



## Central Valley Regional Water Quality Control Board

21 December 2022

John Caprio  
Orwood Resort, Inc.  
4451 Orwood Road  
Brentwood, CA 94513

**CERTIFIED MAIL**  
**7020-1810-0002-0569-1071**

### REVISED NOTICE OF APPLICABILITY

**GENERAL WASTE DISCHARGE REQUIREMENTS FOR SMALL DOMESTIC  
WASTEWATER TREATMENT SYSTEMS ORDER WQ 2014-0153-DWQ  
FOR  
ORWOOD RESORT, INC.  
ORWOOD RESORT, INC. WWTF  
CONTRA COST COUNTY**

Orwood Resort, Inc. (Discharger) submitted a Report of Waste Discharge (RWD) dated 21 July 2017 describing the Orwood Resort Wastewater Treatment Facility (WWTF) in Contra Costa County. The WWTF provides treatment and disposal service for domestic wastewater generated from a mobile home park, a recreational vehicle (RV) park, a campground, a restaurant, a marina, two single family residences, and a boat storage. The WWTF discharge was previously regulated by Waste Discharge Requirements (WDR) Order 5-01-099, adopted on 27 April 2001, and rescinded on 07 June 2019. The wastewater treatment system and discharge are consistent with the requirements of the State Water Resources Control Board (State Water Board) *General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems*, Water Quality Order 2014-0153-DWQ (General Order) and are regulated pursuant to the General Order and Notice of Applicability (NOA) Order WQ 2014-0153-DWQ-R5308, issued on 25 April 2019. The Discharger is responsible for all the applicable requirements that exist in the General Order and this NOA.

On 30 September 2022 the Discharger submitted information describing a new food concession trailer that will be tied into the existing sanitary sewer line. Operating approximately three days per week typically during warm weather from late spring through autumn, the food concession trailer will add approximately 50 gallons per day (gpd) of greywater from kitchen sink activities to the average daily sewer flow.

This NOA has been revised to include the concession trailer discharge to the WWTF, to update the status of originally required reports, and to include a section on the Salt and Nitrate Control Programs. Historical water quality data from the original NOA have not been updated. No changes were made to the MRP.

MARK BRADFORD, CHAIR | PATRICK PULUPA, ESQ., EXECUTIVE OFFICER

A copy of the General Order is available at the State Water Boards Adopted Orders, General Orders webpage, [Order No. WQ 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/](https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/2014-0153-dwq_noas/)).

## EXISTING FACILITY AND DISCHARGE DESCRIPTION

The Orwood Resort WWTF is owned and operated by the Discharger and is located at 4451 Orwood Road, Brentwood in Contra Costa County. The resort is located in an area without a regional wastewater collection system; therefore, wastewater is collected and treated on-site. The site plan is shown on Attachment A, which is attached to the original NOA and is made part of this revised NOA by reference. The following description of the WWTF and operations are based on the information proved in the RWD.

A domestic well is located more than 600 feet from the effluent disposal areas. The well is approximately 285 feet deep and tested monthly for coliform. All sample results have been non-detect for coliform.

Wastewater generated from two homes, a campground, a restaurant, and a seasonal food concession trailer flows into a collection system connected to a lift station. The restaurant and the food concession trailer each have a grease trap that is cleaned out regularly. Average flow rates into the WWTF and influent wastewater quality for 2017 and 2018 are shown below.

**Table 1. Average Daily Flows, gallons per day (gpd)**

Month	2017	2018
Jan	2,714	2,207
Feb	2,756	2,049
Mar	2,427	2,649
Apr	2,365	2,634
May	2,817	2,817
Jun	3,048	2,996
Jul	3,329	3,354
Aug	2,805	2,736
Sep	2,602	2,492
Oct	2,064	2,006
Nov	1,638	1,852
Dec	1,563	1,677

**Table 2. Influent Wastewater Quality (mg/L) – note 1**

Month	BOD <sub>5</sub>		TDS		TSS	
	2017	2018	2017	2018	2017	2018
Jan	350	467	1,800	1,100	140	160
Feb	240	584	1,600	1,320	46	100
Mar	430	308	1,100	1,700	75	60
Apr	640	502	1,500	810	100	10
May	740	597	1,500	1,410	120	280
Jun	730	1,320	1,400	1,760	110	350
Jul	660	703	1,100	1,460	96	174
Aug	890	789	1,400	1,520	130	778
Sep	510	689	1,200	1,360	120	140
Oct	520	728	1,100	1,270	72	140
Nov	560	742	870	1,710	12	131
Dec	730	840	1,300	1,500	160	167

Table 2 note 1: Samples are collected monthly.

The lift station pumps raw wastewater to an on-site package treatment plant that was constructed in 2001. The treatment plant consists of an equalization/anoxic tank, an aeration chamber, a clarifier, and an aerobic sludge digester. A wastewater process flow schematic is shown on Attachment A. Wastewater is disinfected with sodium hypochlorite in the chlorine contact basin before discharging to an evaporation pond or a subsurface drip field. The pond is clay-lined and has a capacity of 2.8 million gallons, not including two feet of freeboard. Effluent discharged to the 1.22-acre subsurface drip field, generally during the summer months, is used for subsurface irrigation. The discharge pipe with emitters is approximately 10 inches below the surface. The drip field and the pond independently have sufficient capacity for a 100-year precipitation event.

Monthly effluent samples are taken at the point of discharge from the chlorine contact basin prior to discharging to the wastewater pond or the drip field. Effluent quality for 2018 is shown below.

**Table 3. Effluent Wastewater Quality for 2018**

Month	BOD <sub>5</sub> (mg/L) note 1	TDS (mg/L) note 1	TSS (mg/L) note 1	Nitrate (mg/L) note 1	Total Coliform (MPN/100mL) note 2
Jan	12	1,400	2	1	<1.8
Feb	7.2	1,600	5	1.6	7.8
Mar	6	1,100	4	1.4	<1.8

Month	BOD <sub>5</sub> (mg/L) note 1	TDS (mg/L) note 1	TSS (mg/L) note 1	Nitrate (mg/L) note 1	Total Coliform (MPN/100mL) note 2
Apr	9	1,300	10	0.6	2
May	10	1,200	10	0.6	9
Jun	7	960	4	0.7	7
Jul	3	760	<2	0.3	2
Aug	3	760	4	0.3	<1.8
Sep	10	1,100	4	1.4	<1.8
Oct	4	890	6	2.1	4.5
Nov	7	1,100	12	1.6	4.5
Dec	4	860	4	0.7	<1.8

Table 3 notes:

- 1: Samples are collected monthly.
- 2: Samples are collected weekly. Maximum concentration for the month is shown.

The resort has a 3,000-gallon underground waste storage tank to collect waste from RVs. Wastewater is pumped out of the tank and delivered to a municipal treatment plant and is not treated or disposed of on-site.

No sludge is stored on-site. The activated sludge remains in the digester assisting the biological decomposition of new sludge. A pumper truck pumps sludge directly from the digester as needed and delivers it to the Delta-Diablo Sanitation Treatment Plant.

There are no groundwater monitoring wells on-site. Based on the RWD, in August 2000, depth to groundwater was approximately 6.5 feet below ground surface. The pond was constructed with the base five feet above the water table and the drip field was raised with fill to provide eight feet of height above the water table.

### **SITE-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.

The wastewater treatment operator must be certified and familiar with the requirements contained in the General Order, this NOA, and the MRP.

## Requirements by Wastewater System Type, Section B of General Order

### All Wastewater Systems (Section B.1 of General Order)

This section applies in its entirety to the Orwood Resort WWTF with the following site-specific requirements.

1. Influent flow limits (Section B.1.a of General Order).

**Table 4. Influent flow limits**

Treatment Unit	Flow Limit as Monthly Average
Influent to the WWTF	15,000 gpd

2. Wastewater system setbacks (Section B.1.l of General Order).

**Table 5. Wastewater System Setbacks**

Equipment or Activity	Domestic Well	Flowing Stream	Ephemeral Stream Drainage	Property Line	Lake or Reservoir
Septic Tank, Treatment System, & Collection System (note 1)	150 ft.	50 ft.	50 ft.	5 ft.	200 ft.
Leach Field (note 2)	100 ft.	100 ft.	50 ft.	5 ft.	200 ft.

Table 5 notes:

1. Setbacks referenced under “Septic Tank, Aerobic Treatment Unit, Treatment System, or Collection System” in Table 3 of General Order.
2. Setbacks referenced under “Leach Field” in Table 3 of General Order. Leach field includes all subsurface dispersal systems.

This is an existing facility, constructed prior to the issuance of the new General Order for Small Domestic Wastewater Treatment Systems, and the wastewater system may not be compliant with the setbacks included in the General Order. However, this WWTF is permitted under the General Order provided that nuisance conditions do not result from noncompliance. Expansion of a noncomplying wastewater treatment system shall trigger further evaluation of the setbacks, as described in Section B.1.l of the General Order.

### Aerobic Treatment Units

The WWTF utilizes an aerobic treatment unit; therefore Section B.3 of General Order applies in its entirety.

### Activated Sludge Systems

The WWTF utilizes an activated sludge system; therefore Section B.4 of General Order applies in its entirety.

### Pond Systems

The WWTF utilizes a pond system; therefore Section B.5 of General Order applies in its entirety.

### Subsurface Disposal Systems

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

## **Effluent Limitations, Section D of General Order**

This section applies in its entirety to the Orwood Resort WWTF and shall include the following site-specific limitations.

### Effluent Limitations

The following limits apply to effluent from WWTF. Sample location is shown on Attachment A.

**Table 6. Effluent limitations**

<b>Constituent</b>	<b>Units</b>	<b>Limit</b>
BOD	mg/L	90
TSS	mg/L	30

### Effluent Limit Rationale

The pond treatment system is subject to technology performance effluent limits for biochemical oxygen demand (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.

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

In response to the original NOA issued on 25 April 2019, the following technical reports have been successfully submitted:

1. By **1 August 2019**, the Discharger submitted a *Spill Prevention and Emergency Response Plan* (Response Plan) consistent with the requirements of General Order Provision E.1.a.
2. By **1 August 2019**, the Discharger submitted a *Sampling and Analysis Plan* consistent with the requirements of General Order Provision E.1.b.

## **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 the Nitrate Control Program, the Facility falls outside of any prioritized Groundwater Basin, so no action is required at this time.
- 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. The Discharger, with CV-SALTS ID 2348, has opted to participate in the Prioritization and Optimization (P&O) Study.

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](https://www.waterboards.ca.gov/centralvalley/water_issues/salinity)).

## **MONITORING AND REPORTING PROGRAM**

The Discharger shall comply with MRP 2014-0153-DWQ-R5308, which is attached hereto and made part of this NOA by reference.

## **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 Regional Water Board to determine if submittal of a report of waste discharge is required.

Orwood Resort, Inc. will generate the waste subject to the terms and conditions of WQ 2014-0153-DWQ-R5308 Rev. 1 and will maintain exclusive control over the discharge. As such, Orwood Resort, Inc. is primarily responsible for compliance with this NOA, MRP, and General Order, with all attachments. Failure to comply with the requirements in the General Order or this NOA could result in an enforcement action as authorized by provisions of the California Water Code.

## **ANNUAL FEES**

Staff has determined the discharge has a threat to water quality and complexity (TTWQ/C) rating of 3-B. The annual fee corresponding to the TTWQ/C 3-B category is due and payable on an annual basis until coverage under the General Order is formally rescinded. Please note that the annual fees are reviewed each year and may change. You must provide written notice if and when the wastewater discharge ceases, so that we can terminate coverage under the General Order and no longer bill you.

## 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](mailto: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: Orwood Resort, Contra Costa County  
Program: Non-15  
Order: 2014-0153-DWQ-R5308 Rev. 1  
CWIQS Place ID: 246267

Documents that are 50 MB or larger should be copied 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 Revised Notice of Applicability has been issued, the Board's Compliance and Enforcement section will continue management of your case. Guy Childs is your point of contact for any questions about the General Order. If you need to make a change to your permitted operations, Guy will direct you to the appropriate Permitting Staff. You may contact him at (916) 464-4648 or at [guy.childs@waterboards.ca.gov](mailto:guy.childs@waterboards.ca.gov).

***Original Digitally Signed by: John J. Baum on  
Date: 2022.12.21 19:21:02-08'00'***

for Patrick Pulupa  
Executive Officer

enc: Water Quality Order WQ 2014-0153-DWQ

cc via email, w/out enc:

John Wiggins, Contra Costa County Env. Health Dept., Concord  
Laurel Warddrip, State Water Resources Control Board, Sacramento  
Guy Childs, Central Valley Water Board, Rancho Cordova