six single cabins to the southwest portion of the property. Phase IV upgraded the existing lodge building and added a 1,500-square foot conference facility. The phases were all completed in 2009. The Discharger is considering building 16 additional guest units in the future.

POTENTIAL THREAT TO WATER QUALITY

The Facility serves an annual average of 200 guest per day. During the summer, the Facility serves about 300 guests per day. The Facility is closed during the month of January, temporarily discontinuing the use of the OWTS. At maximum cabin capacity, wastewater discharge is expected to be 10,900 gallons per day (gpd). Wastewater from the kitchen and laundry adds an additional 2,134 gpd, for a maximum discharge of 13,034 gpd. According to a 1998 Report of Waste Discharge (ROWD), signed and stamped by Rodger L. Stephens (RCE 27317), the Facility is designed for a maximum flow rate of 14,040 gpd. The annual average flow is anticipated to be approximately 8,733 gpd, based on a 67 percent occupancy. The Facility consists of 40 septic tanks, two grease traps, and 5,500 linear feet of leach field. The total volume capacity of all 40 septic tanks is approximately 70,000 gallons. The wastewater is generated from toilets, showers, and a kitchen. The septic system serving the restaurants and staff cafeteria includes grease traps. Tuolumne County has permitted the Discharger to install gray water systems to capture shower and laundry water for subsurface irrigation.

Soil profile inspections and percolation rate tests were conducted by a registered professional engineer at 12 locations scattered over the Facility. According to the field data, the soils in the profile pits were nearly identical throughout the property. Between zero to seven feet, the soil consists of soft, loose, very friable, slightly moist silty soil to predominately fine granitic sand. Numerous roots were also present and some profile holes showed broken granite cobbles or weathered granite. Groundwater was encountered at seven feet in two of the profile holes. These two holes were located in a low-lying area on the east side of the property, none of the trench lines were built there. According to the ROWD submitted in 1998, the depths to first groundwater in three of the on-site drinking water wells were 22, 180, and 245 feet below ground surface. The tested percolation rates ranged from 0.92 to 3.3 minutes per inch. Due to the high percolation rates the Discharger installed pressure-dosed sand-trench leach fields to provide intermediate treatment after the septic tank and prior to the discharge to the soil.

On 23 February 2009, the Central Valley Water Board staff received a Report of Monitoring Well Installation for the Facility in accordance with Order 5-00-132. Monitoring and Reporting Program No. 5-00-132 requires the Discharger to sample and report groundwater semi-annually. The monitoring well network currently consists of monitoring well (MW) – 1, MW-2, and MW 3 (Attachment B). The Central Valley Water Board records indicate groundwater monitoring data was only submitted once on 23 May 2011. Recent analytical data from the Facility's monitoring wells are not available.

Typical characteristics for residential wastewater were considered. The five-day biological oxygen demand (BOD₅) is expected to be between 200-290 mg/L, total suspended solids are roughly 200-290 mg/L, total nitrogen 35-100 mg/L, and total phosphorus 18-29 mg/L. Primary treatment takes place in the anaerobic environment of a septic tank. The wastewater is then treated in the aerobic environment of the sand filter before discharging to the soil trenches, where additional biodegradation occurs. According to the Orenco System Inc. reports, most of the decomposition takes place in the sand filter where naturally occurring microbes residing on the surface of sand particles thrive on the regular dose of nutrients contained in the wastewater. Order 5-00-132 states that the typical treatment results from a pressure-dosed sand-trench leach field reduces the BOD to 5 mg/L, total suspended solids to 5 mg/L, fecal coliform to 400 MPN/100 mL, and total nitrogen to 30 mg/L. The Discharger has not submitted self-monitoring reports in recent years, therefore, analytical data of the Facility's effluent is not available.

MONITORING REQUIREMENTS

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

- Septic Tank Monitoring,
- Subsurface Disposal Area Monitoring,
- Solids Disposal Monitoring, and
- Groundwater Monitoring

CV-SALTS

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. These programs, once effective, could change how the Central Valley permits discharges of salt and nitrate.



