



CVCWA

Central Valley Clean Water Association

Representing Over Fifty Wastewater Agencies

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Via Electronically Only

Mr. Jeremy Pagan
Water Resource Control Engineer
Regional Water Quality Control Board,
Central Valley Region
364 Knollcrest Drive, Suite 205
Redding, CA 96002
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RE: Comments on the Tentative Waste Discharge Requirements Order R5-2014-XXXX, City of Alturas, Alturas Wastewater Treatment Plant, Modoc County

Dear Mr. Pagan:

The Central Valley Clean Water Association (CVCWA) appreciates the opportunity to submit comments on the tentative Waste Discharge Requirements for the Alturas Wastewater Treatment Plant (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 definition of Reporting Level, requirements in the Monitoring and Reporting Program (MRP), the inclusion of the City of Alturas's (City) collection system as facilities subject to the permit, the reasonable potential analysis for pathogens, and the ammonia requirements.

I. Definition of Reporting Level

The Tentative Order includes a definition for Reporting Level (RL) that may cause confusion with respect to identifying appropriate RLs for reporting data under the MRP. The first two sentences of the definition accurately represent the straightforward procedure for determining Minimum Levels (ML) consistent with the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (SIP). The latter half of the definition, however, lacks clarity and direction. The permittee is left to choose an RL based on unnamed factors and the “proper” application of analytical procedures. To eliminate this confusion and make the Tentative Order consistent with the SIP, CVCWA requests that the latter sentences be deleted and that the definition for RL in Attachment A be revised as follows:

Reporting Level (RL)

RL is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination ~~from the MLs included in this Order.~~ The MLs included in this Order for priority pollutants correspond to approved analytical methods for reporting a sample result that are selected by the Central Valley Water Board either from Appendix 4 of the SIP in accordance with section 2.4.2 of the SIP, or established in accordance with section 2.4.3 of the SIP. ~~The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied in the computation of the RL.~~

II. MRP Provisions

The MRP attached to the Tentative Order includes provisions that are inconsistent with the SIP. For instance, in footnote 8 of Table E-3, the MRP states that if the lowest ML published in Appendix 4 of the SIP is not below the effluent limitation, “the detection limit shall be the lowest ML.”¹ This provision is contrary to the language in the SIP. Rather under section 2.4.2 of the SIP, if no ML value is below the effluent limitation, the SIP provides that the RL shall be the lowest ML.² This distinction between the RL and a method detection limit (MDL) is essential for reporting data under the protocols in the SIP. Samples that are greater than or equal to the RL

¹ Tentative Order at p. E-6.

² SIP at p. 23.

must be reported as measured whereas samples that are less than a laboratory's MDL must be reported as not detected.³

Identification of the appropriate RL is also relevant to compliance determinations. Under section 2.4.5 of the SIP, concentrations of a priority pollutant must be greater than the effluent limitation and greater than or equal to the RL before a discharger is determined to be out of compliance.⁴ Substituting "detection limit" for "reporting limit" frustrates the carefully prescribed procedures for reporting data and determining compliance under the SIP.

Further, the MRP in the Tentative Order assumes that the Regional Board may set RLs less than the MLs listed in Appendix 4 of the SIP under any condition. However, section 2.4.3 of the SIP provides that the Regional Board may deviate from the MLs listed in Appendix 4 only under certain circumstances, including when: (1) the constituent is not included in Appendix 4; (2) the permittee agrees to use a test method that is more sensitive than those specified in the federal regulations; (3) the permittee agrees to use an RL that is lower than the MLs in Appendix 4; (4) the permittee demonstrates that the calibration standard matrix is sufficiently different from that used to establish the ML in Appendix 4 and proposes an appropriate ML for their matrix; and (5) the permittee uses a method whose quantification practices are not consistent with the definition of an ML.⁵ The language in the Tentative Order should be revised to make clear that an RL may be established at a value less than the MLs listed in Appendix 4 of the SIP only if the value is determined in accordance with section 2.4.3 of the SIP.

To ensure that the MRP in the Tentative Order is consistent with the monitoring and reporting requirements in the SIP, and to eliminate any confusion regarding the SIP's application, CVCWA requests that footnote 8 to Table E-3⁶ be revised as follows:

For priority pollutant constituents with effluent limitations, the reporting level shall be consistent with Sections 2.4.2 and 2.4.3 of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays and Estuaries of California. ~~detection limits shall be below the effluent limitations. If the lowest minimum level (ML) published in Appendix 4 of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Plan or SIP) is not below the effluent limitation, the detection limit shall be the lowest ML. For priority pollutant constituents without effluent limitations, the detection limits shall be equal to or less than the~~

³ *Id.* at p. 26.

⁴ *Id.*

⁵ *Id.* at p. 24.

⁶ The requested revisions to both footnotes are consistent with MRPs in waste discharge requirements recently adopted by the Regional Board, including Order R5-2013-0094 (City of Yuba City) and Order R5-2013-0157 (Ironhouse Sanitary District).

~~lowest ML published in Appendix 4 of the SIP.~~ Sampling and analysis of bis (2-ethylhexyl) phthalate shall be conducted using ultra-clean techniques that eliminate the possibility of sample contamination.

For the same reasons, footnote 9 to Table E-5 in the MRP should be similarly revised:

~~Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136. ; for priority pollutants the methods must meet the lowest MLs specified in Appendix 4 of the SIP, where no methods are specified for a given pollutant, by methods approved by this Central Valley Water Board or the State Water Board.~~

III. Inconsistent Monitoring Frequency for Priority Pollutants

The MRP includes inconsistent direction on priority pollutant monitoring for the receiving water. According to Attachment E, section IX.C.1. and Table E-7, the City must conduct semiannual priority pollutant monitoring of the effluent and receiving water from monitoring locations EFF-001, RSW-001N, and RSW-001S during the third year of the permit term.⁷ According to Attachment E, section VIII.A.1 and Table E-5, priority pollutant sampling must also be conducted during the first and second quarters of the fourth year of the permit term.⁸ This latter provision is unnecessary given the semiannual monitoring that the MRP requires under the Effluent and Receiving Water Characterization Study. Moreover, the “Note” in section IX.C.1⁹ does not alleviate the burden of additional monitoring or clarify any confusion.

CVCWA recommends revising footnote 8 to Table E-5 as follows to refer directly to the requirements in the Effluent and Receiving Water Characterization Study, which are sufficient for a discharger of this size:

~~⁸ Priority pollutants shall be sampled twice during the 1st and 2nd quarters (once per quarter) of the fourth year of the permit term at Monitoring Location RSW-001, concurrently with effluent monitoring for priority pollutants. See monitoring frequency in Effluent and Receiving Water Characterization Study, Attachment E, Section IX.C.1 for more detailed requirements related to performing priority pollutant monitoring.~~

⁷ Tentative Order at p. E-12.

⁸ *Id.* at pp. E-10 to E-11.

⁹ The MRP states “Note: Duplicative monitoring for a priority pollutant is not required. If monitoring and reporting for a priority pollutant listed in Table E-11 is already required in this Order, the Discharger is not required to perform additional, duplicative monitoring and reporting as specified in this section.” (*Id.* at p. E-12.)

IV. Collection System

The Tentative Order states that the City's "collection system is part of the system that is subject to this Order," and as such, the City "must operate and maintain its collection system . . . and mitigate any discharge from the collection system in violation of this Order."¹⁰ However, the State Water Resources Control Board (State 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 Board Order No. 2006-0003-DWQ). State 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.¹¹

Sanitary sewer systems pose unique challenges for water quality regulation, and the State Board has adequately addressed these challenges in State Board Order No. 2006-0003-DWQ with which the City must comply. The Regional Board does not need to regulate collection systems further in the City'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.¹² 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 Board delete the permit provision on page 22 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:

e. 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 of Order

¹⁰ *Id.* at p. 22.

¹¹ State Board Order No. 2006-0003-DWQ at pp. 2-3, 10-15.

¹² 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."].

~~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 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)). See the Order at Standard Provision VI.A.2.c and Attachment D, subsections I.D, V.E, V.H, and I.C.~~

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 8 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, 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 wastewater from the Facility as this tentative order only authorizes discharges from the wastewater facility. The Clean Water Act and the State 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-13:

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 report of waste discharge (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 Board revise the Tentative Order accordingly.

V. Reasonable Potential Analysis for Pathogens

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.¹³ CVCWA has previously conveyed its concerns to the Regional 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.”¹⁴ 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.”¹⁵ 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*.¹⁶ 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, and encouraging the manufacture of chemically safe products.¹⁷ DTSC’s 2014-2018 Strategic Plan does not mention the regulation of bacteria or pathogens.¹⁸ 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

¹³ Tentative Order at p. F-34.

¹⁴ Basin Plan at p. III-8.01.

¹⁵ Williams et al., Principles of Toxicology: Environmental and Industrial Applications (2d ed. 2000) p. 3, emphasis added.

¹⁶ *Id.* at pp. 415-416.

¹⁷ See generally Health & Saf. Code, §§ 25100-25258.2.

¹⁸ DTSC’s 2014-2018 Strategic Plan is available here: http://www.dtsc.ca.gov/InformationResources/upload/Strategic_Plan_2013_Web.pdf.

pollutants designated under section 307(a)(1) of the Clean Water Act.¹⁹ Similarly, pathogens are not included in USEPA's National Toxics Rule²⁰ or the California Toxics Rule.²¹

Put simply, the regulation of pathogens is not related to toxicity. To determine whether a water quality-based effluent limitation should be imposed for pathogens, the Regional 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.²² Or, if the Regional Board determines that a more stringent objective should be applied (and the Regional Board has on many occasions), then the Regional Board should adopt limits based on a more stringent objective in compliance with Water Code section 13241 and applicable State Board Orders.

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."

VI. Ammonia Requirements

The Tentative Order requires the City to prepare a site-specific ammonia criteria study to determine the applicable criteria for analyzing reasonable potential. CVCWA supports this approach and appreciates the Regional Board's recognition of the importance of seasonal and receiving water conditions when regulating ammonia. There are some other references for ammonia, however, that are not consistent with this determination. For instance, on page 19, the Tentative Order requires a pollution prevention plan for ammonia in addition to the pollution prevention plan for aluminum and total dissolved solids. The title and text of this section are not consistent, suggesting that there may be an error. Additionally, section VII.B.7 of the Fact Sheet contains further inconsistencies regarding the references to aluminum and ammonia. In general, the Regional Board does not require a pollution prevention plan for constituents that do not have an effluent limitation.²³ CVCWA requests that the sections on pollution prevention plans be reviewed to eliminate any superfluous or unintended references to ammonia (or other constituents).

¹⁹ See 40 C.F.R. § 401.15.

²⁰ See 40 C.F.R. § 131.36.

²¹ See 40 C.F.R. § 131.38.

²² Basin Plan at p. III-3.00. If the Regional Board chooses to implement a site-specific objective in the permit that is more stringent than the objective in the Basin Plan, then it must consider the factors in Water Code section 13241. (State Board Order WQ 95-4, In the Matter of the Petition of City and County of San Francisco, et al. (1994) p. 13.)

²³ See Wat. Code, § 13263.3(d)(1).

Likewise, there are some other apparently inadvertent references to ammonia in the Tentative Order. On page 22, ammonia is included in the list of constituents subject to the compliance schedule to meet final effluent limitations. There are additional references to final effluent limitations for ammonia on page 6 of the permit and pages F-54 and F-57 of the Fact Sheet. The Tentative Order, however, does not include final effluent limitations for ammonia as the Regional Board appropriately determined there was insufficient information to conduct the reasonable potential analysis.²⁴ CVCWA requests that the references to ammonia limits and compliance schedules on these pages be deleted.

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

²⁴ See Tentative Order at pp. 19, F-29, F-65.