

ITEM:

SUBJECT: City of Lathrop, Wastewater Recycling Plant - San Joaquin County

BOARD ACTION: *Consideration of Adoption of Revised Waste Discharge Requirements and a New Master Reclamation Permit*

BACKGROUND: The City of Lathrop owns and operates a wastewater facility that was constructed for a new planned community consisting of residential and commercial developments. The existing wastewater treatment facility (Water Recycling Plant No. 1) can treat a monthly average flow of up to 0.75 million gallons per day (mgd). The existing facility is currently regulated by WDRs Order No. R5-2005-0045, but that Order is being rescinded and the facility will be covered under this Order.

Because land development is continuing, the City is planning to expand the wastewater system. This will include construction of an adjacent wastewater treatment facility (Water Recycling Plant No. 2), as well as construction of additional recycled water storage ponds and land application areas. Both of the facilities are referred to as the Water Recycling Plant (WRP); the term "WRP" includes the wastewater treatment plants, wastewater collection system, recycled water storage ponds, recycled water delivery system, and land application areas.

Developers currently own portions of the land application areas, but intend to transfer ownership, or lease, the land to the City. This Order was written as a Master Reclamation Permit as described in California Water Code Section 13523.1 to allow the City flexibility in changing the size and use of land areas for recycled water storage or land application. The City of Lathrop is named as the Discharger, and as operator of the recycled water system, is responsible to maintain the minimum land application area acreage and recycled water storage pond capacity as defined in this Order. The City is also responsible for ensuring that wastewater is treated to the minimum specifications and is applied to land as described in the Order.

This Order is unusual in that it allows an initial flow of 0.75 mgd (for the same facilities previously authorized under Order No. R5-2005-0045), but also allows the City to increase flows to 6.24 mgd upon verification that additional facilities have been constructed in conformance with the specifications of this Order. At this time, the City has not identified the location of each new storage pond or land application area. However, as it begins its expansion process, the City will finalize the location of the land areas and will demonstrate to staff that they meet the Order's conditions through the submittal of Recycled Water Expansion Reports (RWERs). Staff will review each RWER, and upon approval by the Executive Officer, the City will be authorized

ISSUES:

additional capacity, up to the limit of 6.24 mgd.

The Tentative Order was sent out for public comment on 28 July 2006. Comment letters were received from the City of Lathrop and the California Sportfishing Protection Alliance (CSPA). Minor revisions to this Order have been incorporated into these documents, while substantive comments are addressed in the Staff Report and are summarized here.

This Order allows an initial flow rate of 0.75 mgd, and will allow the wastewater flow rate to grow to a maximum of 6.24 mgd. CSPA expressed concern over issues related to expansion and CEQA review. However, prior to any expansion, the Discharger must perform technical studies, install groundwater monitoring wells, and complete other work as described in the Order to demonstrate that the discharge can be performed in accordance with the Order. It is noted that this Order does not guarantee that the maximum wastewater flow rate will be allowed, as flow increases are subject to the City's demonstration that the new land areas meet the Order's constraints. In addition, this Order allows land application only to those areas subject to a final document adopted pursuant to the California Environmental Quality Act (CEQA) prior to the issuance of this Order.

CSPA also expressed concern over potential groundwater degradation from land application of recycled water. However, the wastewater treatment plant design and effluent recycling program incorporate numerous best practicable treatment and control (BPTC) measures. Groundwater monitoring presently characterizes groundwater conditions at selected recycled water land application areas and all recycled water storage pond sites located across a large region. The Discharger has voluntarily limited recycled water application to areas where the shallow groundwater has average TDS concentrations above 1,000 mg/L. In addition, the Discharger has stated that it will line all wastewater treatment and storage ponds with a minimum 40-mil high density polyethylene liner, or equivalent. This Order requires that both of these BPTC measures continue for all land application areas and all storage ponds.

This Order requires that additional groundwater monitoring wells to be installed to continue the groundwater characterization at proposed land application areas and recycled water storage sites. As stated earlier, these areas may only be used if the City can demonstrate through the RWER process that all conditions of the Order will be met.

If groundwater is degraded by the discharge or there is evidence that the discharge may cause degradation, then the Discharger will be required to evaluate and implement additional BPTC measures for each conveyance, treatment, storage, and disposal

component of the system. Completion of these tasks will ensure that BPTC and the highest water quality consistent with the maximum benefit to the people of the State will be achieved.

Other comments and concerns discussed in the staff report include: coordination with the State Water Board General Order for sanitary sewer overflows; issues with the groundwater monitoring well network; the use of surface water to dilute TDS concentrations in the wastewater; a request that CEQA documents be adopted for certain land application areas after adoption of this Order; the need for a pretreatment program; the need for long-term agreements between the land owners and the City; failure to delineate wetlands and conduct biological surveys; concerns about the use of infiltration basins; concerns about infiltration and inflow into the collection system; lack of a Pollution Prevention Plan; a request to prohibit water softeners; lack of public comment during the RWER process; lack of 100-year flood protection for some land application areas; concerns about groundwater impacts in areas with sandy soils and a high water table; the issue of whether or not this discharge should be subject to NPDES permitting in areas where on-going dewatering is necessary to prevent flooding; lack of definition of incidental runoff; and an improper antidegradation analysis.

RECOMMENDATION: Staff recommends that the Regional Water Board adopt the Waste Discharge Requirements and Master Reclamation Permit.

Mgmt. Review _____
Legal Review _____

21/22 September 2006
Central Valley Regional Water Quality Control Board meeting
11020 Sun Center Dr. #200
Rancho Cordova, CA 95670