



# CVCWA

## Central Valley Clean Water Association

*Representing Over Fifty Wastewater Agencies*

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November 13, 2012

VIA ELECTRONIC MAIL ONLY

Ms. Jeanine Townsend, Clerk to the Board  
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**Re: Comments of the Central Valley Clean Water Association Regarding SWRCB/OCC Files A-2144(a) and (b)—December 4, 2012 State Water Resources Control Board Meeting**

Dear Chairman Hoppin and Members of the Board:

The Central Valley Clean Water Association (CVCWA) submits these comments on the October 29, 2012 proposed order in SWRCB/OCC Files A-2144(a) and (b) (Revised Proposed Order). The Revised Proposed Order consists of a revised version of the proposed order released for public review and comment on May 14, 2012 (May Proposed Order). The Revised Proposed Order involves the potential resolution of the State Water Resources Control Board's (State Water Board's) own motion review involving Waste Discharge Requirements Order No. R5-2010-0114<sup>1</sup> (WDRs) for the Sacramento Regional County Sanitation District's (District's) Sacramento Regional Wastewater Treatment Plant (SRWTP).

CVCWA is a non-profit organization that represents publicly owned treatment works (POTWs) throughout the Central Valley Region in regulatory matters affecting surface water discharge and land application. We approach these matters with a perspective to balance environmental and economic interests consistent with applicable law. We are submitting these

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<sup>1</sup> National Pollutant Discharge Elimination System (NPDES) No. CA0077682.

comments because the Revised Proposed Order would have serious legal, economic, and other consequences for CVCWA's members and other POTWs throughout the Region. We believe that the Revised Proposed Order disregards aspects of the permitting process established by statute, the State Water Board itself, and courts to ensure permit requirements protect beneficial uses while being reasonable for POTWS and ratepayers to implement.

This process includes, among other things, the consideration of various factors (e.g., economics) that must be accounted for under the Water Code when establishing certain permit requirements. The process also includes demonstrating *in the permit* how its requirements reflect consideration of these factors and are a direct product of the evidence in the administrative record. In addition, the Revised Proposed Order seemingly creates a new type of effluent limitation not authorized by the framework for establishing effluent limitations. As a result, the Revised Proposed Order would open the door to a new, highly subjective and legally unsupportable approach to permitting. Such an approach creates substantial risk that POTWs and their ratepayers will have to expend significant amounts of scarce resources for no meaningful, or legally required, water quality benefit.

For these reasons described in more detail below, we respectfully request that the State Water Board modify the Revised Proposed Order in a manner consistent with this letter. This includes remanding the WDRs to the Central Valley Regional Water Quality Control Board (Central Valley Water Board) to: (1) modify the WDR requirements for tertiary filtration and disinfection and re-establish disinfection requirements based on 23 most probable number per 100 milliliter (23 MPN/100 mL) total coliform; and (2) modify the effluent limitation for nitrate such that it is calculated based on the maximum contaminant level (MCL) and consideration of the mixing zone that the WDRs and Revised Draft Order recognize as applicable for meeting human health criteria. In the alternative, CVCWA asks that the State Water Board amend the WDRs to accomplish the same. In addition, we note that we continue to have significant concerns with proposed provisions that were not modified consistent with our June 15, 2012 comments on the May Proposed Order. However, in accordance with the public notice on the Revised Proposed Order, the comments below address only the revisions made since the release of the May Proposed Order.

**A. New Findings Regarding Tertiary Filtration/Disinfection Are Inconsistent with the Evidence in the Record and Water Code and Otherwise Improper**

The Revised Proposed Order would uphold tertiary filtration/disinfection requirements in the WDRs and the related final effluent limitation for total coliform organisms of 2.2 MPN/100 mL.<sup>2</sup> The Revised Proposed Order contains findings or statements not included in the May Proposed Order that purportedly justify these requirements. However, the new findings are not

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<sup>2</sup> Revised Proposed Order at p. 4. Note that references to page numbers to the "Revised Proposed Order" in this comment letter correspond to the underline/strikeout version released on October 29, 2012.

grounded in law or fact and do not represent a proper evaluation of whether the Central Valley Water Board complied with Water Code sections 13241 and 13263(a).

**1. The New Proposed Provisions Are Not Proper Findings or Reflective of the Evidence That Was Before the Central Valley Water Board**

When adopting permit requirements, the water boards must “set forth findings to bridge the analytic gap between the raw evidence and the ultimate decision or order.”<sup>3</sup> This serves to “conduce the administrative body to draw legally relevant sub-conclusions supportive of its ultimate decision” and “facilitate orderly analysis and minimize the likelihood that the agency will randomly leap from evidence to conclusions.”<sup>4</sup> Clear articulation of “the relationships between evidence and findings and between findings and ultimate action” discloses “the analytic route the administrative agency traveled from evidence to action.”<sup>5</sup> The Legislature “contemplated that the agency would reveal this route” in the findings.<sup>6</sup> There must be evidence in the record that support the findings.<sup>7</sup>

The tertiary filtration/disinfection and total coliform organisms requirements in the WDRs are not supported by findings that meet this standard, nor are the requirements backed by the evidence in the record. The Revised Proposed Order would uphold these requirements with *new* findings that are similarly inappropriate. Examples of such findings are as follows:

- The Revised Proposed Order would require tertiary filtration/disinfection even though dilution is greater than 20:1 and 23 MPN/100 mL would apply under dilution-based guidelines of the California Department of Public Health (DPH).<sup>8</sup> The Revised Proposed Order implies that 20:1 dilution must exist at all times and at all locations in the water column even though such a standard is inconsistent with DPH guidelines and unsupported by evidence in the record regarding the circumstances of the discharge, environmental conditions, and protecting beneficial uses.<sup>9</sup>

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<sup>3</sup> *Topanga Assn. for a Scenic Community v. County of Los Angeles* (1974) 11 Cal.3d 506, 515.

<sup>4</sup> *Id.* at 516.

<sup>5</sup> *Id.* at 515.

<sup>6</sup> *Ibid.*

<sup>7</sup> *Id.* at 514-515.

<sup>8</sup> Revised Proposed Order at p. 6.

<sup>9</sup> See *id.* at pp. 6-8.

- Further, the Revised Proposed Order would uphold use of a threshold for risk of infection of 1 in 10,000 as an acceptable risk from exposure to treated effluents.<sup>10</sup> The Revised Proposed Order would uphold this threshold *while finding* that the background risk in the receiving water upstream of the discharge is much higher than this threshold and without any basis to conclude that the SRWTP results in any cognizable increase in risk.<sup>11</sup>
- The Revised Proposed Order offers an approach to quantitative health risk assessment that is not consistent with accepted methodologies.<sup>12</sup> The Revised Proposed Order does not explain itself or disclose the information or analysis relied upon. Rather, the proposed provisions appear to layer multiple and compounding worst-case assumptions upon one another and assume they co-occur as a norm. It is not clear whether any of them even occur at all.
- The Revised Proposed Order speculates on the efficacy of the District's chlorine disinfection system because it is not "conventional."<sup>13</sup> However, the proposed provisions do not consider the system's actual performance.

CVCWA urges the State Water Board to reject the new findings related to tertiary filtration/disinfection and effluent limitation for total coliform organisms and revise the Revised Proposed Order accordingly.

## **2. The Revised Proposed Order Incorrectly Concludes That Findings Were Not Required for the Water Code Section 13241 Factors**

Under the Water Code, the Central Valley Water Board must consider certain factors when adopting permit conditions that are more stringent than necessary to comply with a water quality objective.<sup>14</sup> Such factors include, but are not limited to, "economic considerations."<sup>15</sup> Unlike the WDRs and May Proposed Order, the Revised Proposed Order acknowledges that the Basin Plan specifies a numeric water quality objective for fecal coliform.<sup>16</sup> This objective is for the protection of contact recreation (REC-1) and states:

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<sup>10</sup> Revised Proposed Order at pp. 8-9.

<sup>11</sup> *Id.* at p. 9.

<sup>12</sup> See Revised Proposed Order at pp. 9-13.

<sup>13</sup> Revised Proposed Order at p. 12.

<sup>14</sup> Wat. Code, §§ 13263(a), 13241.

<sup>15</sup> Wat. Code, § 13241(d).

<sup>16</sup> Revised Proposed Order at p. 15.

In waters designated for contact recreation (REC-1), the fecal coliform concentration based on a minimum of not less than five samples for any 30-day period shall not exceed a geometric mean of 200/100 ml, nor shall more than ten percent of the total number of samples taken during any 30-day period exceed 400/100 ml.<sup>17</sup>

The effluent limitation for total coliform organisms and other provisions in the WDRs regarding tertiary filtration are more stringent than necessary to implement this objective. As a result, the Central Valley Water Board must consider the Water Code section 13241 factors.<sup>18</sup> The Revised Proposed Order acknowledges as much, stating: "The limits in the Permit are more stringent than the Basin Plan's existing numeric objective for REC-1 beneficial use. Therefore, the Central Valley Water Board was under an obligation to consider the 13241 factors."<sup>19</sup>

However, the Revised Proposed Order fails to evaluate whether the Central Valley Water Board actually complied with its duty to consider the factors.<sup>20</sup> Rather, the Revised Proposed Order incorrectly suggests that specific findings on each of the Water Code section 13241 factors is not necessary, that only "some evidence" of consideration of the factors is required, and that a vague mention of "various documents and studies in the Central Valley Water Board's administrative record" is a sufficient finding of evidence supporting consideration of the factors.<sup>21</sup> This approach severely undermines a key aspect of the permitting process required by state law and is inconsistent with longstanding State Water Board precedent and guidance. In one such precedential decision, the State Water Board stated:

[W]hen a Regional Board includes permit limits more stringent than limits based on an applicable numeric objective in the relevant basin plan, the Regional Board must address the section 13241 factors in the permit findings. These factors include, among others,

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<sup>17</sup> Basin Plan at p. III-3.00.

<sup>18</sup> See e.g., *In the Matter of the Petition of City and County of San Francisco, et al.*, State Water Board Order No. WQ 95-4 (Sept. 21, 1995), p. 13; see also *In the Matter of the Petitions of Napa Sanitation District, et al.*, State Water Board Order No. WQ 2001-16 (Dec. 5, 2001), p. 24; *In the Matter of the Petition of the Cities of Palo Alto, Sunnyvale and San Jose*, State Water Board Order No. WQ 94-8 (Sept. 22, 1994), p. 9.

<sup>19</sup> Revised Proposed Order at p. 15, footnote omitted.

<sup>20</sup> See Revised Proposed Order at pp. 14-16.

<sup>21</sup> *Id.* at p. 16.

economic considerations, environmental characteristics of the hydrographic unit under consideration, and the need for recycled water.<sup>22</sup>

Similarly, the State Water Board's Office of Chief Counsel has advised that the water boards must consider and balance the Water Code section 13241 factors when developing objectives on a permit-by-permit basis.<sup>23</sup> This includes accounting for economic considerations, such as "the cost of providing treatment facilities and the economic value of development."<sup>24</sup> No prior decision or guidance suggests that an analysis of only some factors, or evidence of any consideration of the factors regardless of the level of effort or number of factors involved, is legally sufficient.

For these reasons, the Central Valley Water Board has a duty to make findings related to *each* of the factors, including economics, which reveal the analytic route from the evidence in the record to the final permit conditions. Further, the State Water Board should evaluate whether the Central Valley Water Board fully complied with this duty and whether the findings have an evidentiary basis. CVCWA respectfully requests that you revise the Revised Proposed Order accordingly, finding that the Central Valley Water Board failed to comply with the Water Code respecting tertiary treatment requirements.

**B. The Newly Proposed Provisions Regarding Nitrate Are Inconsistent with Federal Law and State Procedural Requirements**

The Revised Proposed Order rejects the Central Valley Water Board's rationale for the SRWTP's stringent new effluent limitation for nitrate of 10 milligrams per liter (mg/l) as nitrogen, but upholds the limitation based on discussion newly developed since the May Proposed Order.<sup>25</sup> These findings and conclusion run afoul of applicable law for establishing effluent limitations. In addition, they are unsupported by the evidence.

Under the Clean Water Act and its implementing regulations, permits for POTWs may contain one of two types of effluent limitations.<sup>26</sup> They consist of technology-based effluent

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<sup>22</sup> *In the Matter of the Review on Own Motion of Waste Discharge Requirements Order No. 5-01-044 for Vacaville's Easterly Wastewater Treatment Plant*, State Water Board Order WQO 2002-0015 (Oct. 3, 2002), p. 35, footnote omitted.

<sup>23</sup> Memorandum to Regional Water Board Executive Officers, from W. Attwater, Chief Counsel of the State Water Board, re: Guidance on Consideration of Economics in the Adoption of Water Quality Objectives (Jan. 4, 1994) at p. 3.

<sup>24</sup> *Ibid.*

<sup>25</sup> Revised Proposed Order at pp. 28-42.

<sup>26</sup> 33 U.S.C. §1311(b).

limitations based on secondary treatment standards and water quality-based effluent limitations (WQBELs) established to implement any applicable water quality standard.<sup>27</sup> WQBELs must be established when a pollutant is discharged, or may be discharged, at a level that will cause, have reasonable potential to cause, or contribute to an excursion above any numeric or narrative water quality standard.<sup>28</sup> There are no secondary treatment standards for total nitrogen or nitrate. The Revised Proposed Order concludes that a WQBEL is necessary for the SRWTP, as “the District’s discharge is contributing to an exceedance of the downstream biostimulatory water quality objectives.”<sup>29</sup> The draft goes on to state that the nitrate effluent limitation of 10 mg/L as nitrogen “provides a technologically attainable performance-based level for protection of aquatic life[.]”<sup>30</sup>

These statements are greatly concerning and highly inappropriate for many reasons. The WDRs make no findings regarding aquatic life impacts and related beneficial uses, nor do the WDRs suggest that there would be an exceedance of the biostimulatory water quality objectives. To CVCWA’s knowledge, the evidence in the record does not support that the SRWTP has reasonable potential to cause or contribute to exceedance of such objectives. Moreover, the Revised Proposed Order does not “bridge the analytic gap” between the evidence in the record (including the WDRs) and conclusion that the nitrate effluent limitation is appropriate due to an exceedance of the objectives.<sup>31</sup>

In addition, the Revised Proposed Order does not explain how it came to the conclusion that the SRWTP discharge would cause an exceedance of the biostimulatory water quality objectives. In accordance with federal regulations, the Central Valley Water Board generally determines reasonable potential and WQBELs for narrative water quality objectives, such as those at issue, using the stepwise approach in the state’s *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries in California* (SIP) or the U.S. Environmental Protection Agency’s *Technical Support Document for Water Quality-based Toxics Control* (TSD).<sup>32</sup> Here, the Central Valley Water Board used the SIP, and the primary MCL as the applicable water quality objective for nitrate, to determine reasonable potential.<sup>33</sup> The Revised

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<sup>27</sup> 33 U.S.C., § 1311(b)(1).

<sup>28</sup> 40 C.F.R., § 122.44(d)(1)(i).

<sup>29</sup> Revised Proposed Order at p. 31.

<sup>30</sup> *Id.* at p. 40.

<sup>31</sup> See *Topanga, supra*, 11 Cal.3d at 515.

<sup>32</sup> See 40 C.F.R., § 122.44(d)(1); *In the Matter of Petition of Yuba City*, State Water Board Order WQO 2004-0013 (July 22, 2004) at p. 6.

<sup>33</sup> WDRs at p. F-45.

Proposed Order does not suggest that the SIP or TSD are inappropriate for determining reasonable potential in this case. Nor does the Revised Proposed Order identify or walk through the SIP's or TSD's procedures or actually find that reasonable potential exists. Further, the evidence does not support the claim that the SRWTP is contributing to an exceedance of the biostimulatory water quality objectives.

Further, the Revised Proposed Order's conclusion that the nitrate effluent limitation is appropriate in part because it "provides a technologically attainable performance-based level for protection of aquatic life" is not grounded in any applicable legal principle.<sup>34</sup> As mentioned, there are no technology-based standards, and therefore no technology-based effluent limitations, for nitrate. Further, the federal statutory and regulatory scheme for establishing such effluent limitations does provide for "preventative action" or "precautionary" effluent limitations.<sup>35</sup>

For the above-described reasons, federal and state law does not authorize the establishment of the nitrate effluent limitation in the WDRs as provided in the Revised Proposed Order. The State Water Board should revise the Revised Proposed Order accordingly.

CVCWA appreciates the State Water Board's consideration of these comments on the Revised Proposed Order. Please contact me at (530) 268-1338 or [eofficer@cvcwa.org](mailto:eofficer@cvcwa.org) if I can be of further assistance.

Sincerely,



Debbie Webster, Executive Officer  
Central Valley Clean Water Association

c: Pamela Creedon, Central Valley RWQCB (by electronic mail only)

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<sup>34</sup> Revised Proposed Order at p. 40.

<sup>35</sup> Revised Proposed Order at p. 37.