

ITEM: 25

SUBJECT: Calaveras County Water District, Copper Cove Wastewater Reclamation Facility and Saddle Creek Golf Course, L.P., Calaveras County

BOARD ACTION: *Consideration of Time Schedule Order (TSO) for NPDES Permit (NPDES No. CA0084620)*

BACKGROUND: Calaveras County Water District (CCWD) is the owner and operator of the Copper Cove Wastewater Reclamation Facility (hereinafter Facility), a publicly-owned treatment works. Saddle Creek Golf Course, L.P. is the owner and operator of the Saddle Creek Golf Course (SCGC), together CCWD and SCGC are the Discharger.

CCWD provides sewerage service for portions of the Copper Cove Community, located in the southwestern part of Calaveras County. The Facility consists of a headworks and flow diverter, two aerated ponds operated in parallel, followed by an additional aerated pond for settling and polishing, and potassium hypochlorite disinfection. Disinfected, secondary treated wastewater is stored on-site in an unlined storage reservoir, which may then be land applied via spray irrigation on CCWD's 25 acres of spray irrigation fields.

During the summer, wastewater is further treated to tertiary levels using tertiary filtration and ultraviolet light (UV) disinfection. The Title 22 tertiary treated effluent is collected in a reclaimed water storage tank and then discharged to be used for golf course irrigation or to provide makeup water for the jurisdictional wetland system on the SCGC. The wetland system is regulated by a US Army Corps of Engineers Clean Water Act Section 404 permit.

Waste Discharge Requirements (WDR) Order R5-2013-0072, adopted by the Central Valley Water Board on 31 May 2013, regulates the discharge to the wetlands. Time Schedule Order (TSO) R5-2012-0055 provides compliance schedules for dichlorobromomethane, chloroform, electrical conductivity, aluminum, and manganese with compliance required by 31 July 2016.

To comply with these final effluent limitations the Discharger commenced a full scale pilot test in September 2012. Previously, the Discharger stored chlorine disinfected secondary effluent in a storage pond (Pond 6), which is used for winter storage prior to tertiary treatment and reuse on the golf course. The addition of chlorine creates disinfection byproducts, such as chloroform and dichlorobromomethane, as well as, increases the EC. The pilot test eliminated the use of chlorine disinfection prior to storage in Pond 6. Instead, all wastewater is treated to tertiary levels and disinfected with UV disinfection prior to storage in Pond 6. This is expected to eliminate the formation of disinfection byproducts.

Although the new treatment configuration eliminates disinfection byproducts, the Discharger can no longer comply with ammonia final effluent limitations contained in WDR Order R5-2013-0072. The new treatment configuration disturbed accumulated solids in a settling pond and decreased residence time in the treatment ponds that has resulted in reduced ammonia removal. In addition, the renewed WDR Order R5-2013-0072 includes a new effluent limitation for nitrate plus nitrite that the Discharger cannot meet due to incomplete denitrification. The Discharger needs additional time to modify treatment plant operations and construct additional aeration to meet the ammonia and nitrate plus nitrite final effluent limitations or eliminate discharge to the jurisdictional wetlands.

A time schedule order is proposed that maintains the same compliance date as TSO R5-2012-0055 for EC, dichlorobromomethane, aluminum and manganese (1 August 2016), but adds ammonia and nitrate plus nitrite to the compliance schedule.

ISSUES: None

RECOMMENDATION: Adopt Time Schedule Order

Mgmt. Review _____

Legal Review _____

25/26 July 2013 Board Meeting

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