## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

# ORDER R5-2018-0062

### AMENDING WASTE DISCHARGE REQUIREMENTS ORDER R5-2013-0133 FOR LA CONTENTA INVESTORS, LTD CALAVERAS COUNTY WATER DISTRICT LA CONTENTA WASTEWATER TREATMENT FACILITY CALAVERAS COUNTY

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

## Waste Discharge Requirements Order R5-2013-0133

- On 4 October 2013, the Central Valley Water Board adopted Waste Discharge Requirements (WDRs) Order R5-2013-0133, prescribing requirements for La Contenta Wastewater Treatment Facility (WWTF) and the production and conveyance of recycled water to the DBD La Contenta Golf Course (the Golf Course) in Calaveras County. Reclamation of tertiary wastewater on the Golf Course is currently regulated under State Water Resources Control Board Order 2009-0006-DWQ, General Waste Discharge Requirements for Landscape Irrigation Uses of Recycled Water. Calaveras County Water District owns and operates the WWTF and is responsible for compliance with the WDRs. The Golf Course is owned and operated by La Contenta Investors, LTD.
- 2. The WWTF consists of a mechanical bar screen, an activated sludge treatment unit (a 500,000-gallon concrete aeration basin, a clarifier, and a sludge return system), a coagulant feed system, sand filters, a ultraviolet (UV) light disinfection system, a sludge lagoon, a sludge belt press, a dry sludge storage area, and two unlined storage ponds (Upper pond and Lower Pond). Filtered effluent is disinfected by the UV system and is stored in the Lower Pond prior conveyance to the 70-acre Golf Course for recycling during the irrigation season.

### **Proposed Amendment**

- On 15 February 2018, the Discharger submitted a letter requesting that the Board amends WDRs Order R5-2013-0133 to include requirements for the use of recycled water at the Golf Course. This Order revises Section F, Water Recycling Specification of WDRs Order R5-2013-0133.
- 4. Calaveras County Water District and La Contenta Investors, LTD should be jointly referred to as "Discharger" and are responsible for compliance with the WDRs. Findings No.1, 2, 4, 5, 6, 19, 38 and 39.c have been revised to reflect the changes.

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 Recycled water use at the Golf Course will no longer be regulated under the General Order 2009-0006-DWQ and the Notice of Applicability with General Permit Enrollee No. 2009-0006-DWQ-002 will be rescinded by the State Water Resources Control Board.

#### **Public Notice**

- 6. 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.
- 7. The Central Valley Water Board, in a public meeting, heard, and considered all comments pertaining to the discharge.

**IT IS HEREBY ORDERED** that Order R5-2013-0133 is amended solely to include requirements for the use of recycled water at the Golf Course. 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 R5-2013-0133 as follows:

- 1. Calaveras County Water District and La Contenta Investors, LTD are jointly referred to as "Discharger" and are responsible for compliance with the WDRs.
- Finding No.1 is revised as: On 1 April 2013, Calaveras County Water District submitted a Report of Waste Discharge (RWD) to update Waste Discharge Requirements (WDRs) for the La Contenta Wastewater Treatment Facility (WWTF).
- 3. Finding No.2 is revised as: Calaveras County Water District owns and operates the WWTF.
- 4. Finding No.4 is revised as: WDRs Order R5-2002-0222, adopted by the Central Valley Water Board on 6 December 2002, prescribes requirements for the WWTF and the use of recycled water at the La Contenta Golf Course (the Golf Course). The Golf Course is owned and operated by La Contenta Investors. Calaveras County Water District and La Contenta Investors, LTD should be jointly referred to as "Discharger" and are responsible for compliance with the WDRs. WDRs Order R5-2002-0222 allows a monthly average dry weather influent flow (ADWF) of 0.15 million gallons per day (MGD). The Discharger requested to increase the ADWF limit to 0.20 MGD.
- Finding No. 5 is revised as: After WDRs Order R5-2002-0222 was adopted, improvements and changes were made to the facility and operations, including:

   The storage capacity of one effluent storage pond (the Lower Pond) was increased from 23 to 172 acre-foot (ac-ft) in 2005; b. The chorine disinfection system was replaced with an ultra violet (UV) light disinfection system in 2009; c. An additional sand filter was

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installed; and d. The use of recycled water at the Golf Course became regulated under State Water Resources Control Board Order 2009-0006-DWQ, *General Waste Discharge Requirements for Landscape Irrigation Uses of Recycled Water*.

- 6. Finding No.6 is revised as: On 15 February 2018, the Discharger submitted a letter requesting that the Central Valley Water Board amend WDRs Order R5-2013-0133 to incorporate requirements for the use of recycled water at the Golf Course. Recycled water use at the Golf Course will no longer be regulated under the General Order 2009-0006-DWQ and the Notice of Applicability with General Permit Enrollee No. 2009-0006-DWQ-002 will be rescinded by the State Water Resources Control Board.
- 7. Finding No. 19 is revised as: The WWTF site elevations range from 650 to 800 feet mean sea level. All areas of the WWTF are outside of the 100-year flood zone.
- 8. Finding No. 38 is revised as: The Discharger has been monitoring groundwater quality at the WWTF site since 2004. Based on the data available, it is not possible to determine pre-1968 groundwater quality. Therefore, determination of compliance with Resolution 68-16 for this facility is based on groundwater quality data since 2004.
- 9. Finding No.39.c is revised as:
  - b. Nitrate. For nutrients such as nitrate, the potential for degradation depends not only on the quality of the treated effluent, but on the ability of the vadose zone below the effluent storage ponds to provide an environment conducive to nitrification and denitrification, which converts the effluent nitrogen to nitrate and the nitrate to nitrogen gas before it reaches the water table. The groundwater average nitrate nitrogen concentrations in all monitoring wells are less than the primary MCL of 10 mg/L for nitrate nitrogen, which is the Basin Plan's Water Quality Objective. The current effluent average nitrate nitrogen concentration of 21 mg/L is greater than the primary MCL for nitrate nitrogen. However, the total nitrogen loading rate for the Golf Course is approximately 200 pounds per acre per year, which is less than the plant demand for grasses. Therefore, recycled water use at the Golf Course is not likely to cause additional degradation with nitrate. It is appropriate to set an effluent limit of 22 mg/L for total nitrogen as an annual average to prevent further groundwater degradation. The Discharger is able to comply with this limit. This Order sets a groundwater limit of 10 mg/L for nitrate as nitrogen.
- 10. Section F, Water Recycling Specification shall be revised as follows:
  - 1) For the purpose of this Order, "use area" means an area with defined boundaries where recycled water is used or discharged.

- 2) Notwithstanding the following requirements, the production, distribution, and use of recycled water shall conform to an Engineering Report prepared pursuant to Title 22, section 60323 and approved by the Division of Drinking Water.
- 3) The recycled water shall be at least disinfected tertiary 2.2 recycled water as defined in Title 22, section 60301.
- Recycled water shall be used in compliance with Title 22, section 60304. Specifically, uses of recycled water shall be limited to those set forth in Title 22, section(s) 60304(a).
- 5) Tailwater runoff and spray of recycled water shall not be discharged outside of the use areas except in minor, incidental amounts that cannot reasonably be eliminated by implementation and good maintenance of best management practices.
- 6) Application rates of recycled water to the use area shall be reasonable and shall consider soil, climate, and plant demand. In addition, application of recycled water and use of fertilizers shall be at a rate that takes into consideration nutrient levels in recycled water and nutrient demand by plants. As a means of discerning compliance with this requirement:
  - a. Crops or landscape vegetation shall be grown on the use areas, and cropping activities shall be sufficient to take up the nitrogen applied, including any fertilizers and manure.
  - b. Hydraulic loading of recycled water and supplemental irrigation water (if any) shall be managed to:
    - i. Provide water only when water is needed and in amounts consistent with that need;
    - ii. Maximize crop nutrient uptake;
    - iii. Maximize breakdown of organic waste constituents in the root zone; and
    - iv. Minimize the percolation of waste constituents below the root zone.

The Board recognizes that some leaching of salts is necessary to manage salt in the root zone of crops for production. Leaching shall be managed to minimize degradation of groundwater, maintain compliance with the groundwater limitations of this Order, and prevent pollution.

7) The Discharger shall conduct periodic inspections of the recycled water use areas to determine compliance with the requirements of this Order. If an inspection reveals noncompliance or threat of noncompliance with this Order, the Discharger shall temporarily stop recycled water use immediately and implement corrective actions to ensure compliance with this Order.

- 8) Use areas where public access is allowed shall be managed to avoid public contact with recycled water.
- 9) Discharge to the use areas shall not be performed during rainfall or when the ground is saturated.
- 10) The irrigation with recycled water shall be managed to minimize erosion within the use areas.
- 11) The use areas shall be managed to prevent breeding of mosquitoes or other vectors.
- 12) Use areas and recycled water impoundments shall be designed, maintained, and operated to comply with the following setback requirements:

|  | (feet)          |
|--|-----------------|
| Edge of use area to domestic water supply well                       | 50 <sup>1</sup> |
| Toe of recycled water impoundment berm to domestic water supply well | 100             |

Except as allowed pursuant to Water Recycling Specification F.13 below.

- 13) Irrigation with disinfected tertiary recycled water shall not take place within 50 feet of any domestic water supply well unless all of the following conditions have been met and the State Water Resources Control Board Division of Drinking Water (DDW) has approved a variance pursuant to Title 22, section 60310(a):
  - a. A geological investigation demonstrates that an aguitard 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.
- 14) Spray irrigation with recycled water is prohibited when wind speed (including gusts) exceeds 30 mph.
- 15) Spray, mist, or runoff shall not enter dwellings, designated outdoor eating areas, or food handling facilities.

- 16) Drinking water fountains shall be protected against contact with recycled water spray, mist, or runoff.
- 17) Public contact with recycled water shall be controlled using fences, signs, and other appropriate means.
- 18) Use areas that are accessible to the public shall be posted with signs that are visible to the public and no less than four inches high by eight inches wide. Signs shall be placed at all areas of public access and around the perimeter of all use areas and at above-ground portions of recycled water conveyances to alert the public of the use of recycled water. All signs shall display an international symbol that shall include the following wording:

#### "RECYCLED WATER – DO NOT DRINK" "AGUA DE DESPERDICIO RECLAMADA – NO TOME"

Alternative language will be considered by the Executive Officer if approved by DDW.

- 19) All recycling equipment, pumps, piping, valves, and outlets shall be marked to differentiate them from potable water facilities. Quick couplers, if used, shall be different than those used in potable water systems.
- 20) Recycled water controllers, valves, and similar appurtenances shall be equipped with removable handles or locking mechanisms to prevent public access or tampering.
- 21) Hose bibs and unlocked valves, if used, shall not be accessible to the public.
- 22) No physical connection shall exist between recycled water piping and any potable water supply system (including domestic wells), or between recycled water piping and any irrigation well that does not have an approved air gap or reduced pressure principle device.
- 23) Horizontal and vertical separation between pipelines transporting recycled water and those transporting potable water shall comply with Title 22, section 64572, except to the extent that DDW has specifically approved a variance.
- 24) No physical connection shall be made or allowed to exist between any recycled water system and any separate system conveying potable water or auxiliary water source system.
- 25) A public water supply shall not be used as backup or supplemental source of water for a recycled water system unless the connection between the two systems is protected by an air gap separation which complies with the requirements of California Code of Regulations, title 17, sections 7602(a) and 7603(a).

- 26) All recycled water piping and appurtenances in new installations and appurtenances in retrofit installations shall be colored purple or distinctively wrapped with purple tape in accordance with California Health and Safety Code section 116815.
- 27) Any backflow prevention device installed to protect a public water system shall be inspected and maintained in accordance with Title 17, section 7605.

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, PATRICK PULUPA, 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 2 August 2018.

Original signed by

PATRICK PULUPA, Executive Officer

LFU: 7/18/18