



COUNTY OF PLACER
FACILITY SERVICES DEPARTMENT

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August 16, 2010

Central Valley Regional Water Quality Control Board
NPDES - Sacramento Watershed Unit
Attn: Diana C. Messina
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670-6114

**RE: COMMENTS REGARDING TENTATIVE CHLOROFORM EFFLUENT LIMITATIONS
ALTERNATIVE 4 FOR PLACER COUNTY SEWER MAINTENANCE DISTRICT 1
WASTEWATER TREATMENT PLANT**

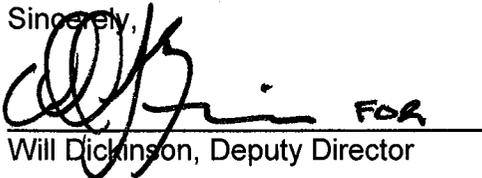
Dear Ms. Messina:

Placer County hereby submits the enclosed comments regarding the Tentative Chloroform Effluent Limitations Alternative 4 (Alternative 4) for Placer County Sewer Maintenance District 1 (SMD 1) Wastewater Treatment Plant (WWTP). Alternative 4 will be considered for adoption at the September 2010 Central Valley Regional Water Quality Control Board (Regional Water Board) meeting along with the Continued Tentative Order for the SMD 1 WWTP. The attached comments address Alternative 4. The County previously submitted comments on the Continued Tentative Order; Alternatives 1, 2 and 3; and the Expansion Option.

The Regional Water Board is considering two alternatives for addressing reasonable potential for chloroform: (1) a final monthly average effluent limitation for chloroform of 1.1 µg/L or (2) a final monthly average total trihalomethanes (total THMs) effluent limitation of 80 µg/L. For the reasons set forth in the enclosed detailed comments, the County requests that the Regional Water Board adopt the 80 µg/L effluent limitation for total THMs as an annual average.

Thank you for your consideration of the information included in this submittal. If you have any questions or concerns please contact David Atkinson of my staff at (530) 886-4968.

Sincerely,


Will Dickinson, Deputy Director

WD:BZ:KB

Attachments:

Attachment A - Placer County Comments on the Tentative Chloroform Effluent Limitations Alternative 4 for Placer County Department of Facility Services Placer County SMD 1 Wastewater Treatment Plant

cc: Webster J. Owen Jr., Owen Psomas
Michael Bryan, Robertson-Bryan

11476 C Avenue Auburn CA 95603
Entrance at 2855 2nd Street

Administration – Building Maintenance – Capital Improvements – Museums – Parks
Property Management – Environmental Engineering - Utilities

ATTACHMENT A
PLACER COUNTY
COMMENTS REGARDING
TENTATIVE CHLOROFORM EFFLUENT LIMITATIONS ALTERNATIVE 4
FOR
PLACER COUNTY DEPARTMENT OF FACILITY SERVICES
PLACER COUNTY SEWER MAINTENANCE DISTRICT 1
WASTEWATER TREATMENT PLANT
PLACER COUNTY

Submitted August 16, 2010

The Regional Water Board is considering two alternatives for addressing reasonable potential for chloroform: (1) a final monthly average effluent limitation for chloroform of 1.1 µg/L or (2) a final monthly average total trihalomethanes (total THMs) effluent limitation of 80 µg/L. For the reasons set forth below, the County requests that the Regional Water Board impose the 80 µg/L effluent limitation for total THMs as an annual average.

The 1.1 ug/L "goal" is not an OEHHA Public Health Goal

Alternative 4 is incorrectly citing 1.1 µg/L as an OEHHA public health goal (PHG). OEHHA's website (see: <http://oehha.ca.gov/water/phg/allphgs.html>), with a listing of all PHGs developed through January 2010, does not have a PHG for chloroform. Further, the latest version of the Regional Water Board's *A Compilation of Water Quality Goals* (July 2008) identifies the 1.1 ug/L value as a "CalEPA Cancer Potency Factor as a Drinking Water Level" at a 1-in-a-million risk level for a 70 kg person consuming 2L/day, not an OEHHA PHG. The basis of the 1.1 ug/L "goal" should be made factually correct in the final permit, should Option 1 be adopted.

The 1.1 ug/L "Goal" is not an Appropriate Basis for Establishing Effluent Limitations for SMD 1.

As the Regional Water Board has itself acknowledged, "the [Office of Environmental Health Hazard Assessment] (OEHHA) public health goal is not used as the basis for effluent limitations when there are no active drinking water intakes in the vicinity of the discharge, because chloroform is a volatile organic constituent that will degrade in the environment." (City of Vacaville Easterly WWTP, Order R5-2008-055 at F-23.) Based on chloroform's volatility and thus environmental fate, its concentration in undiluted, treated wastewater immediately prior to discharge bears little to no relationship to its concentrations in downstream receiving waters where water is diverted and treated prior to its consumption. Not only does chloroform volatilize in receiving waters, it further volatilizes as the diverted water is treated in the water treatment plant process, and then is again produced when the water treatment plant disinfects the treated drinking water supply via chlorination. Because the total THM MCL has been approved by the State and U.S. EPA as the appropriate value for regulating human health effects of THMs (including chloroform) in drinking water supplies, and the application of a cancer potency factor expressed as a drinking water goal has not been approved for regulating

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human health effects due to chloroform exposure through drinking water by either U.S. EPA or the State, the MCL represents the applicable criterion [C], for assessing reasonable potential and, if necessary, deriving effluent limitations according to the SIP.

The State Water Resources Control Board has endorsed the regulation of chloroform through effluent limitations for total THMs. (Order WQ 2002-015, In the Matter of the City of Vacaville, at p.53.) Such an approach is consistent with other recently issued waste discharge requirements. The permit for the City of Vacaville Easterly Wastewater Treatment Plant permitted only a daily maximum total THM effluent limitation of 122 µg/L, and included no additional monitoring of chloroform levels downstream of the discharge. (Order R5-2008-055 at p. 9, 11). In the City of Placerville's recently renewed permit (Order No. R5-2008-0053), the MEC for chloroform was 78 µg/L. The permit found no reasonable potential specifically for chloroform when its maximum effluent concentration (MEC) of 78 µg/L was compared to the applicable MCL for total THMs of 80 µg/L, but did find reasonable potential for total THMs because the sum of the maximum concentrations of the four THMs was 91.5 µg/L. Consequently, an average monthly effluent limitation for total THMs of 80 µg/L was included in the permit.

A similar approach was used to regulate chloroform in two permits recently issued for the City of Roseville wastewater treatment plants. For the Dry Creek WWTP, the Regional Water Board staff conducted the reasonable potential analysis for chloroform by comparing the facility's chloroform MEC of 56 µg/L to the applicable criterion of 80 µg/L (the MCL for total THMs). (Order R5-2008-0077.) Because there was no reasonable potential for chloroform or the other three THM constituents, no total THM limitation was imposed for this facility. The same approach and permitting outcome was applied for the renewed permit for the City of Roseville's Pleasant Grove WWTP (Order No. R5-2008-0079) where the chloroform MEC was 66 µg/L, and for the El Dorado Irrigation District's Deer Creek WWTP permit (Order No. R5-2008-0173).

Regulating Chloroform Through an Effluent Limitation for Total THMs is Consistent with Antibacksliding Provisions

Issuance of the current NPDES effluent limitation for chloroform of 1.1 µg/L as a 30-day average (based on the OEHHA public health goal) was improper because the applicable criterion is the total THM MCL of 80 µg/L, not the OEHHA goal. This is clearly evidenced by how the Board has permitted chloroform over the past couple years in the 5 NPDES permits cited above. Including an effluent limitation for total THMs in the renewed permit does not qualify as "less stringent" than the existing limitation, in the context of backsliding, because the current effluent limitation is improper and has never been consistently complied with. Regardless, revision of the chloroform effluent limitation to a limitation based on total THMs is not prohibited or prevented under the Clean Water Act's (CWA) general prohibition against backsliding.

The CWA provides for exceptions to anti-backsliding either under Section 303(d)(4)(B), or Section 402(o)(2). Under Section 402(o), backsliding does not apply where new information is available that was not available at the time the prior permit was issued and that would have justified a less stringent limitation. Here, subsequent to adoption of the current permit in 2005, the California Department of Public Health adopted the MCL for total THMs for the protection of human health. (22 Cal. Code Regs. §64533; operative

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June 17, 2006.) The adoption of this MCL constitutes new information regarding the appropriate manner of protecting the municipal drinking water use, and thus the appropriate criterion to apply under the SIP procedure for NPDES permitting purposes. Following the adoption of this MCL, the Regional Water Board staff have consistently used the total THM MCL for assessing reasonable potential and deriving effluent limitations associated with chloroform, as evidenced by the 5 permits discussed above.

Moreover, under Section 303(d)(4)(B), the general prohibition against backsliding does not apply where the receiving waters attain their water quality standards, and the less stringent effluent limitation is consistent with the federal anti-degradation policy. (33 U.S.C. § 1313(d)(4)(B); *In the Matter of the Petitions of County Sanitation District No. 2 of Los Angeles and Bill Robinson*, Order No. WQO 2003-0009 (July 16, 2003) at p. 18.) In this case, due to the volatility of THMs, the receiving waters attain the applicable water quality standards for total THMs at downstream locations where drinking water diversions exist. Imposition of a new effluent limitation for total THMs will not result in higher levels of THMs in the discharge. As the Regional Water Board is well aware, SMD 1 has not been able to consistently comply with the existing chloroform monthly average effluent limitation of 1.1 µg/L since the limitation was adopted in 2005. Under the Tentative Order and Cease and Desist Order, SMD 1 is already required to undertake improvements to comply with THMs that are regulated pursuant to the California Toxics Rule, and this technology will address compliance with the total THM requirement, including chloroform. Thus, the selection of Option 2 is also consistent with the antidegradation policy, as it will not result in an increase of the discharge of pollutants to the receiving water.

The Total THM Limitation Should be Expressed as an Annual Average

The Regional Water Board has consistently implemented MCLs in NPDES permits as annual averages. As noted in the County's August 9, 2010 comments related to the effluent limitation for arsenic, the effluent limitation for total THMs is based on the Primary MCL, which is designed to protect human health over long exposure periods. Primary MCLs are drinking water standards contained in Title 22 of the CCR. For the Primary MCL for total THMs, Title 22 requires compliance with these standards on an annual average basis, when sampling at least quarterly. Since water that meets these requirements on an annual average basis is suitable for drinking, it is impracticable to calculate average monthly effluent limitations because such limits would be more stringent than necessary to protect the MUN use. Using an averaging period similar to what is used by DPH for those parameters regulated by Primary MCLs is appropriate, and using shorter averaging periods is impracticable because this results in more stringent limits than necessary. **As such, the County requests the total THMs effluent limitation be adopted as an annual average limitation, consistent with DPH implementation.**

Inclusion of an annual average effluent limitation for total THMs is consistent with permits issued to other similarly situated POTWs, is protective of beneficial uses, and is consistent with anti-backsliding and antidegradation requirements. For these reasons, the County supports a modified Option 2, establishment of an annual average effluent limitation for total THMs.