Item: 10

Subject: Public Hearing on Order No. R1-2012-0029, to consider adoption of Waste Discharge Requirements for Lake Shastina Community Services District Wastewater Treatment Facility, WDID No. 1A790100SIS, Siskiyou County

DISCUSSION

The Discharger owns and operates a wastewater collection, treatment, and disposal facility (Facility) that provides sewerage service to residential and commercial parcels within the Lake Shastina Community Services District (the District).

The Facility has historically consisted of solids separation (primary treatment), followed by three percolation and evaporation treatment and disposal ponds, but recent upgrades have included a fourth pond in that series. The Facility is designed to treat and dispose of an annual average daily flow (AADF) up to 0.132 million gallons per day (mgd), but does not include any disinfection. Wastewater treatment is achieved through settling, aerobic and anaerobic bacterial actions, and other biogeochemical processes. Since Pond Nos. 1, 2, and 3 are not lined and treatment and disposal are not segregated, discharges of partially treated wastewaters to land and groundwater begins as soon as wastewater enters Pond No. 1 of the treatment process.

This Order contains a requirement for an increased treatment and containment plan to ensure the containment of partially treated wastes and to achieve the best practicable treatment and control of the discharge necessary to comply with the Antidegradation Policy. This requirement is consistent with the District’s proposal in its Report of Waste Discharge to sequentially line Pond Nos. 1, 2, and 3 and to eventually increase treatment to a level sufficient be able to reuse its effluent in accordance with Title 22. The work plan requirement is intended to give the District flexibility in how to address treatment and containment issues. The scope of this work plan includes enough detail to guide the District in improving treatment and containment, while still allowing the District to choose the method and manner of compliance. Nonetheless, it is important that the wastewater be sufficiently contained and treated prior to discharge to protect groundwater quality.
Historically there has only been one groundwater monitoring well onsite (MW-0) that was constructed prior to 1986, but there is no available information on the construction of MW-0, such as boring logs or well construction diagrams, and it is currently capped on the surface, preventing any measurement of depth to groundwater. Accordingly, MW-0 is in need of rehabilitation and/or reconstruction prior to being considered viable. Historically, monitoring has only been required for total coliform bacteria from this well, which has not shown contamination. In July 2010, the District constructed two new groundwater monitoring wells MW-1 and MW-2 in support of the application for this permit renewal. However, MW-0 is currently not considered viable and, because it requires at least three water level measurement points to calculate gradient direction, the two operational wells do not provide sufficient data to establish the local groundwater gradient. A groundwater monitoring assessment plan is required by this Order to establish a monitoring network that establishes the local groundwater gradient and that determines the appropriate locations to monitor discharges from each pond. This Order also requires quarterly groundwater monitoring for nutrients, bacteria, pH, and other pollutants, and triennial groundwater monitoring for all constituents with maximum contaminant levels established in Title 22.

In 2008, the District identified an emergency need to regain disposal capacity that had been lost through sludge accumulation in Pond Nos. 1, 2 and 3 because their ponds were full, at wastewater flows below the permitted capacity. As a result, the District recently upgraded the Facility including the addition of a new percolation and evaporation pond (Pond No. 4), which is lined with a 60-millimeter thick High Density Polyethylene (HDPE) liner; the construction of an unlined primary pond (Pond No. 5), which is not a permitted discharge location under this permit; and the addition of electrical supply to the ponds to provide any future electricity needs.

The four ponds have approximately 17.3 million gallons (53.1 acre-feet) of storage and the design estimates that the addition of Pond No. 4 will provide enough capacity to evaporate 0.170 mgd and percolate approximately 0.0125 mgd of wastewater. Therefore, the design estimates that the four ponds will have enough disposal capacity to accommodate flows up to 0.1825 mgd. However, this permit does not authorize discharge in excess of the previously permitted rate of 0.132 mgd because the California Environmental Quality Act (CEQA) document for the development of the new ponds included this flow limitation. Any future increases in flow above the permitted rate of 0.132 mgd will require a subsequent CEQA analysis of the potential environmental impacts of increased flows.

The North Coast Regional Water Quality Control Board is a responsible agency under CEQA in relation to this Water Board action to reissue waste discharge requirements for discharges of municipal wastewater to land. The District prepared a negative declaration (SCH No. 2005062051) for the project in order to comply with CEQA. The Regional Water Board has reviewed and considered the environmental document and any proposed changes incorporated into the project or required as a condition of
approval to avoid significant effects to the environment. The Regional Water Board will file a Notice of Determination within five days from the issuance of this order.

A copy of the draft permit and/or information to access the draft on the Regional Water Board website was mailed to the Discharger, interested agencies, and persons. This item was open for public comment from February 2, 2012 through March 9, 2012. The Discharger submitted a comment letter on March 9, 2012 (attached). The attached Response to Comments document provides responses to the Discharger’s comments and identifies changes made to the draft Order No. R1-2012-0029 in response to the Discharger’s comments.

Preliminary Staff Recommendation: Adopt Order No. R1-2012-0029 as proposed.