

Central Valley Regional Water Quality Control Board

25 April 2019

John Caprio
Orwood Resort
4451 Orwood Road
Brentwood, CA 94513

CERTIFIED MAIL
7017 2620 0001 1359 2363

NOTICE OF APPLICABILITY
GENERAL WASTE DISCHARGE REQUIREMENTS FOR
SMALL DOMESTIC WASTEWATER TREATMENT SYSTEMS
ORDER WQ 2014-0153-DWQ
FOR
ORWOOD RESORT, INC
ORWOOD RESORT WWTF
CONTRA COSTA COUNTY

Orwood Resort, Inc. 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 has been regulated by Waste Discharge Requirements (WDR) Order 5-01-099, which was adopted on 27 April 2001. 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 (State Water Board) *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 upon rescission of Order 5-01-099 at an upcoming Board meeting, the discharge shall be regulated pursuant to the General Order and this NOA. You are hereby assigned Order WQ 2014-0153-DWQ-R5308 for the discharge. A copy of the General Order is enclosed and also available at:

http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2014/wqo2014_0153_dwq.pdf

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-R5308. The Discharger is responsible for all the applicable requirements that exist in the General Order and this NOA.

EXISTING FACILITY AND DISCHARGE DESCRIPTION

The Orwood Resort WWTF is owned and operated by Orwood Resort, Inc. (hereafter “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 hereto and is made part of this 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, and a restaurant flows into a collection system to a lift station. The restaurant has a grease trap that is cleaned regularly. Average flow rates into the WWTF and influent wastewater quality are shown below.

Average Daily Flows (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

gpd = gallons per day

Influent Wastewater Quality (mg/L) ¹

Month	BOD ₅		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

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 is shown below.

Effluent Wastewater Quality for 2018

Month	BOD ₅ (mg/L) ¹	TDS (mg/L) ¹	TSS (mg/L) ¹	Nitrate (mg/L) ¹	Total Coliform (MPN/100mL) 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
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

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).

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).

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

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 include 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 will still be permitted under this 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.

Constituent	Units	Limit
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

The following technical reports shall be submitted as described below:

1. By **1 August 2019**, the Discharger shall submit 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 shall submit a *Sampling and Analysis Plan* consistent with the requirements of General Order Provision E.1.b.

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 an RWD is required.

Orwood Resort, Inc. will generate the waste subject to the terms and conditions of WQ 2014-0153-DWQ-R5308 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 is a threat to water quality and complexity rating of 3-B. The annual fee corresponding to a threat to water quality and complexity of 3-B is currently \$5,145. The fee 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.

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 Compliance	Order: 2014-0153-DWQ-R5308	CIWQS 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 Notice of Applicability has been issued, the Board's Compliance and Enforcement section will take over management of your case. Guy Childs is your new point of contact for any questions about the General Order. If you find it necessary to make a change to your permitted operations, Guy will direct you to the appropriate Permitting Staff. You may contact Guy at (916) 464-4648 or at gchilds@waterboards.ca.gov.

--original signed by Andrew Altevogt for--

Patrick Pulupa
Executive Officer

enc: Water Quality Order WQ 2014-0153-DWQ
Monitoring and Reporting Program 2014-0153-DWQ-R5308
Attachment A, Site Plan and Wastewater Treatment System Schematic

cc w/out enc: Timothy O'Brien, State Water Resources Control Board, Sacramento
Contra Costa County Environmental Health Department, Concord

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM WQ 2014-0153-DWQ-R5308

FOR

ORWOOD RESORT, INC.
ORWOOD RESORT WWTF
CONTRA COSTA COUNTY

This Monitoring and Reporting Program (MRP) describes requirements for monitoring a wastewater treatment system at the Orwood Resort WWTF. This MRP is issued pursuant to Water Code section 13267. The 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) 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 Orwood Resort WWTF discharge is regulated by the Notice of Applicability (NOA) of Water Quality Order 2014-0153-DWQ-R5308 and is owned and operated by Orwood Resort, Inc. Pursuant to Water Code section 13267, the Discharger shall implement this MRP and submit the monitoring reports described herein. The reports are necessary to ensure that the Discharger complies with the NOA and General Order.

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 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.

INFLUENT FLOW MONITORING

Influent flow shall be monitored at the location shown in Attachment A as specified below:

Parameter	Units	Type of Sample	Monitoring Frequency	Reporting Frequency
Average Daily Influent Flow	MGD	Meter Observation	Daily	Quarterly

EFFLUENT MONITORING

Effluent samples shall be collected the effluent from the chlorine contact chamber prior to disposal at the wastewater pond or leach field at the location shown on Attachment A. At a minimum, the Discharger shall monitor effluent as specified below:

Parameter	Units	Type of Sample	Monitoring Frequency	Reporting Frequency
BOD ₅ ¹	mg/L	Grab	Monthly	Quarterly
Total Nitrogen	mg/L	Grab	Monthly	Quarterly
TSS	Mg/L	Grab	Monthly	Quarterly

¹ 5-day Biochemical Oxygen Demand

POND MONITORING

The Discharger shall monitor the wastewater pond as specified below.

Parameter	Units	Type of Sample	Monitoring Frequency	Reporting Frequency
Freeboard ¹	0.1 feet	Staff Gage	Weekly	Quarterly
Levee Condition	--	Observation	Weekly	Quarterly
Seepage ²	--	Observation	Weekly	Quarterly
Odors	--	Observation	Weekly	Quarterly
Dissolved Oxygen ³	mg/L	Grab	Monthly	Quarterly

Parameter	Units	Type of Sample	Monitoring Frequency	Reporting Frequency
¹ Freeboard shall be measured vertically from the surface of the pond water to the lowest elevation of the surrounding berm and shall be measured to the nearest 0.1 feet.				
² Pond containment berms shall be observed for signs of seepage or surfacing water along the exterior toe. If surfacing water is found, then a sample shall be collected and tested for total coliform organisms and total dissolved solids.				
³ Dissolved oxygen shall be monitored at each pond that contains at least one foot of standing water. The report shall state how much water was in the pond if dissolved oxygen was not monitored. Samples shall be collected opposite the pond inlet at a depth of one foot.				

**LEACH FIELD AREA
 (SUBSURFACE DRIP AREA)**

Monitoring shall be sufficient to determine if wastewater is evenly applied, the leach field area is not saturated, burrowing animals are not present, plant roots have not compromised the disposal area, and odors are not present. Inspection of dosing pump controllers, automatic distribution valves, etc. is required to maintain optimum treatment in the leach field. Monitoring shall include, at a minimum, the following:

Parameter	Inspection Frequency	Reporting Frequency
Pump Controllers, Automatic Valves, etc. ¹	Quarterly	Quarterly
Nuisance Odor Condition	Quarterly	Quarterly
Saturated Soil Conditions ²	Quarterly	Quarterly
Plant Growth ³	Quarterly	Quarterly
Vectors or Animal Burrowing ⁴	Quarterly	Quarterly

- ^{1.} All pump controllers and automatic distribution valves shall be inspected for proper operation as recommended by the manufacturer.
- ^{2.} Inspect a leach field area for saturated conditions.
- ^{3.} Shallow-rooted plants are generally desirable, deep-rooted plants such as trees shall be removed as necessary.
- ^{4.} Evidence of animals burrowing shall be immediately investigated, and burrowing animal populations controlled as necessary.

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.

REPORTING

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

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

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

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 transmittal sheet:

Attention: Compliance/Enforcement Section
Orwood Resort, Inc.
Orwood Resort WWTF
Contra Costa County
Place ID: 246267

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.

Monitoring information shall include the method detection limit (MDL) and the Reporting limit (RL) or practical quantitation limit (PQL). If the regulatory limit for a given constituent is less than the RL (or PQL), then any analytical results for that constituent that are below the RL (or PQL) but above the MDL shall be reported and flagged as estimated. For a Discharger conducting any of its own analyses, reports must be signed and certified by the chief of the laboratory.

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 quarterly monitoring. Data shall be organized by the associated monitoring sections (e.g., Flow Monitoring, Effluent Monitoring, etc.) and presented in tabular format.
2. A comparison of monitoring data to the discharge specifications, flow limit, and effluent limits.
3. A disclosure of any violations of the NOA and/or General Order requirements and an explanation of corrective actions.
4. 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 Regional Water Board by **February 1st following the monitoring year**. The Annual Report shall include the following:

1. Tabular and graphical summaries of all monitoring data collected during the year.
2. An evaluation of the performance of the wastewater treatment system, including discussion of 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 if required.
3. A discussion of compliance and the corrective action taken, as well as any planned or proposed actions needed to bring the discharge into compliance with the NOA and/or General Order.
4. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.
5. The name and contact information for the wastewater operator responsible for operation, maintenance, and system monitoring.

A letter transmitting the monitoring reports shall accompany each report. The letter shall report violations found during the reporting period, and actions taken or planned to correct the violations and prevent future violations. The transmittal letter shall contain the following penalty of perjury statement and shall be signed by the Discharger or the Discharger's authorized agent:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

The Discharger shall implement the above monitoring program as of the date of this MRP.

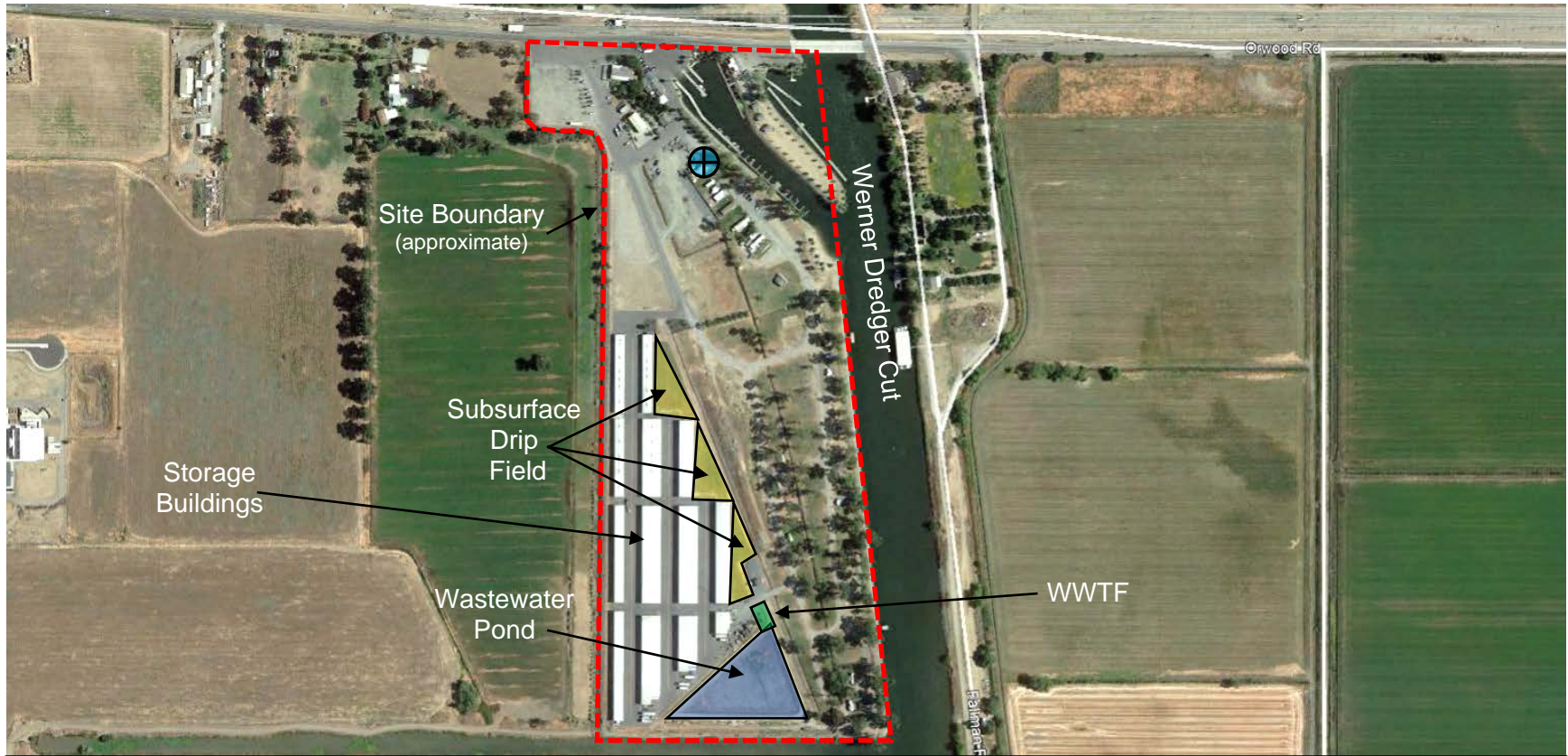
I, Patrick Pulupa, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of a Monitoring and Reporting Program issued by the Central Valley Water Quality Control Board, Central Valley Region on 25 April 2019.

--original signed by Andrew Altevogt for--

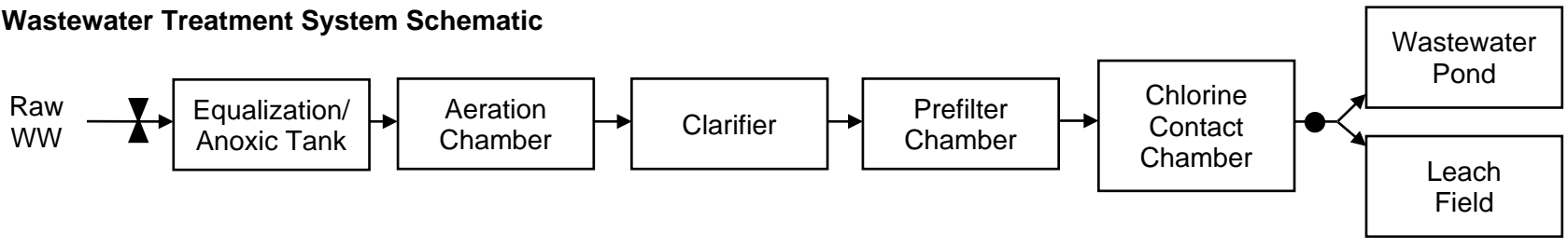
PATRICK PULUPA, Executive Officer

GLOSSARY

BOD ₅	Five-day biochemical oxygen demand
TDS	Total dissolved solids
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.
Weekly	Once per week.
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
gpd	Gallons per day
mgd	Million gallons per day
MPN/100 mL	Most probable number [of organisms] per 100 milliliters



Wastewater Treatment System Schematic



Legend

- Domestic Well
- Flow Meter
- Sample Location
- WW = wastewater
- All locations are approximate.



~1,000 feet

SITE PLAN AND WASTEWATER FLOW SCHEMATIC

ORWOOD RESORT WWTF
CONTRA COSTA COUNTY