



CVCWA

Central Valley Clean Water Association

Representing Over Fifty Wastewater Agencies

MICHAEL RIDDELL – Chair, City of Riverbank
CASEY WICHERT – Secretary, City of Brentwood

TERRIE MITCHELL – Vice Chair, Sacramento Regional CSD
MARGARET ORR – Treasurer, City of Stockton

December 24, 2014

Via Electronic Mail Only

Mr. Scott Armstrong
Environmental Geologist
Regional Water Quality Control Board,
Central Valley Region
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670
sarmstrong@waterboards.ca.gov

RE: Comments on the Tentative Waste Discharge Requirements and Master Reclamation Permit for City of Lathrop, Lathrop Consolidated Treatment Facility, San Joaquin County

Dear Mr. Armstrong:

The Central Valley Clean Water Association (CVCWA) appreciates the opportunity to comment on the tentative Waste Discharge Requirements and Master Reclamation Permit for the City of Lathrop (City) Lathrop Consolidated Treatment Facility (Tentative Order). CVCWA is a non-profit association of public agencies located within the Central Valley region that provide wastewater collection, treatment, and water recycling services to millions of Central Valley residents and businesses. We approach these matters with the perspective of balancing environmental and economic interests consistent with state and federal law. In this letter, we provide the following comments regarding the applicable groundwater objectives, the performance-based effluent limitation for total dissolved solids, and the recycled water specifications, and request revisions as indicated herein.

I. Groundwater Objectives

The Tentative Order is not clear as to which salinity-related water quality objectives are being applied as groundwater limitations to groundwater in this area. The Tentative Order imposes the following groundwater limitation: "Release of waste constituent from any portion of the [Facility] and recycled water Use Areas shall not cause groundwater to . . . [c]ontain constituents in concentrations that exceed either the Primary or Secondary MCLs established in Title 22 of the California Code of Regulations."¹ For total dissolved solids (TDS), the recommended Secondary MCL is 500 mg/L, the upper level is 1000 mg/L, and the short-term level is 1500 mg/L.

As the Tentative Order acknowledges, groundwater in the vicinity of the Facility does not meet potentially applicable water quality objectives for salinity constituents. The City's monitoring results show that background TDS concentrations for the groundwater underlying the different Use Areas are highly variable, as low as 308 mg/L and as high as 18,000 mg/L. The City's effluent quality is much better with an average TDS concentration of 688 mg/L, indicating that the effluent will likely improve groundwater quality. However, if the recommended Secondary MCL level of 500 mg/L is considered to be the applicable objective, then the City could potentially violate the groundwater limitation in Use Areas due to its discharge of 688 mg/L even though the TDS in the City's effluent is actually improving groundwater quality.

Considering the background salinity quality of groundwater in this area, and the fact that the Central Valley Regional Water Quality Control Board (Regional Board) acknowledges that the City's effluent is not the cause of degradation, CVCWA respectfully recommends that the Regional Board revise the language for the groundwater limitations and state that for TDS, the upper secondary MCL of 1000 mg/L is considered the applicable objective.

II. Performance-Based Limit for TDS

The Tentative Order includes a performance-based, flow-weighted annual average effluent limit TDS of 750 mg/L "that will restrict effluent salinity to ensure compliance with the Controllable Factors Policy."² This performance-based limit is not consistent with the implementation provisions of the *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins* (Basin Plan) related to establishing limits when background water quality already exceeds the applicable water objectives. CVCWA is also concerned that imposing a performance-based limit in drought conditions for a community that is expanding recycled water uses will set up the City for compliance issues.

¹ Tentative Order, p. 37.

² Tentative Order, p. 21.

The Tentative Order explains that the average effluent TDS concentration is 688 mg/L, yet the background groundwater “greatly exceeds” water quality objectives, a condition that was present before any discharges to the Use Areas.³ In such a situation, the Tentative Order states that the Basin Plan’s Controllable Factors Policy applies. Under that Policy, controllable factors are not allowed to cause further degradation of water quality in instances where uncontrollable factors have already resulted in water quality objectives being exceeded.⁴ However, in this case, the discharge (i.e., the controllable factor) is likely improving water quality. The Controllable Factors Policy is not a basis for imposing a performance-based limit in this circumstance where the discharge is improving groundwater quality.

Another implementation provision of the Basin Plan provides:

water quality objectives do not require improvement over naturally occurring background concentrations. In cases where natural background concentration of a particular constituent exceeds an applicable water quality objective, the natural background concentration will be considered to comply with the objective . . . Maintenance of the existing high quality of water means maintenance of “background” water quality conditions, i.e., the water quality found upstream or upgradient of the discharge, unaffected by other discharges. Therefore . . . background defines the most stringent limits which will be imposed on ambient water quality.⁵

According to the Tentative Order, the background wells show that the average TDS concentrations for groundwater underlying the various Use Areas exceeded the upper MCLs for TDS prior to the discharge.⁶ Under the implementation section of the Basin Plan, the groundwater is considered to comply with the objective for TDS. In addition, the background “defines the most stringent limits which will be imposed on ambient water quality.”⁷ The Regional Board cannot then set a performance-based limit that is well below the background concentration levels and that affords little room for error.

CVCWA respectfully requests that the Regional Board remove the performance-based limit for TDS, or at least set the limit at a level consistent with the upper Secondary MCL objective of 1000 mg/L, which is still lower than background water quality conditions. The latter option gives the City some flexibility in the event that influent flows decrease due to water

³ *Ibid.*

⁴ Basin Plan, pp. III-1.00, IV-15.00.

⁵ Basin Plan, p. IV-17.00.

⁶ Tentative Order, pp. 14-16.

⁷ Basin Plan, p. IV-17.00.

conservation, and concentrations of constituents correspondingly increase. It is also consistent with the antidegradation policy and the Basin Plan implementation provisions.

III. Recycled Water Use Specifications

As a master recycling permit, the Tentative Order includes recycled water specifications. A number of the specifications track the water recycling criteria in Title 22 or the general orders issued by the State Water Resources Control Board (State Board) for recycled water use or for landscape irrigation uses of municipal recycled water. However, some other specifications are not based on the criteria in Title 22, are more stringent than those criteria, or do not provide the necessary caveat that the City may proceed in a manner different that what is required in Title 22 with approval from the Division of Drinking Water (DDW) at the State Board. For example, Provision F.14⁸ lists setback requirements, but does not include the qualification “except as approved by DDW.”⁹ Similarly, Provision F.27¹⁰ requires a certain amount of horizontal and vertical separation between pipelines transporting recycled water and pipelines transporting domestic supply, with no qualification.¹¹

Most importantly, the City has prepared and submitted a Title 22 Engineering Report to DDW in April 2014. The Tentative Order requires that the production, distribution, and use of recycled water must conform to a Title 22 Engineering Report.¹² Some of these specifications in the WDRs may be inconsistent with the design specifications the City has pursued in its Title 22 Engineering Report. The Regional Board should refer back to the requirements in the City’s Title 22 Report as the enforceable specifications in the WDRs, rather than pick and choose various criteria from different documents to include in the WDRs.

CVCWA respectfully requests that specifications that are not part of Title 22 be deleted from this Tentative Order. Further, the specifications that are based on Title 22 must follow the requirements of Title 22, and where the Regional Board deviates from Title 22, the Regional Board must explain its deviations.

As to specific provisions, the Regional Board should delete Provision F.27, or at least add the qualification “except as approved by DDW.” In addition, the Regional Board should delete

⁸ Tentative Order, p. 38.

⁹ Compare State Board WQO 2009-0006-DWQ, p. 10 [prohibits “the application of recycled water within fifty (50) feet of a domestic well . . . unless approved by CDPH . . .”].

¹⁰ Tentative Order, p. 40.

¹¹ Compare State Board WQO-2009-0006-DWQ, p. 12. [“Domestic water pipelines shall be configured above recycled water pipelines, unless approved by CDPH.”].

¹² Tentative Order, p. 37 (Provision F.2).

Mr. Scott Armstrong

Re: CVCWA Comments on the Tentative Waste Discharge Requirements and
Master Reclamation Permit for City of Lathrop Consolidated Treatment Facility

December 24, 2014

Page 5 of 5

Provision F.14. If the Regional Board does not delete Provision F.14 entirely, then CVCWA requests that the Regional Board delete the setback requirement of 25 feet for the "Use Area to manmade or natural surface water drainage course," and add the above qualification to the remaining requirements. This setback requirement is not in the Title 22 regulations and is especially troubling given the proximity of the existing and planning Use Areas to the many surface waters and tributaries in the area.¹³ This setback requirement could make it impossible to apply recycled water to these Use Areas, as intended by the City and otherwise permitted in the Tentative Order. Provision F.18 should also be deleted, as it is duplicative of Provision F.19.

We appreciate your consideration of these comments. If you have any questions or if CVCWA can be of further assistance, please contact me at (530) 268-1338 or eoofficer@cvcwa.org.

Sincerely,



Debbie Webster,
Executive Officer

cc (via email): Pamela Creedon, Central Valley Regional Water Quality Control Board
(pcreedon@waterboards.ca.gov)

¹³ See Attachments C and E to the Tentative Order, showing Use Areas abutting the San Joaquin River, Old River, Paradise Cut, and other watercourses.