



CVCWA Central Valley Clean Water Association

Representing Over Fifty Wastewater Agencies

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November 17, 2006

Ms. Pamela Creedon, Executive Officer
Regional Water Quality Control Board
Central Valley Region
11020 Sun Center Drive #200
Rancho Cordova, California 95670

Subject: Comments on Tentative Order for City of Atwater Wastewater Treatment Facility

Dear Ms. Creedon:

The Central Valley Clean Water Association (CVCWA) has reviewed the Tentative Order (TO) for the City of Atwater's Wastewater Treatment Facility. Based on our review, there are a several provisions contained in this permit that are of concern to our membership. Because of these concerns and their potential impact on other permittees within the Central Valley, CVCWA provides the following comments for consideration by the Regional Water Quality Control Board (Regional Board).

- **Use of Lowest Ambient Hardness to Calculate CTR Metals Criteria**

CVCWA has continually expressed its concern with regards to the Regional Board's practice of using the lowest upstream ambient hardness to calculate hardness dependent CTR metals criteria. While we understand the Regional Board's interpretation of the State's Implementation Policy to mean that a receiving water hardness measurement must be used to calculate such criteria, we disagree with the Regional Board's interpretation, practice and policy of using the lowest ambient hardness without consideration of the hardness of the effluent and the hardness occurring during the critical flow conditions under which the permit is written.

The California Toxics Rule (CTR) states that the "actual ambient hardness of the surface water shall be used" when there is a hardness of 400 mg/L or less (40 CFR 131.38 (c)(4)) and that the hardness values used "shall be consistent with the design discharge conditions established in paragraph (c)(2) of this section for design flows and mixing zones." (40 CFR 131.38 (c)(4)(ii).) Thus, hardness values used to calculate hardness dependent criteria must reflect the design discharge conditions of the receiving water, which means hardness values should be selected from the appropriate locations within or at the

boundary of a mixing zone, where applicable, or at the point of discharge when there is no mixing zone. Based on this language in the CTR, it is inappropriate to calculate hardness dependent criteria based on lowest measured upstream hardness, which does not reflect the influence of effluent hardness at the point of discharge and in the downstream discharge plume.

The Regional Board has also argued that the State's Implementation Policy requires that the hardness value to calculate hardness dependent criteria must be from the receiving water (SIP, page 5). While the SIP does state that the hardness value should be for the receiving water, it does not provide any direction as to what point of the receiving water should be used. When the SIP policy is combined with the CTR, there is a clear indication that hardness measurements used to calculate hardness dependent criteria should occur at the point of discharge, or at an appropriate location within or at the boundary of a mixing zone.

Furthermore, the Central Valley Board's practice is inconsistent with hardness level determinations made by other Regions throughout the state. For example, the San Francisco Regional Board uses an adjustable geometric mean where 30% of the hardness values are below the value the Board uses to calculate CTR metals criteria. The Los Angeles Regional Board uses the average of the upstream receiving water hardness. Thus, other Regions do not agree with the language contained in many Central Valley permits, including the City of Atwater TO, that states, "[e]ffluent limits must be set using the worst-case condition (e.g. lowest ambient hardness) in order to protect beneficial uses for all discharge conditions." CVCWA maintains that this reflects a condition, beyond worst case, that will never occur. Such an approach is unreasonable.

- **Effluent Limit for Ammonia**

CVCWA does not support the Regional Board's determination to eliminate the use of a variable effluent limit for ammonia, and subsequently to calculate ammonia limits based on worst-case observations. Such an approach is inconsistent with the U.S. EPA's *Update of Ambient Water Quality Criteria for Ammonia* (1999 Ammonia Update), which recognizes that the toxicity of ammonia is dependent on both pH and temperature at the time of discharge. Calculation of such limits based on the worst case conditions is over-protective and does not reflect that actual impact of the effluent on aquatic life in the receiving water. When water quality criteria varies based on hardness, or pH and temperature as is in this case, it is appropriate to vary the effluent limit. Otherwise, effluent limits calculated based on worst case conditions that do not account for the variables is over protective.

The California Sportfishing Protection Alliance comments that "floating" limits for ammonia are contrary to State Water Board precedential orders. We disagree. First, the State Board Order in question (Order WQO 2004-0013) does not prohibit the Regional Board from using effluent limits that are not fixed within the permit. The language in the State Board's Orders states that "it is preferable to establish fixed or seasonal effluent limitations, as provided in the SIP, rather than "floating" limitations." (WQO 2004-0013 at pg. 23.) The State Board has stated a preference, it has not made a finding that prohibits the use of variable effluent limits.

Second, the language referred to above comes from a footnote within the body of the order, and was not an issue on appeal. (WQO at pg. 9.) In the case in question, the City of Yuba City challenged the

hardness value that the Regional Board used to conduct its reasonable potential analysis to find reasonable potential. The City did not challenge the actual hardness dependent metals effluent limits, which were variable. Thus, the State Board's preference is not supported by any technical or legal reasoning contained in the Order or the larger Administrative Record.

Finally, the State Board's preference specially applies to metals, based on the SIP. Ammonia is not a metal and is not subject to the provisions of the SIP because it is not a CTR constituent. It appears that the Regional Board finds reasonable potential for ammonia based on the reasonable potential to exceed the narrative toxicity objective. However, the fact sheet and the TO do not contain sufficient information to clearly show how the Regional Board arrived at this conclusion, and how the Regional Board determined that it was appropriate to apply the U.S. EPA's Ambient Water Quality Criteria. The *Fourth Edition of the Water Quality Control Plan (Basin Plan) for the Sacramento River and San Joaquin River Basins* requires the Regional Board to conduct a case-by-case evaluation to determine if specific numeric criteria from other sources is "relevant and appropriate" to determine compliance with a narrative objective. (Basin Plan, at pg. IV-17.00.) The TO and fact sheet do not provide any evidence of the Regional Board's efforts to conduct this type of a case-by-case evaluation.

- **Effluent Limit for Electrical Conductivity**

CVCWA does not support the inclusion of a final effluent limit for electrical conductivity until the City of Atwater has had the opportunity to conduct a detailed, site-specific investigation to establish an appropriate EC limit to support the agricultural uses on the Gallo Ranch. Although the TO appropriately contains a study provision that allows the City to conduct a study that recommends the appropriate site-specific numeric values for EC (consistent with the State Water Board's order for the City of Woodland (WQO 2004-0010)), the inclusion of a final limit of 700 umhos/cm for EC prior to the completion of that study is inappropriate and may create anti-backsliding concerns if the City's study shows that the appropriate EC level is higher than 700 umhos/cm. Thus, CVCWA recommends that the final limit be removed from the TO.

We appreciate the opportunity to comment on the TO for the City of Atwater's Wastewater Treatment Facility. If you have any questions, please do not hesitate to contact me at (530) 886-4911.

Sincerely,



Warren Tellefson
Executive Officer

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