



CVCWA

Central Valley Clean Water Association

Representing Over Fifty Wastewater Agencies

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February 21, 2014

Via Electronically Only

Ms. Aide Ortiz
Water Resource Control Engineer
Regional Water Quality Control Board,
Central Valley Region
1685 E Street
Fresno, CA 93702
aortiz@waterboards.ca.gov

**RE: Comments on the Tentative Waste Discharge Requirements Order R5-2014-XXXX,
Mariposa Public Utility District, Mariposa Wastewater Treatment Facility,
Mariposa County**

Dear Ms. Ortiz:

The Central Valley Clean Water Association (CVCWA) appreciates the opportunity to submit comments on the tentative Waste Discharge Requirements for the Mariposa Wastewater 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 spirit, we provide the following comments regarding the inclusion of the collection system as facilities subject to the permit, certain statements with respect to nitrates, the use of the narrative toxicity objective for finding reasonable potential analysis for pathogens, and the inclusion and or timing of requirements where significant changes that are planned treatment facility provide little value, but significant cost to this small community facing significant permit requirements.

I. Collection System

The Tentative Order states that the Mariposa Public Utility District's (District) "collection system is part of the system that is subject to this Order," and as such, the District "must operate and maintain its collection system . . . and mitigate any discharge from the collection system in violation of this Order."¹ However, the State Water Resources Control Board (State Water Board) regulates sanitary sewer systems greater than one mile in length that collect and convey untreated or partially treated wastewater to treatment facilities under the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, Order No. 2006-0003-DWQ (State Water Board Order No. 2006-0003-DWQ). State Water Board Order No. 2006-0003-DWQ requires enrollees, which includes municipalities that operate sanitary sewer systems, to develop sewer system management plans and other measures to prevent sanitary sewer overflows.²

Sanitary sewer systems pose unique challenges for water quality regulation, and the State Water Board has adequately addressed these challenges in State Water Board Order No. 2006-0003-DWQ with which the District must comply. The Central Valley Regional Water Quality Control Board (Regional Water Board) does not need to regulate collection systems further in the District's NPDES permit. To the extent that federal regulations require publicly-owned treatment works to properly operate and maintain all facilities and systems of collection, such requirements are adequately contained in the Standard Provisions.³ With respect to other provisions, such as Discharge Prohibitions and specific collection system requirements in the Tentative Order, the inclusion of collection systems in the manner as provided in the Tentative Order may subject the City to duplicative liability for sanitary sewer overflows that may reach waters of the United States. CVCWA understands that such discharges are not authorized and constitute a violation of the Clean Water Act. However, by also having collection systems subject to the Discharge Prohibitions in the Tentative Order, such discharges become a permit violation as well as an unauthorized discharge.

CVCWA asks that the Regional Water Board delete the permit provision on page 18 of the Tentative Order, stating that the collection system is subject to the Order. Instead, CVCWA recommends adopting the following language, consistent with the waste discharge requirements recently adopted for the City of Lincoln Wastewater Treatment and Reclamation Facility and others:

- b. Collection System. On 2 May 2006, the State Water Board adopted State Water Board Order No. 2006-0003-DWQ, Statewide General WDRs for Sanitary Sewer Systems. The Discharger shall be subject to the requirements

¹ Tentative Order at p. 18.

² State Water Board Order No. 2006-0003-DWQ at pp. 2-3, 10-15.

³ See Tentative Order, Attachment D, Standard Provision I.D at p. D-1 ["The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this Order."].

of Order No. 2006-0003-DWQ and any future revisions thereto. Order No. 2006-0003-DWQ requires that all public agencies that currently own or operate sanitary sewer systems apply for coverage under the general WDRs. The Discharger has applied for and has been approved for coverage under Order No. 2006-0003-DWQ for operation of its wastewater collection system. The Discharger's collection system is part of the system that is subject to this Order. As such, the Discharger must properly operate and maintain its collection system (40 C.F.R. § 122.41(e)). The Discharger must report any non-compliance (40 C.F.R. § 122.41(l)(6) and (7)) and mitigate any discharge from the collection system in violation of this Order (40 C.F.R. § 122.41(d)).

In addition, CVCWA recommends revising language in the standard Discharge Prohibition to protect municipalities from allegations that sanitary sewer overflows are also violations of NPDES permits. Accordingly, Discharge Prohibition III.A on page 4 of the Tentative Order should be revised as follows:

- A. Discharge of wastewater from the Facility, as the Facility is specifically described in the Fact Sheet in section II.B.1, at a location or in a manner different from that described in this Order is prohibited.

It is important to note that this proposed language does not mean that discharges from the collection system are allowed, only that this discharge prohibition is specific to wastewater from the Facility as this Tentative Order only authorizes discharges from the wastewater facility. The Clean Water Act and the State Water Board's General Order both prohibit discharges from the sanitary sewer collection system. Thus, it is not necessary to include such discharges in this prohibition. To explain further the distinction intended by using the term "Facility" in the Discharge Prohibition, the following discussion should be added to section IV.A.1 of the Fact Sheet at page F-11:

1. Prohibition III.A. (No discharge or application of waste other than that described in this Order). This prohibition is based on Water Code section 13260 that requires filing of a ROWD before discharges can occur. This prohibition applies specifically to discharges from the wastewater treatment facility and does not apply to the collection system. The collection system is governed by State Water Board Order No. 2006-0003-DWQ and any future revisions thereto. The Discharger submitted a ROWD for the discharges described in this Order; therefore, discharges not described in this Order are prohibited.

This is a reasonable approach that avoids duplicative regulation and unintended lawsuits, and CVCWA respectfully requests that the Regional Water Board revise the Tentative Order accordingly.

II. Statements Regarding Nitrate and Nitrite

The Fact Sheet for the Tentative Order states that “recent toxicity studies have indicated a possibility that nitrate is toxic to aquatic organisms.”⁴ However, the Tentative Order and Fact Sheet provide no further information to support such a statement. To the extent that the sum of nitrate and nitrate water quality-based effluent limitation (WQBEL) (as nitrogen) is being adopted to protect the municipal beneficial use, it is inappropriate to include unsupported statements with respect to toxicity to aquatic organisms. Thus, such statements should be removed.

III. Use of Narrative Toxicity Objective for Pathogens

The Fact Sheet for the Tentative Order includes the conclusion that the possibility of inadequate disinfection creates the potential for pathogens to be discharged, and thus, the discharge has reasonable potential to cause or contribute to an exceedance of the narrative toxicity objective.⁵ CVCWA has previously conveyed its concerns to the Regional Water Board regarding this application of the narrative toxicity objective and the regulation of pathogens as a toxic substance, and will repeat them here.

The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins (Basin Plan) provides the following water quality objective for toxicity: “[a]ll waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life.”⁶ By its terms, the toxicity objective relates to “toxic substances.” Further, by definition, “toxicity” means “any toxic (adverse) effect that a *chemical or physical* agent might produce within a living organism.”⁷ Biological organisms such as pathogens are not chemical or physical agents. Biological organisms invade and multiply within hosts, producing effects by biological activity, such as when a virus damages cell membranes and causes cell death. Biological organisms may excrete chemicals that cause toxicity but the organisms themselves are not a “toxic substance.” For example, tetanus poisoning is caused by a neurotoxin excreted by the bacteria *Clostridium tentani*.⁸ In that case, the chemical produced by the bacteria is the toxicant, not the bacteria itself.

Further, regulatory agencies do not consider pathogens to be toxic substances. The California Department of Toxic Substances Control (DTSC) has the mission of protecting California’s people and environment from the harmful effects of toxic substances by collecting information on hazardous wastes, restoring contaminated sites, enforcing hazardous waste laws,

⁴ Tentative Order at p. F-31.

⁵ Tentative Order at p. F-34.

⁶ Basin Plan at p. III-8.01.

⁷ Williams et al., *Principles of Toxicology: Environmental and Industrial Applications* (2d ed. 2000) p. 3, emphasis added.

⁸ *Id.* at pp. 415-416.

and encouraging the manufacture of chemically safe products.⁹ DTSC's 2014-2018 Strategic Plan does not mention the regulation of bacteria or pathogens.¹⁰ Similarly, the United States Environmental Protection Agency's (USEPA) Technical Support Document for Water Quality-Based Toxics Controls (TSD) specifies a chemical-specific approach and a whole effluent approach using acute and chronic toxicity testing for protection of aquatic life. In the TSD, pathogens are not considered as toxicants. Pathogens are not included in USEPA's list of toxic pollutants designated under section 307(a)(1) of the Clean Water Act.¹¹ Similarly, pathogens are not included in USEPA's National Toxics Rule¹² or the California Toxics Rule.¹³

Moreover, merely stating that there is reasonable potential does not end the process for the establishment of WQBELs. Under title 40 of the Code of Federal Regulations, section 122.44(d)(1)(vi) requires that when a permitting authority has determined that there is reasonable potential for violation of a narrative water quality objective, effluent limits must be established using one or more of the options set forth in the Code of Federal Regulations. Specifically, the options available for establishing effluent limitations include: (1) using a calculated numeric water quality criterion for which the permitting authority has demonstrated will attain and maintain applicable narrative water quality criteria and will protect the beneficial use; (2) establishing effluent limits on a case-by-case basis, using USEPA's water quality criteria published under section 304(a) of the Clean Water Act; or (3) establishing effluent limitations on an indicator parameter for the pollutant of concern provided certain steps are taken. (40 C.F.R. § 122.44(d)(1)(vi).) The Fact Sheet here provides no explanation or information to show how or why the total coliform limitations included in the permit are protective of the narrative toxicity objective.

To the extent that the Regional Water Board may argue that the total coliform limitations fall within option (3), the Regional Water Board is required to take all of the following steps: identify the pollutant that is intended to be controlled; set forth the basis for the limit in the Fact Sheet and how it will be sufficient to support the water quality standard (i.e., the narrative toxicity standard); include necessary monitoring; and include a reopener provision should the indicator parameter no longer maintain the applicable standard. As stated earlier, the Fact Sheet provides no explanation as to why or how the total coliform standard is protective of the narrative toxicity objective, thus the permit has not meet the requirements of 40 Code of Federal Regulations section 122.44(d)(1)(vi).

⁹ See generally Health & Saf. Code, §§ 25100-25258.2.

¹⁰ DTSC's 2014-2018 Strategic Plan is available here: http://www.dtsc.ca.gov/InformationResources/upload/Strategic_Plan_2013_Web.pdf.

¹¹ See 40 C.F.R. § 401.15.

¹² See 40 C.F.R. § 131.36.

¹³ See 40 C.F.R. § 131.38

Regardless, CVCWA maintains its position that the regulation of pathogens is not related to toxicity. To determine whether a WQBEL should be imposed for pathogens, the Regional Water Board should evaluate whether the discharge has the reasonable potential to cause or contribute to an exceedance of the bacteria objective in the Basin Plan.¹⁴ If the Regional Water Board determines that a more stringent objective should be applied (and the Regional Water Board has on many occasions), then the Regional Water Board should adopt limits based on a more stringent objective in compliance with Water Code section 13241 and applicable State Water Board Orders.¹⁵

Accordingly, CVCWA requests that the following language from page F-34 of the Fact Sheet be deleted: "Although the Discharger provides disinfection, inadequate or incomplete disinfection creates the potential for pathogens to be discharged and provides the basis for the discharge to have a reasonable potential to cause or contribute to an exceedance of the Basin Plan's narrative toxicity objective."

IV. Timing and Requirements for Studies

The District is being required by the Regional Water Board in the proposed permit to make significant improvements to its treatment process to meet new, more stringent effluent limits and requirements including upgrading to tertiary treatment, nitrogen removal and ultraviolet disinfection. These upgrades will come at a significant cost to this small community and will change the effluent characteristics. CVCWA request that the Regional Water Board allow the District to delay monitoring of priority pollutants and other constituents of concern following completion of the plant upgrade, thereby providing greater value of the results for the next permit term. CVCWA request that the Regional Water Board also delay other monitoring requirements that are impacted by the plant upgrade (such as continuous monitoring) as requested by the District.

Additionally, the permit contains an effluent limit for EC (although there is no reasonable potential) and requires the District to complete a salinity study evaluation and minimization study within the first nine months that "identifies and quantifies chemical additives necessary for the proper operation and treatment of the Facility." CVCWA questions the value of this study at this time for several reasons:

- (1) The District's average EC in its effluent and discharge volume is low. It is unlikely that changes in chemical addition will make a significant change to the level of EC in the discharge;

¹⁴ Basin Plan at p. III-3.00.

¹⁵ See State Water Board Order WQ 95-4, In the Matter of the Petition of City and County of San Francisco, et al. (1994) p. 13.

(2) Chemicals are added to provide the required treatment levels and must be adjusted based on plant & effluent conditions. Overuse of a chemical will increase cost and may result in problems elsewhere in the treatment system. Therefore, the District is motivated, without the need of a study, to control the levels of chemical addition at the treatment plant.

(3) The treatment plant is undergoing changes and results from the study will have limited value for a short period of time; and

(4) Provision IV.A.2.I. of the tentative permit requires that these types of studies be “prepared by or under the direction of persons registered to practice in California pursuant to California Business and Professions Code, sections 6735, 7835, and 7835.1.” As such, these studies are costly to small communities and should only be required were there is evidence that they are necessary.

CVCWA request that the requirement for the study be removed during this permit cycle.

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 eofficer@cvcwa.org.

Sincerely,



Debbie Webster
Executive Officer

cc (via email):

Pamela Creedon, Central Valley Regional Water Quality Control Board
Mark Rowney, Mariposa PUD