

ITEM: 6

SUBJECT: City of Sanger, Domestic Wastewater Treatment Facility, Fresno County

BOARD ACTION: *Consideration of Waste Discharge Requirements*

BACKGROUND: The City of Sanger (City or Discharger) owns and operates two wastewater treatment facilities (WWTFs) southeast of the City of Sanger. One facility treats mostly domestic waste (Domestic WWTF) and is currently regulated by Waste Discharge Requirements (WDRs) Order 98-141, which will be replaced by the proposed WDRs. The other facility treats industrial waste (Industrial WWTF) and is regulated by WDRs Order 98-131.

WDRs Order 98-141 authorize the discharge of 3.0 mgd of effluent from an activated sludge Domestic WWTF to percolation ponds three miles south of the Domestic WWTF. The ponds comprise about 54 acres of a 120-acre parcel owned by the City. Surrounding land is agricultural land, but there are several residences adjacent to and downgradient of the ponds. Average discharge flows are 1.6 mgd. Effluent quality is generally good, with an electrical conductivity (EC) of 610 umhos/cm and a biochemical oxygen demand of 5 mg/L. However, the effluent is high in nitrate as nitrogen at 29 mg/L.

Soils in the vicinity of the ponds are coarse grained, and groundwater is in an unconfined aquifer at relatively shallow depths of 40 feet below ground surface. Baseline monitoring conducted in 1996 and 1997 (prior to discharges to the ponds) indicated that groundwater was high quality with respect to EC (220 umhos/cm) and nitrate as nitrogen (3.2 mg/L). The State drinking water standard for nitrate as nitrogen is 10 mg/L. The baseline water quality is consistent with regional groundwater quality data. The residences near the ponds use groundwater for domestic supply.

Recent groundwater monitoring indicates that discharges from the Domestic WWTF to the ponds have polluted groundwater with nitrate as nitrogen. To address the pollution, the proposed WDRs include a compliance schedule (Provision F.19) that requires the City to reduce the total nitrogen concentration in the WWTF effluent or to implement other measures to ensure that wastewater discharged to the ponds does not cause groundwater to exceed the State standard. The WDRs also include a compliance schedule (Provision F.20) that requires the City to define the horizontal and vertical extent of the groundwater that has already been impacted by nitrate as nitrogen, and to evaluate whether the changes made to address the discharges from the ponds will be sufficient to address the impacted groundwater or whether other measures are needed to mitigate these impacts.

WDRs Orders 98-131 and 98-141 both included compliance schedules requiring the City to develop a pretreatment program that would serve both WWTFs. At that time, the City had a history of issues with respect to discharges to its Industrial WWTF and had industrial sources connected to its Domestic WWTF. Following the issuance of those orders, the City pursued the development of a pretreatment program and adopted a pretreatment ordinance, but the process is not yet complete and it is not clear that the ordinance is sufficient to protect the City's collection system and both WWTFs. It is also not clear whether the City

has a use permit system in place, a monitoring and inspection program to ensure compliance with the ordinance and use permits, or an enforcement program to ensure compliance with the provisions of the ordinance and use permits. To remedy this situation, the proposed WDRs include a compliance schedule (Provision F.16) requiring the City to complete the previously-required pretreatment program.

ISSUES:

Comments were received by the City and the Central Valley Clean Water Association (CVCWA). Revisions were made to address some of the comments. Full responses to comments are included in the Response to Comments in the agenda package. A short summary of issues and Staff's responses follow:

1. The City requests that the compliance dates in Provisions F.19 and F.20 be extended. Though Staff are not proposing to give the City the full extension that the City has asked for, the proposed schedules have been significantly extended and the language has been modified to increase clarity.
2. The City maintains that it has an adequate pretreatment ordinance, and CVCWA questions the need for a pretreatment program for the Domestic WWTF. However, the City has not prohibited industrial discharges into its Domestic WWTF and the City has not demonstrated that it has the tools in place to adequately implement its pretreatment ordinance. Staff are therefore not proposing any changes.
3. The City notes that its groundwater monitoring wells have gone dry. Staff has added a provision requiring the City to replace its dry wells.
4. CVCWA is concerned that the compliance schedules in Provision F.19 and F.20 are too short, which means that the City may need to take actions that could be inconsistent with alternative compliance strategies that might be developed by CV-SALTS. CVCWA also states that Provision F.20 does not appear to consider whether drinking water uses are actually being harmed. Staff has modified the effluent nitrogen provisions and compliance schedules to clarify that active remediation is not the focus of these requirements. However, the City's discharge has polluted shallow groundwater that is currently being used as domestic supply, and staff does not believe that the compliance schedules are inconsistent with the solutions that are currently under consideration by CV-SALTS. Should CV-SALTS amend the Basin Plan to allow alternative compliance strategies that would address these discharges in a different way than currently proposed, the WDRs can certainly be reopened and modified.

RECOMMENDATION Adopt the proposed WDRs.

Mgmt. Review _____
Legal Review __PEP__
6/7 February 2014
11020 Sun Center Dr. #200
Rancho Cordova, CA 95670