

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER R5-2018-0021

AMENDING WASTE DISCHARGE REQUIREMENTS ORDER R5-2010-0070
FOR
CALAVERAS COUNTY WATER DISTRICT
COPPER COVE WASTEWATER TREATMENT PLANT
CALAVERAS COUNTY

The California Regional Water Quality Control Board, Central Valley Region (hereafter Central Valley Water Board), finds:

Waste Discharge Requirements Order R5-2010-0070

1. On 27 May 2010, the Central Valley Water Board adopted Waste Discharge Requirements (WDRs) Order R5-2010-0070, prescribing requirements for Copper Cove Wastewater Treatment Plant (WWTP) in Calaveras County. The Calaveras County Water District (CCWD, the “Discharger”) owns and operates the WWTP.
2. The WWTP includes collection, secondary and tertiary wastewater treatment and storage facilities, and on-site 35 acres of land application area (LAA). The WDRs Order prescribes requirements for the collection, secondary treatment and storage facilities, and the LAA. The LAA serves as a backup means of effluent disposal. The requirements for tertiary wastewater treatment and recycled water irrigation reuse at Saddle Creek Golf Course (SCGC) are specified in the existing National Pollutant Discharge Elimination System (NPDES) Order for Calaveras County Water District & Saddle Creek Golf Course L.P., Copper Cove Wastewater Reclamation Facility, NPDES Order R5-2006-0081, and amended Order R5-2016-0065 or subsequent Order.
3. The secondary treatment system consists of a headworks, a flow diverter, aerated unlined treatment Ponds 1 and 2 operated in parallel, and an additional aerated Pond 4. Pond 6 is an unlined effluent storage pond. Pond 3 is currently out of service and Pond 5 is a storage pond only used for emergencies. The tertiary treatment system includes microfloc, coagulation-flocculation, two stage filtration and ultraviolet (UV) light disinfection.
4. Section B, Discharge Specifications B.15 of WDRs Order R5-2010-0070 contains requirements for the use of Pond 5.
5. Section C, Land Application Area Specifications C.1 of WDRs Order R5-2010-0070 contains setback requirements for the application of secondary disinfected wastewater.
6. Effluent Limitations E.1 and E.2 of WDRs Order R5-2010-0070 contain effluent limits for the effluent prior to discharge to the effluent storage Pond 6.
7. Effluent Limitations E.1 of WDRs Order R5-2010-0070 contains effluent limits for secondary chlorine disinfected wastewater.

8. Groundwater Limitations F.1.a of WDRs Order R5-2010-0070 contains groundwater limits for chlorine disinfection by-products bromoform, bromodichloromethane, chloroform and dichlorobromomethane that were required due to the past use of chlorine for disinfection.

Proposed Amendment

9. On 2 August 2017, the Discharger submitted a letter requesting WDRs amendment to include recent operational changes discussed in the following Findings.
10. The Discharger no longer operates Pond 5 for the storage of treated wastewater and has requested the removal of Pond 5 from the WDRs. The volume of local drainage to the pond due to precipitation often equals or exceeds total pond storage capacity. Therefore, this Order authorizes discontinued use of Pond 5. This Order amends WDRs Order R5-2010-0070 to remove Discharge Specifications B.15 for the use of Pond 5.
11. The Discharger previously discharged secondary chlorine disinfected wastewater into Pond 6 and then to the LAA or to the tertiary treatment system as described in existing WDRs R5-2010-0070. Since 2009, wastewater has been treated and disinfected with a combination of filtration and ultra violet (UV) disinfection through a tertiary treatment facility. As of April 2013, the Discharger has discontinued the use of chlorine in order to reduce disinfection by-products. Currently, all flows from either Pond 4 or Pond 6 are diverted to the tertiary treatment facility using UV disinfection prior to discharge to the SCGC or LAA. Only tertiary disinfected wastewater is applied to the onsite LAA when the recycled water flow rates exceed the Golf Course's irrigation demand.
12. This Order amends setback requirements in Section C.1. Land Application Area Specifications of WDRs Order R5-2010-0070. Although the LAA serves as a backup means of effluent disposal, the LAA is required to be maintained in operational condition and this requirement is added to Section C as C.8.
13. Because the use of chlorine for disinfection has been discontinued, the discharge no longer demonstrates reasonable potential to cause or contribute to an exceedance of the applicable water quality objectives for chloride and disinfection byproducts. This Order amends WDRs Order R5-2010-0070 to remove the effluent limits for chloride and the groundwater monitoring requirements for disinfection byproducts. In addition, this Order amends effluent and groundwater limits for other constituents, such as total coliform bacteria, based on evaluation of improved effluent quality.
14. This Order authorizes storage of undisinfected secondary treated wastewater in Pond 6. In addition, this Order changes the effluent sampling location at the UV channel outlet instead of a location prior to the discharge to Pond 6 as described in WDRs Order R5-2010-0070. An updated wastewater treatment process schematic is shown on Attachment, which is attached hereto and made part of this Order by reference.

California Environment Quality Act

15. The action of prescribing these WDRs, which impose regulatory requirements on the existing discharge in order to ensure the protection of groundwater resources, is exempt from the provisions of the California Environmental Quality Act (Pub. Resources Code, § 21000 et seq.) in accordance with California Code of Regulations, title 14, section 15301, which exempts the “operation, repair, maintenance, [and] permitting ... of existing public or private structures, facilities, mechanical equipment, or topographical features” from environmental review.

Public Notice

16. The Central Valley Water Board has notified the Discharger and interested agencies and persons of its intent to amend waste discharge requirements for this discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
17. The Central Valley Water Board, in a public meeting, heard, and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that Order R5-2010-0070 is amended solely to accommodate recent operational changes discussed in the Findings. Pursuant to Water Code sections 13263 and 13267, the Discharger, its agents, successors and assigns, in order to meet the provisions contained in Division 7 of the Water Code and regulations adopted thereunder, shall comply with amended Order R5-2010-0070 as follows:

18. Section B, Discharge Specifications B.15 of WDRs Order R5-2010-0070 shall be deleted:

Pond 5 may be used to store wastewater under emergency conditions only. If used, all seepage shall be collected at the base of the dam and returned to Pond 5.

19. Section C, Land Application Area Specifications C.1 of WDRs Order R5-2010-0070 shall be amended as follows:

Application of effluent shall comply with the following setback requirements:

Setback Definition ¹	Minimum Irrigation Setback (feet)
Edge of LAA to domestic well ²	50
Toe of recycled water impoundment berm to domestic water supply well	100

1. As defined by the wetted area produced during irrigation.
2. Unless all of the following condition have been met:
 - a. A geological investigation demonstrates that an aquitard exists at the well between the uppermost aquifer being drawn from the ground and the surface.
 - b. The well contains an annular seal that extends from the surface into the aquitard.
 - c. The well is housed to prevent any recycled water spray from coming into contact with the wellhead facilities.
 - d. The ground surface immediately around the wellhead is contoured to allow surface water to drain away from the well.
 - e. The owner of the well approves of the elimination of the buffer zone requirement.

20. Section C.8 should be added to Section C, Land Application Area Specifications of WDRs Order R5-2010-0070 as follows:

Section C.8: The LAA shall be in operating condition.

21. Section E, Effluent Limitations E.1 of WDRs Order R5-2010-0070 shall be amended as follows:

Effluent prior to discharge to the LAA shall not exceed the following limits:

<u>Constituent</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Daily Maximum</u>
BOD ₅ ¹	mg/L	30	80
Nitrate as Nitrogen	mg/L	10	--
<u>Total Dissolved Solids</u>	mg/L	450	600

¹ 5-day biochemical oxygen demand at 20° C.

22. Section E, Effluent Limitations E.2 of WDRs Order R5-2010-0070 shall be amended as follows:

Prior to discharge to the LAA, effluent shall not exceed the following limits for total coliform organisms:

- a. The median concentration of total coliform bacteria measured in the disinfected effluent shall not exceed a most probable number (MPN) of 2.2 per 100 milliliters utilizing the bacteriological results of the last seven days for which analyses have been completed.
- b. The number of total coliform bacteria shall not exceed an MPN of 23 per 100 milliliters in more than one sample in any 30-day period.
- c. No sample shall exceed an MPN of 240 total coliform bacteria per 100 milliliters.

23. Section F, Groundwater Limitations F.1.a. of WDRs Order R5-2010-0070 shall be amended as follows:

Release of waste constituents from any portion of the WWTP and LAA shall not cause groundwater to:

- a. Contain constituent concentrations in excess of the concentrations specified below or natural background quality, whichever is greater:

<u>Constituent</u>	<u>Units</u>	<u>Limitation</u>
Total Dissolved Solids	mg/L	450
Nitrate as Nitrogen	mg/L	10
Total Coliform Organisms	MPN/100 mL	<2.2

24. This order modifies Attachment C of WDRs Order R5-2010-0070 as shown in the Attachment.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:

http://www.waterboards.ca.gov/public_notices/petitions/water_quality

or will be provided upon request.

I, PAMELA C. CREEDON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 6 April 2018.

Original signed by

PAMELA C. CREEDON, Executive Officer

LFU: 4/16/18