



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

April 11, 2014

James Marshall
Senior Water Resources Control Engineer
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670

Re: Draft Tentative Order/NPDES Permit for the City of Vacaville - Easterly
Wastewater Treatment Plant (NPDES Permit No. CA0077691)

Dear Mr. Marshall:

Thank you for the opportunity to review and comment on the tentative order/draft permit (NPDES Permit No. CA0077691) for the discharge from the Vacaville - Easterly Wastewater Treatment Plant to Old Alamo Creek, which was dated March 13, 2014. We have several concerns with the proposed NPDES permit, specifically with the analysis concluding that effluent limits for trihalomethane (THM) compounds are no longer needed and associated monitoring requirements. It appears the proposed permit is based on monitoring data from 2011 to 2013 and application of the site-specific reasonable potential analysis procedure adopted by RB in 2010 (Resolution No R5-2010-0047). As you know, EPA approved site specific objectives for three trihalomethane compounds in New Alamo Creek but disapproved the site-specific NPDES implementation procedures (letter dated April 9, 2013). As EPA disapproved these procedures, they may not be used as the basis for developing this NPDES permit. Instead, reasonable potential should be evaluated using procedures consistent with federal regulations at 40 CFR 122.44(d) and associated state policies.

The draft permit and factsheet explains the facility will continue to use chlorination to disinfect and therefore effluent discharge will likely contain levels of THMs in Old Alamo Creek and the immediate downstream reach, New Alamo Creek. Based on federal antidegradation and antibacksliding (as discussed below), the proposed permit should be revised to incorporate performance-based effluent limits for THMs and total THMs and more monitoring requirements for THMs. Pursuant to 40 CFR 123.44, we reserve the right to object to issuance of this permit if our concerns are not addressed.

Performance-based limits for trihalomethanes

We understand that the state has removed the MUN designated use for Old Alamo Creek and adopted site-specific objectives for three THM compounds - chloroform, chlorodibromomethane, dichlorobromomethane for New Alamo Creek. We also understand that additional monitoring

data were collected at the wastewater treatment plant discharge point and at the terminus of Old Alamo Creek, above its confluence with New Alamo Creek. It appears that the highest effluent values collected at the treatment plant are below the CTR standards now applicable in Old Alamo Creek. It also appears that the highest effluent values observed at the Old Alamo Creek terminus monitoring site are lower than the new SSOs adopted for New Alamo Creek. Pursuant to federal reasonable potential evaluation requirements at 40 CFR 122.44(d)(1)(ii), these results would not necessitate a finding of reasonable potential for these pollutants. In reviewing your reasonable potential analysis, taking into account EPA's disapproval of the site specific implementation procedures, the Regional Board should also consider state policies for reasonable potential determination.

While the available record would not, under federal regulations, necessitate a finding of reasonable potential and the retention of water quality-based effluent limitations for these pollutants, the conclusion that effluent limitations are no longer necessary appears inconsistent with federal antibacksliding requirements. The facility will continue to chlorinate its effluent and can be expected to discharge chlorination byproducts. While the highest observed data points at the discharge point and at the Old Alamo Creek terminus are below the locally applicable standards, they are generally within the same order of magnitude. These factors indicate that the permit should be structured to ensure THM levels do not increase in the future. The draft fact sheet cites Clean Water Act Section 402(o)(2)(B)(i) as the basis for deleting effluent limitations for these pollutants from the new permit. However, Section 402(o)(2) also provides that:

“Subparagraph (B) shall not apply to any revised wasteload allocations or any alternative grounds for translating water quality standards into effluent limitations, except where the cumulative effect of such revised allocations results in a decrease in the amount of pollutants discharged into the concerned waters...” (emphasis added)

In order to rely upon this section as the basis for removing effluent limitations from the permit, the permit record would need to support a finding that there has been a decrease of pollutants discharged into the receiving water. If data are available to support that finding, please provide those data to us for review and cite these data in the fact sheet. If not, it is invalid to rely upon Section 402(o)(2)(B)(i) as the basis for completely removing effluent limitations.

As it appears, based on recently collected data, that there is not reasonable potential requiring inclusion of water quality-based effluent limitations but antibacksliding provisions require retention of effluent limitations to guard against backsliding and future water quality degradation, the permit should include performance-based effluent limits for these compounds: bromoform, chloroform, chlorodibromomethane, dichlorobromomethane and total THMs. We recommend applying methods for calculating performance based limitations described in EPA's 1992 *Technical Support Document for Water Quality-Based Toxics Control*. We have worked with other Regional Boards in similar situations to develop appropriate, regularly achievable performance-based limitations and we would be happy to assist your development of these limits. As the draft permit requires collection of effluent and receiving water data for these pollutants and the performance-based limitations should not place the facility at risk of non-

compliance, this approach will not increase compliance costs but will ensure protection of the receiving waters from water quality degradation.

Monitoring Requirements

We appreciate that you provided us with recently collected THM data for the discharge point and the terminus of Old Alamo Creek. We received no data for these THM compounds in New Alamo Creek, where the new SSOs apply. Consistent with the analysis above, and to support future analysis of whether the new SSOs are being met, we recommend two modifications to the permit's proposed monitoring provisions for THMs:

1. Add monitoring for four THM compounds within New Alamo Creek, preferably once per month.
2. Add monitoring for bromoform at two sites – effluent and at terminus of Old Alamo Creek, preferably once per month.

This will yield monitoring results to be used for future reasonable potential analyses and water quality assessments within each waterbody. EPA can also support the notion of reduced frequency of monitoring at each site, once sufficient THM data has been collected and evaluated to be far below applicable receiving water criteria.

We look forward to working with you and your staff to seek a mutually satisfactory resolution prior to issuance of this permit. If you have questions, please contact me at (415) 972-3464 or Peter Kozelka at (415) 972-3448.

Sincerely,

A handwritten signature in black ink, appearing to read "David Smith". The signature is written in a cursive, somewhat stylized font.

David Smith, Manager
NPDES Permits Office (WTR-5)

