

INFORMATION SHEET

INFORMATION SHEET - ORDER NO. R5-2018-XXXX
RIVERDALE PUD
WASTEWATER TREATMENT FACILITY
FRESNO COUNTY

Background

The Riverdale Public Utilities District (District or Discharger) submitted a Report of Waste Discharge (RWD), proposing the expansion of the existing Riverdale wastewater treatment facility (WWTF). The WWTF is about a mile north of the community of Riverdale.

The current discharge from the WWTF is regulated by Waste Discharge Requirements (WDRs) Order 85-252 that allows a discharge of up to 0.25 million gallons per day (mgd) of domestic wastewater. The WWTF is currently discharging an average of about 0.21 mgd or about 88 percent of the design treatment capacity. The RWD estimates growth over the next 20 years and proposes increasing the treatment capacity in two phases. The first phase would increase the treatment and disposal capacity to 0.275 mgd and the second phase would increase the treatment and disposal capacity to 0.325 mgd and would be completed in about ten years.

Wastewater Generation and Disposal

The existing WWTF is an aerated lagoon system designed to remove biochemical oxygen (BOD) and total suspended solids (TSS). Raw wastewater or influent enters at the headworks where it passes through a comminutor, prior to being discharged to an unlined complete-mix aerated lagoon. The effluent is then discharged to one of six unlined oxidation lagoons, where the effluent percolates into the underlying soil/substrate, evaporates, or is discharged to open land north of the WWTF.

The new treatment system will consist of three, lined aeration ponds. From the treatment ponds, effluent will be discharged to a series of new disposal (evaporation/percolation) ponds installed in two phases. Some of the existing treatment ponds will be converted to disposal (evaporation/percolation) ponds. The new evaporation/percolation ponds proposed for the site will occupy the area of the current land application area.

Groundwater Considerations

Groundwater in the area of the Riverdale WWTF is contained in two primary aquifers. An unconfined aquifer is present above the E-Clay or Corcoran Clay, which is reported to be at about 450 feet below the ground surface (bgs) beneath the WWTF and is about 80 to 100 feet thick. Below the E-Clay, the aquifer is confined. Historically, the Van Ness Slough flowed across the WWTF property from east to west. The presence of a slough in the area indicates perched waters may be present as well.

The exact depth to first encountered groundwater beneath the WWTF is unknown, but some regional information is available. Depth to groundwater is addressed in the Antidegradation Report that indicates the depth to water has dropped 100 feet since 2010 and is at about 240 feet bgs. The District indicates they just installed a new supply well and groundwater was

encountered at a depth of 240 feet bgs. The Department of Water Resources has groundwater information (*Tulare Lake Groundwater Basin, Spring 2010, Lines of Equal Depth to Water in Wells, Unconfined Aquifer*) and the general direction of groundwater flow was to the west/southwest and the depth to water in the spring of 2010 is shown as being about 170 feet bgs.

Additional Regulatory Considerations

The Tulare Lake Basin Plan states that the evaporation of reclaimable wastewater is not an acceptable permanent disposal method where the opportunity exists to replace an existing use of proposed use of fresh water with reclaimed water. To that end, the District circulated a 29 November 2016 letter to adjacent property owners that grow alfalfa, hay, or fodder crops within a mile of the WWTF to evaluate possible interest in using undisinfected secondary treated wastewater for recycling. One property owner responded that they were interested in using the wastewater, but wanted to use District land as well as the wastewater due to the elevated EC of the wastewater. The WWTF has a long history of standing water in the existing land application area, which created nuisance conditions (mosquitoes). To eliminate the standing water issues associated with the recycling of wastewater to the land application area, the upgraded WWTF will utilize evaporation/percolation ponds for disposal.

Legal Effect of Rescission of Prior WDRs or Orders on Existing Violations

The Board's rescission of prior waste discharge requirements and/or monitoring and reporting orders does not extinguish any violations that may have occurred during the time those waste discharge requirements or orders were in effect. The Central Valley Water Board reserves the right to take enforcement actions to address violations of prior prohibitions, limitations, specifications, requirements, or provisions of rescinded waste discharge requirements or orders as allowed by law.

Reopener

The conditions of discharge in the proposed Order were developed based on currently available technical information and applicable water quality laws, regulations, policies, and plans, and are intended to assure conformance with them. The proposed Order would set limitations based on the information provided thus far. If applicable laws and regulations change, or once new information is obtained that will change the overall discharge and its potential to impact groundwater, it may be appropriate to reopen the Order.