



Central Valley Regional Water Quality Control Board

23 December 2021

Carl Thompson
Del Rio Lago LLC
Del Rio Lago Wastewater System
1919 Grand Canal Blvd., Suite B-7
Stockton, CA 95207

CERTIFIED MAIL
7020-1810-0002-0569-0104

NOTICE OF APPLICABILITY

**GENERAL WASTE DISCHARGE REQUIREMENTS FOR SMALL DOMESTIC
WASTEWATER TREATMENT SYSTEMS ORDER WQ 2014-0153-DWQ
FOR
DEL RIO LAGO LLC
DEL RIO LAGO WASTEWATER SYSTEM
STANISLAUS COUNTY**

Del Rio Lago LLC submitted a Report of Waste Discharge (RWD) dated 15 September 2020 describing the Del Rio Lago Wastewater System (WWS) in Stanislaus County. The WWS will provide treatment and disposal service for domestic wastewater generated from the Del Rio Lago subdivision. Based on information provided in the RWD, the wastewater treatment system and discharge are consistent with the requirements of the State Water Resources Control Board's (State Water Board's) *General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems*, Order WQ 2014-0153-DWQ (General Order). This Notice of Applicability (NOA) serves as formal notice that the discharge shall be regulated pursuant to the General Order and this NOA. You are hereby assigned Order 2014-0153-DWQ-R5347 for the discharge. A copy of the Waiver is enclosed and also available at the State Water Board's [Adopted Orders webpage, General Order 2014-0153-DWQ](https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/2014-0153-dwq_noas/) (https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/2014-0153-dwq_noas/).

You should familiarize yourself with the entire General Order and its attachments, which describe mandatory discharge and monitoring requirements. The General Order contains operational and reporting requirements by wastewater system type. 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) 2014-0153-DWQ-R5347. 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-R5347.

DENISE KADARA, ACTING CHAIR | PATRICK PULUPA, EXECUTIVE OFFICER

EXISTING FACILITY

Del Rio Lago Wastewater System is owned and operated by Del Rio Lago LLC (Discharger) and is located on Carver Road between Ladd Road and Thunderbird Drive, in Stanislaus County in the southeast quarter of Section 19 and the north half of Section 30, T2S, R9E, MDB&MM, as shown in Attachment A, which is incorporated herein. The Del Rio Lago subdivision of 47 detached single-family dwellings is located approximately 1600 feet (ft) southwest of the San Joaquin River, two miles north of the City of Modesto on Stanislaus County assessor's parcel numbers 004-100-001 through 024, 004-100-027 through 028, 004-101-001 through 023, and 004-101-026 through 029. The WWS is in a Priority 1 Subbasin with respect to the Central Valley Salinity Alternatives for Long-term Sustainability (CV-SALTS) Nitrate Control Program.

The Del Rio Lago subdivision will be served by a municipal potable water distribution system owned and operated by the City of Modesto. However, the subdivision is in an area without a regional wastewater collection system; therefore, wastewater is collected and treated on-site. The site plan is shown on Attachment B, which is attached hereto and is made part of this NOA by reference. The subdivision site includes one water supply test well located in the southeastern corner of the property. The test well will be abandoned in accordance with Stanislaus County regulations. There are two neighboring wells, owned by others, in close proximity to the site: one is located along the east-central property boundary approximately 500 ft from the nearest wastewater disposal area, and the other is located adjacent to and outside of the property boundary to the north-northeast of leach field B. Both neighboring wells are indicated on Attachment B. Leach fields have been located to preserve the required setback from the neighboring wells.

The subdivision includes a water feature referred to as a lake, though it is fully lined with an impermeable high-density polyethylene (HDPE) liner system to maintain the water depth and to prevent the water from percolating into the underlying sandy soils. As shown in Attachment B, the lined ornamental lake surrounds the central group of residences.

DISCHARGE DESCRIPTION

The WWS consists of individual on-lot septic tanks for decentralized initial settling and primary treatment of domestic wastewater. As new homes are constructed within the subdivision, each septic tank pumping system will include a level control system with pump controller. Effluent from the septic tanks is pumped by each unit's turbine pump to an effluent sewer main, with a capacity of 11,750 gallons per day (gpd). Septic tanks will be pumped out as part of regular maintenance, with the sludge (septage) disposed of off-site at a licensed septage treatment facility or a publicly owned treatment works.

The primary-treated wastewater from the sewer main is sent to a package treatment unit (PTU) located in the southwest corner of the development site. The PTU consists of surge capacity, filtration, membrane biological reactor (MBR), and aeration by recirculation, with a treatment capacity of 24,000 gpd. Treated water from the PTU is discharged via underground distribution piping to several leach fields located on the Del Rio Lago subdivision, as shown on Attachment B. Effluent distribution within the leach

fields is via perforated distribution laterals. As required by the General Order, the leach fields are registered with the EPA as Class V injection wells for sanitary waste.

The Discharger conducted site-specific percolation rate testing in January 2019. Based on the findings a unit wastewater application rate of 1.2 gpd/square foot is the design rate for the western and southern leach fields (A, B, C, and H), and 0.64 gpd/square foot is the design application rate for the northeastern leach fields (D, E, F, and G).

The minimum depth to groundwater in the area is 36 ft below ground surface (ft bgs) as reported in the RWD from a 2001 study by Kleinfelder, and verified by USGS data represented as periodic groundwater contours in the Sustainable Groundwater Management Act ([SGMA\) Data Viewer](https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer#gwlevels) (<https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer#gwlevels>). Groundwater monitoring is not required because groundwater is more than 30 ft bgs and the quality of the undisinfected secondary treated water is sufficiently good that it does not pose a threat to groundwater. The closest domestic well is approximately 250 feet east (upgradient) from the nearest leach field. The nearest municipal or public water supply wells are screened at more than 130 ft bgs, and are located more than 1200 feet from the nearest leach field.

FACILITY-SPECIFIC REQUIREMENTS AND EFFLUENT LIMITS

Note that the General Order contains prohibitions and specifications that apply to all wastewater treatment systems as well as those that only apply to specific treatment and/or disposal systems. The specific requirements and effluent limits for your treatment system are summarized below.

Because the system has the capacity to treat domestic waste from more than 20 people per day, the General Order requires that the leach fields for the wastewater system be registered as Category V injection wells with USEPA Region 9. The Discharger has completed this registration, with confirmation from USEPA Region 9 included in the RWD. If there are any changes to the leach fields, the Category V injection well registration must be updated.

Requirements by Wastewater System Type, Section B of General Order

This section applies in its entirety to the Del Rio Lago Wastewater System with the following site-specific requirements.

B.1 All Wastewater Systems

- a. Flow limits (Section B.1.a of General Order).

Table 1. Flow limits

Treatment Unit	Flow Limit as Monthly Average
Package Treatment Unit	11,750 gpd (as influent or effluent flow)

Although the package treatment unit's design capacity is greater than the flow limit listed here, this flow limit conforms to the total capacity of the WWS. If the Discharger desires to make influent system changes that would result in a higher influent flow rate, a new RWD is required to describe those changes.

- b. The General Order states in Section B.1 that the Discharger shall comply with setbacks as described in Table 3 of the General Order. A setback is defined as the measurement from the nearest high-water limit (bottom of freeboard) in the ponds, or from high water levels in other bodies of water requirements, for wastewater treatment system equipment and activities from sensitive receptors and property lines as applicable. The Discharger shall comply with the applicable setback requirements, as summarized in Table 2, below.

Table 2. Wastewater system setback requirements

Equipment or Activity	Septic Tank, Treatment System, Collection System	Leach Field (note 1)
Domestic Well	150 ft	150 ft
Ephemeral Stream Drainage	50 ft	50 ft
Property Line	5 ft	5 ft
Lake, Reservoir, or vernal pool (note 2)	200 ft	200 ft
Drainage Course or Unlined Irrigation Ditch (note 3)	25 ft	50 ft

Table 2 notes:

- 1: Leach Field includes all subsurface dispersal systems, including mound systems, except seepage pits.
- 2. Setback from lakes etc. was established by OWTS Policy, section 7.5.5 and preserved in the Stanislaus County Local Area Management Plan (LAMP). This setback does not apply to lined ponds.
- 3: Setback from drainage courses is preserved in the Stanislaus County LAMP, Attachment A, item 7.5.

B.2 Septic Systems

The WWTF uses septic tanks; therefore Section B.2 of General Order applies in its entirety.

B.3 - B.5 not applicable

B.6 Subsurface Disposal Systems

The WWTF utilizes a subsurface disposal system; therefore Section B.6 of General Order applies in its entirety.

B.7 not applicable

Effluent Limitations, Section D of General Order

This section applies in its entirety to the Del Rio Lago Wastewater System and shall include the following site-specific limitations.

- a. Package Treatment Unit effluent limitations for 5-day biochemical oxygen demand (BOD) and total suspended solids (TSS) are as listed in Table 3.

Table 3. Package Treatment Unit Effluent Limitations

Constituent	Units	Limit	Basis
BOD	mg/L	30	Monthly average
BOD	mg/L	45	7-day average
Total Suspended Solids (TSS)	mg/L	30	Monthly average
TSS	mg/L	45	7-day average

- b. Effluent Limit Rationale:

The MBR element of the Package Treatment Unit is subject to technology-based performance effluent limits for BOD and TSS as specified in the General Order.

Staff evaluated the need for a total nitrogen effluent limit using the method contained in the General Order and determined that a nitrogen effluent limit is not required because the monthly average flow will be less than 20,000 gpd and all leach fields are being constructed to maintain a minimum of 10 feet separation from groundwater.

Technical Report Preparation Requirements, Section E.1 of General Order

By **28 March 2022** the Discharger shall submit the following three technical reports as described below:

1. *Spill Prevention and Emergency Response Plan* (Response Plan) consistent with the requirements of General Order Provision E.1.a.
2. *Sampling and Analysis Plan* consistent with the requirements of General Order Provision E.1.b.

3. *Sludge Management Plan* consistent with the requirements of General Order Provision E.1.c.

Copies of these plans, once submitted, shall be maintained at the treatment facility and shall be presented to Regional Water Board staff upon request.

SALT AND NITRATE CONTROL PROGRAMS

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. The Basin Plan amendments were conditionally approved by the State Water Board on 16 October 2019 (Resolution 2019-0057) and by the Office of Administrative Law on 15 January 2020 (OAL Matter No. 2019-1203-03).

- a. For nitrate, dischargers that are unable to comply with stringent nitrate requirements will be required to take on alternate compliance approaches that involve providing replacement drinking water to persons whose drinking water is affected by nitrates. Dischargers may comply with the new nitrate program either individually or collectively with other dischargers. For the Nitrate Control Program, the Facility falls within Groundwater Basin 5-022.02 (San Joaquin Valley Modesto Sub-basin), a Priority 1 Basin. The Discharger was sent a Nitrate Control Program Notice to Comply (NTC) dated 22 June 2021, with a due date of **28 May 2022** for the Nitrate Assessment Report and Notice of Intent (NOI) to indicate which Nitrate Control Program Pathway will be pursued.
- b. For salinity, dischargers that are unable to comply with stringent salinity requirements will instead need to meet performance-based requirements and participate in a basin-wide effort to develop a long-term salinity strategy for the Central Valley. Dischargers of record received a Notice to Comply with instructions and obligations for the Salt Control Program within one year of 17 January 2020, the effective date of the amendments. The Discharger was sent a Salt Control Program NTC dated 22 June 2021, with a due date of 27 December 2021 for the NOI to indicate which Salt Control Program Pathway will be pursued. This NOA extends adjusts the Salt Control Program NOI due date to **28 May 2022** to concur with the Nitrate Control Program NOI due date and to allow for the late December 2021 issuance of this NOA.

The Discharger's CV-SALTS identification number (CV-SALTS ID) is 3588.

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 Programs are met. More information regarding this regulatory planning process can be found on the [Central Valley Water Board CV-SALTS website](https://www.waterboards.ca.gov/centralvalley/water_issues/salinity) (https://www.waterboards.ca.gov/centralvalley/water_issues/salinity).

MONITORING AND REPORTING

The Discharger shall comply with MRP 2014-0153-DWQ-R5347 which is attached hereto and made part of this NOA by reference.

Within **60 days** of completion of the proposed project, the Discharger shall submit a Construction Completion letter that certifies completion of construction and start-up testing of the new wastewater treatment system. The report shall describe any deviations from the proposed project.

ENFORCEMENT

Please review this NOA carefully to ensure that it completely and accurately reflects the discharge. Discharge of wastes other than those described in this NOA is prohibited.

Prior to allowing changes to the wastewater strength or generation rate, or to the method of waste disposal, you must contact the Central Valley Water Board to determine if submittal of an RWD is required. 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.

Del Rio Lago LLC will generate the waste subject to the terms and conditions of WQ 2014-0153-DWQ-R5347 and will maintain exclusive control over the discharge. Failure to comply with the requirements in this NOA, General Order 2014-0153-DWQ, with all attachments, and MRP No. 2014-0153-DWQ-R5347 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.

ANNUAL FEES

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.

DOCUMENT SUBMITTAL

All monitoring reports and other correspondence should be converted to searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50 MB should be emailed to: centralvalleysacramento@waterboards.ca.gov.

To ensure that your submittal is routed to the appropriate staff person, the following information should be included in the body of the email or any documentation submitted to the mailing address for this office:

Facility Name:	Del Rio Lago Wastewater System, Stanislaus County
Program:	Non-15 Compliance
Order:	2014-0153-DWQ-R5347
CIWQS Place ID:	869528

Documents that are 50 MB or larger should be transferred to a CD, DVD, or flash drive and mailed to:

Central Valley Regional Water Quality Control Board
ECM Mailroom
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670

Now that the Notice of Applicability has been issued, the Central Valley Water Board's Compliance and Enforcement section will take over management of your case. Guy Childs is your point of contact for any questions about the General Order. If you find it necessary to make a change to your permitted operations, he will direct you to the appropriate Central Valley Water Board permitting staff. You may contact Guy at (916) 464-4648 or at guy.childs@waterboards.ca.gov.

for Patrick Pulupa
Executive Officer



Enclosure: Water Quality Order WQ 2014-0153-DWQ
Attachment A, Site Location Map
Attachment B, Site Plan
Monitoring and Reporting Program 2014-0153-DWQ-R5347

cc w/out enc: Laurel Warddrip, State Water Resources Control Board, Sacramento
Howard Hold, Central Valley Water Board, Sacramento
Stanislaus County Environmental Health Department
Robin Peters, Delta Engineering, Inc., Jackson
Debbie Webster, CVCWQ