

**Regional Water Quality Control Board
Central Valley Region
Board Meeting – 27/28 March 2014**

**Responses to Written Comments for the
Mariposa Public Utility District
Wastewater Treatment Facility
Mariposa County
Tentative Waste Discharge Requirements/NPDES Permit
and
Tentative Time Schedule Order**

At a public hearing scheduled for 27/28 March 2014, the Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) will consider adoption of Waste Discharge Requirements (WDRs) (NPDES No. CA0079430) and a Time Schedule Order (TSO) for the Mariposa Public Utility District, Wastewater Treatment Facility. The final meeting agenda will be available at:

http://www.waterboards.ca.gov/centralvalley/board_info/meetings/#2014 at least ten days before the meeting. The agenda will provide the date the proposed WDRs/NPDES permit and TSO will be heard, indicate the anticipated order of agenda items, and may include staff revisions to the proposed WDRs/NPDES permit and TSO.

This document contains responses to written comments received from interested parties regarding the tentative WDRs/NPDES permit and TSO circulated on 21 January 2014. Written comments from interested parties were required by public notice to be submitted to the Central Valley Water Board by 5:00 pm on 21 February 2014 to receive full consideration. Written comments were received by 21 February 2014 from:

- Mariposa Public Utility District (Discharger), 21 February 2014
- Central Valley Clean Water Association (CVCWA), 21 February 2014
- Friends of Mariposa Creek (FoMP), 21 February 2014

Written comments from the above interested parties are summarized below, followed by the response of the Central Valley Water Board staff. Based on the comments, changes were made to the proposed WDRs/NPDES permit. Central Valley Water Board staff also made changes to the proposed WDRs/NPDES permit and proposed TSO to correct typographical errors and to improve clarity.

DISCHARGER COMMENTS

DISCHARGER COMMENT 1: The Discharger indicated it only had 35 working days to review the proposed WDRs/NPDES permit and TSO, which includes new monitoring requirements and effluent limitations for several constituents. The Discharger contends that the proposed WDRs/NPDES permit requires its Board of Directors and staff to consider actions that will have long-term significant impacts to the cost and level of service it provides to the public, and requests an additional 60 days to allow for a thorough review of the documents.

RESPONSE: Central Valley Water Board staff does not recommend extending the comment period. In Central Valley Water Board staff's opinion, the new or increased monitoring requirements and new effluent limitations are not significant enough to warrant an extended comment period beyond that required by federal regulations. The proposed WDRs/NPDES permit include a compliance schedule for the Discharger to upgrade its existing Facility to provide tertiary treatment with nitrogen removal. This requirement was carried over from Order R5-2007-0171. Thus, the Discharger has known about the requirement to upgrade the Facility, and the potential increase in costs for providing service to its customers. Additionally, in November 2013, Central Valley Water Board staff transmitted a letter requesting an infeasibility report from the Discharger for proposed new effluent limitations, which were included in the letter. Thus, the Discharger was made aware of potential new effluent limitations well before the preliminary draft WDRs/NPDES permit was transmitted. The effluent limitations included in the letter were ultimately included in the tentative WDRs/NPDES permit, were not changed numerically, and there were no additional new effluent limitations added. Staff believes the Discharger has had more than enough time to analyze proposed new effluent limitations.

DISCHARGER COMMENT 2: The Discharger requested that the new narrative chronic toxicity effluent limitation be removed. The Discharger states that because there is no numeric limitation, the chronic toxicity trigger of >1 TUc may be interpreted as a numeric effluent limitation and subject to mandatory minimum penalties.

RESPONSE: The requested removal of the narrative chronic toxicity effluent limitation was not made. As the Fact Sheet, section IV.C.5.b. states, effluent monitoring data indicate the discharge has reasonable potential to cause or contribute to the Basin Plan's narrative toxicity objective. Both the federal regulations [40 CFR 122.44(d)(1)] and Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP; Section 4) require an effluent limit for pollutants that will cause, have the reasonable potential to cause, or contribute to exceedances of the State's narrative toxicity objective. Inclusion of a narrative toxicity effluent limit in the proposed permit is also consistent with orders adopted by the State Water Resources Control Board. In response to petitions of NPDES permits, the State Water Resources Control Board has adopted orders (Order WQ 2003-0012; Order WQ 2008-0008; Order WQ 2009-0003) stating that, in the absence of an appropriate numeric effluent limitation, permits must contain a narrative effluent limitation for chronic toxicity where reasonable potential exists. Furthermore, the WDRs/NPDES permit at section VI.C.2.a.iii. states that "[t]he monitoring trigger [of >1 TUc] is not an effluent limitation..." Therefore, exceedance of the numeric toxicity monitoring trigger itself does not subject the Discharger to mandatory minimum penalties.

DISCHARGER COMMENT 3: The Discharger requested that the requirement to prepare and submit a Salinity Evaluation and Minimization Plan be removed as the discharge has been consistently less than 600 µmhos/cm even after the Discharger began using chemicals for

treatment of metals. The Discharger also notes that other chemicals, such as chlorine, soda ash, and sulfur dioxide, were in use before the metals treatment process was implemented.

RESPONSE: The requirement to prepare and submit a Salinity Evaluation and Minimization Plan was not removed. However, the language has been updated to clarify the purpose of the Plan. The purpose of the Plan is not just to evaluate the impacts of new chemicals used for treatment at the Facility. The Plan requires the Discharger to identify and address all sources of salinity from the Facility, as well as sources of salinity to the Facility. The Plan ensures the Discharger remains mindful of these sources of salinity and diligent in minimizing the discharge of salinity to Mariposa Creek. Central Valley Water Board staff recognizes that the Discharger is maintaining its effluent below the electrical conductivity effluent limitation. Given concerns for increasing salinity in ground and surface waters in the Central Valley, the Central Valley Water Board has been requiring most dischargers in the Region to submit similar plans as part of a region-wide effort to address salinity problems.

DISCHARGER COMMENT 4: The Discharger requests that the Compliance Determination language at section VII.F.2. be clarified.

RESPONSE: The language in Compliance Determination section VII.F.2. has been updated to provide some clarification. The Discharger should note that a Pollutant Minimization Plan is not required unless and until Central Valley Water Board staff has evidence that a priority pollutant is present in the effluent and either condition 2.a. or 2.b. is met.

DISCHARGER COMMENT 5: The Discharger requests that the ammonia (as N) effluent limitations be removed because sample analyses results show the discharge has not exceeded the proposed effluent limitations, and, subsequent to December 2012, analytical results have been reported with a reporting level of 1.0 mg/L, which is above the proposed average monthly effluent limitation.

RESPONSE: The proposed ammonia (as N) effluent limitations have not been removed. As the Fact Sheet, section IV.C.3.c.i. states, ammonia (as N) effluent limitations were not included based on effluent data indicating exceedances of water quality objectives. The ammonia (as N) effluent limitations were included based on the facility type, and the *potential* for ammonia (as N) to be discharged in concentrations exceeding water quality objectives if inadequate or incomplete nitrification occurs. Additionally, the Discharger previously reported ammonia (as N) results that were analyzed with an analytical method that could achieve a reporting level below the proposed average monthly effluent limitation. The Discharger did not provide reasoning for the change, but it is evident that reporting levels below the proposed average monthly effluent limitation are achievable.

DISCHARGER COMMENT 6: The Discharger requests that the requirement to collect 24-hour flow-proportional composite samples be delayed until December 2017 to be consistent with the compliance schedule in the proposed WDRs/NPDES permit for other requirements.

RESPONSE: Central Valley Water Board staff proposes to delay the requirement to collect 24-hour flow-proportional composite samples until 4 December 2017 for both influent and effluent monitoring, including whole effluent toxicity monitoring in section V. of the Monitoring and Reporting Program.

DISCHARGER COMMENT 7: The Discharger requests that the requirement to monitor methyl bromide in the effluent be reduced from 24 months to 12 months due to data already collected and the fact that the methyl bromide exceedance was detected 3 years after production and import of methyl bromide was eliminated.

RESPONSE: The proposed WDRs/NPDES permit has been updated to reflect the change.

DISCHARGER COMMENT 8: The Discharger requests that the Monitoring and Reporting Program, section V.A. be revised to allow the Discharger to use chronic toxicity monitoring as compliance for both acute and chronic toxicity testing requirements.

RESPONSE: The language in section V of the Monitoring and Reporting Program has been updated to allow the Discharger to use chronic toxicity tests to derive acute toxicity results.

CVCWA COMMENTS

CVCWA COMMENT 1: CVCWA states that the proposed WDRs/NPDES Permit contains duplicative regulation through Provision VI.C.5.b., Collection System, that states the Discharger's "collection system is part of the system that is subject to this order," and as such, the Discharger "must operate and maintain its collection system ...and mitigate any discharge from the collection system in violation of this Order." CVCWA contends that 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 2006-0003-DWQ (General Order). The General Order requires enrollees, which includes municipalities that operate sanitary sewer systems, to develop sewer system management plans and other measures to prevent sanitary sewer overflows. Sanitary sewer systems pose unique challenges for water quality regulation, and the State Water Board has adequately addressed these challenges in the General Order with which the Discharger must comply. Thus, the Central Valley Water Board does not need to regulate collection systems further in the Discharger's WDRs/NPDES permit. CVCWA further contends that the inclusion of the collection systems as part of the WDRs/NPDES permit subjects the Discharger to possible third party lawsuits because any sanitary sewer overflow will violate the permit's Discharge Prohibitions. Thus, CVCWA respectfully requests that the Central Valley Water Board delete section VI.C.5.b. from the proposed WDRs/NPDES permit and recommends revised language to Discharge Prohibition III.A.

CVCWA also recommends revisions to Fact Sheet, section IV.A.1 to explain that Prohibition III.A (No discharge or application of waste other than that described in the Order) applies to the

“facility,” not to include the collection system. The recommended revision is shown in underline text below.

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.

RESPONSE: Central Valley Water Board staff agrees with CVCWA’s goal to prevent duplicative regulation and that collection system discharges are adequately prohibited under the Collection Systems Order. Central Valley Water Board staff is working with State Water Board staff and CVCWA to determine the best way to address the potential duplicative regulation concern in NPDES permits. Staff has chosen not to make the recommended revision to Fact Sheet, section IV.A.1 of the tentative Order and other NPDES permits pending further discussion and resolution with the State Water Board, CVCWA, and U.S.EPA about potentially duplicative regulation for collection systems. However, the following changes have been made to the proposed WDRs/NPDES permit at Discharge Prohibition III.A., section VI.C.5.b., and Fact Sheet, section VI.B.5.a., as shown, in part, in underline/strikethrough format below:

Discharge Prohibition III.A.

- 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.

Section VI.C.5.b.

- b. **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 CFR 122.41(e)). The Discharger must report any non-compliance (40 CFR 122.41(l)(6) and (7)) and mitigate any discharge from the collection system in violation of this Order (40 CFR 122.41(d)).~~ On 2 May 2006, the State Water Board adopted State Water Resources Control Board Order 2006-0003-DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems. The Discharger shall be subject to the requirements of Order 2006-0003-DWQ and any future revisions thereto. Order 2006-0003-DWQ requires that all public agencies that currently own or operate sanitary sewer systems apply for coverage. The Discharger has applied for and has been approved for coverage under Order 2006-0003-DWQ for operation and maintenance of its sanitary sewer collection system.

Fact Sheet, section VI.B.5.a., in part

Furthermore, the General Order contains requirements for operation and maintenance of collection systems and for reporting and mitigating sanitary sewer overflows. ~~Inasmuch~~

~~that the Discharger's collection system is part of the system that is subject to this Order, certain standard provisions are applicable as specified in Provisions, section VI.C.5. For instance, the 24-hour reporting requirements in this Order are not included in the General Order. The Discharger must comply with both the General Order and this Order. The Discharger and public agencies that are discharging wastewater into the facility were required to obtain enrollment for regulation under the General Order by 4 December 2006. The Discharger is enrolled under the General Order.~~

CVCWA COMMENT 2: CVCWA requests that the following language be removed from the Fact Sheet, section IV.C.3.c.vi.(a): "Recent toxicity studies have indicated a possibility that nitrate is toxic to aquatic organisms." CVCWA contends that it is inappropriate to include unsupported statements with respect to toxicity to aquatic organisms to the extent that the effluent limitation for nitrate plus nitrite (as N) is being adopted to protect the municipal beneficial use.

RESPONSE: Central Valley Water Board staff disagrees with CVCWA's contention that statements regarding the toxicity of nitrate to aquatic organisms be removed if the effluent limitation for nitrate plus nitrite (as N) is based on the California Primary Maximum Contaminant Level (MCL). Subsection (a) of the Nitrate and Nitrite discussion in the Fact Sheet is to present water quality objectives applicable to the receiving water. As subsection (b) – RPA Results and subsection (c) – WQBELs indicate, the effluent limitation included in the proposed WDRs/NPDES permit is based on the Primary MCL. Whether effluent limitations are based on the protection of the municipal and domestic supply beneficial use or a beneficial use that protects aquatic organisms, the Central Valley Water Board is not precluded from presenting water quality objectives or discussions applicable to either beneficial use. However, Central Valley Water Board staff updated the Fact Sheet to include the citation for the studies referred to in section IV.C.3.c.vi.(a) of the Fact Sheet.

CVCWA COMMENT 3: CVCWA states that the proposed WDRs/NPDES permit 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 Basin Plan's narrative toxicity objective. CVCWA's basis for this contention is summarized below.

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." The toxicity objective relates to "toxic substances." "Toxicity" means "any toxic (adverse) effect that a *chemical* or *physical* agent might produce within a living organism."¹ CVCWA provides that biological organisms such as pathogens are not chemical or physical agents. Further, the comment describes that biological organisms invade and multiply in hosts, which can cause damage, but the organisms

¹ Williams et al., Principles of Toxicology: Environmental and Industrial Applications (2d ed. 2000) p. 3, emphasis added.

themselves are not toxic. Ergo, the organism's action within the host causes a detrimental physiological response.

CVCWA also provides that California Department of Toxic Substances Control's strategic plan does not mention regulation of bacteria or pathogens; USEPA's TSD does not consider pathogens as toxicants; and USEPA's National Toxics Rule² and California Toxics Rule³ do not include pathogens within the list of priority pollutants.

CVCWA describes that the reasonable potential analysis for pathogens should be based on the numeric bacteria objective in the Basin Plan, or, if the Board determines that a more stringent objective should be applied, then it should adopt limitations based on a more stringent objective in compliance with California Water Code section 13241 and applicable State Water Board Orders. CVCWA requests that the following language from section IV.C.3.c.vii. 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."

RESPONSE: Central Valley Water Board staff is working with CVCWA to further evaluate the application of the narrative toxicity objective to pathogens in NPDES permits. The following change has been made to the proposed WDRs/NPDES permit, Attachment F, section IV.C.3.c.vii. based on CVCWA's recommendation.

~~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.~~

The above revision does not include deletion of the entire sentence as recommended by CVCWA. Central Valley Water Board staff is recommending only a partial change to CVCWA's recommendation because the potential for the discharge of pathogens from the Facility is a concern regardless of whether the Basin Plan toxicity objective is applicable. In its comment, CVCWA contends that the Basin Plan's narrative toxicity objective should not be used in the reasonable potential analysis. CVCWA's comment does not argue against the finding that "inadequate or incomplete disinfection creates the potential for pathogens to be discharged."

CVCWA COMMENT 4: CVCWA requests that the requirement for the Discharger to prepare and submit a Salinity Evaluation and Minimization Plan, as well the requirement to monitor priority pollutants and other constituents of concern, be delayed until after the Facility upgrades are completed. CVCWA also questions the value of the Salinity Evaluation and Minimization Plan, arguing that the effluent electrical conductivity and discharge volume are low, and that it is unlikely that changes in chemical addition will significantly change the electrical conductivity level in the discharge. Additionally, CVCWA indicates that overuse of a chemical will increase

² See 40 CFR 131.36

³ See 40 CFR 131.38

costs and may result in problems elsewhere in the treatment system; thus, the Discharger is motivated to control the addition of chemical to the treatment process. CVCWA also noted that an effluent limitation for electrical conductivity was included even though there is no reasonable potential.

RESPONSE: Please refer to Central Valley Water Board staff's response to Discharger Comment 3, as it pertains to the Salinity Evaluation and Minimization Plan. Additionally, Central Valley Water Board staff would like to note that the effluent limitation for electrical conductivity was not included based on reasonable potential.

In regards to the priority pollutant monitoring, Central Valley Water Board staff revised the proposed WDRs/NPDES permit to delay the priority pollutant monitoring to the fourth year of the permit, beginning in the third quarter of 2017. The monitoring cannot be delayed further, as monitoring results would need to be submitted with the Report of Waste Discharge, which is required to be submitted six months prior to the expiration of the permit. Central Valley Water Board staff recognizes that effluent data collected prior to Facility upgrades may not entirely be representative of the effluent; however, staff has to consider the possibility that the project may not be completed prior to the Report of Waste Discharge being due, or before the next NPDES permit renewal.

FoMP COMMENTS

FoMP COMMENT 1: FoMP contends that the Central Valley Water Board did not notify all affected persons, including persons owning property and living directly on Mariposa Creek downstream of the Facility, and further contends that Central Valley Water Board staff omitted affected persons from meaningful involvement and fair treatment by the fact that the affected persons were not sought out or contacted by staff.

RESPONSE: Central Valley Water Board staff disagrees. The Notice of Public Hearing, proposed WDRs/NPDES permit, and proposed TSO were sent to all known parties that have identified themselves as concerned parties. The Facility as currently built, with some additions over the years, was constructed in 1984 and was issued a NPDES permit that same year. Thus far, with the exception of FoMP, there have been no parties that have come forward indicating they are interested parties and/or affected by the discharge from the Facility.

FoMP COMMENT 2: FoMP accuses the Central Valley Water Board of failing to comply with various laws, regulations, and policies, and of allowing the Discharger to continue violating its WDRs/NPDES permit. FoMP contends that the Facility is illegally degrading the quality of water in Mariposa Creek, as well as polluting and contaminating the Creek, and that the Central Valley Water Board is complicit in the illegal degradation. Additionally, FoMP indicates that habitat in Mariposa Creek is in need of restoration and suggests the discharges from the Facility have caused a significant decline in wildlife within the Creek.

RESPONSE: Central Valley Water Board staff recognizes that the Facility is currently in violation, has been in violation, and will be in violation of certain effluent limitations, as

evidenced by the proposed Administrative Civil Liability Complaint R5-2013-0590 (for violations of WDRs Order R5-2007-0171) and the proposed TSO (for expected violations of certain effluent limitations in the proposed WDRs/NPDES permit). The proposed TSO is an enforcement action that enforces non-compliance with the proposed WDRs/NPDES permit, and it is designed to ensure the Discharger will complete actions to come into compliance with the proposed WDRs/NPDES permit. From FoMP's comments, it is unclear to Central Valley Water Board staff which specific provisions of the proposed WDRs/NPDES permit and proposed TSO FoMP believes *allow* the Discharger to continue violating the WDRs/NPDES permit.

Order R5-2007-0171 included a requirement for the Discharger to upgrade the treatment facility, and this requirement is carried over in the proposed WDRs/NPDES permit. The process to upgrade the Facility is a significant effort requiring millions of dollars and a substantial amount of engineering design to complete. Completing the Facility upgrades, including engineering design and construction, is not something that can occur within a short timeframe.

It is also unclear from FoMP's comments which specific provisions of the proposed WDRs/NPDES permit illegally authorize degradation of Mariposa Creek. State Water Resources Control Board Resolution No. 68-16 allows high quality waters to be degraded as long as 1) the degradation is found to be consistent with the maximum benefit to the people of the State, 2) the degradation will not unreasonably affect present and anticipated beneficial uses, 3) the degradation will not result in water quality less than that prescribed in State and regional policies, and 4) the discharger is required to meet waste discharge requirements that result in the best practicable treatment or control (BPTC) to minimize degradation. The Central Valley Water Board determined the discharge authorized in the Discharger's current WDRs/NPDES permit is consistent with Resolution No. 68-16, and the proposed WDRs/NPDES permit does not authorize an increase in flow or mass of pollutants to Mariposa Creek over that previously authorized. The Central Valley Water Board has found that providing treatment and disposal of domestic sewage is consistent with the maximum benefit to the people of the State.

Lastly, FoMP suggestions that Mariposa Creek is in need of restoration and that the Discharger is responsible for a significant decline in wildlife in Mariposa Creek and the riparian corridor are unsupported. Central Valley Water Board staff is unaware of any documentation of a significant decline in wildlife in and around Mariposa Creek or any information indicating the discharge is causing significant impacts to wildlife.

FoMP COMMENT 3: FoMP notes that the Discharger failed to comply with all of the milestones in previous TSO R5-2011-0905, and objects to allowing an extension of five years beyond 18 May 2015 for complying with final effluent limitations.

RESPONSE: The proposed TSO does not extend the compliance schedule for dichlorobromomethane beyond 18 May 2015. As Finding No. 12 of the proposed TSO states, the California Water Code allows the Discharger to request up to an additional

five years if it is unable to comply with the final effluent limitations and can show it is making diligent progress toward complying with the final effluent limitations. FoMP was previously informed that any proposed action(s) by staff for the Central Valley Water Board's consideration will be circulated for public comment. If the Discharger requests additional time beyond 18 May 2015, FoMP will have an opportunity to communicate its objection at that time.

FoMP COMMENT 4: FoMP objects to Provision VI.C.2.b. of the proposed WDRs/NPDES permit, which allows the Discharger to pursue a de-designation study for de-designating the municipal and domestic supply beneficial use from Mariposa Creek. FoMP asserts that efforts of the Central Valley Water Board staff and the Discharger must be focused on attaining immediate compliance of the required Facility upgrades.

RESPONSE: FoMP's objection to Provision VI.C.2.b. is noted. The proposed WDRs/NPDES permit does not require the Discharger to conduct a de-designation study but specifically allows the opportunity to do so. Regardless of Provision VI.C.2.b., however, all dischargers have the opportunity to conduct a de-designation study if they so choose for any designated beneficial use. Any proposed changes to the designated beneficial uses of Mariposa Creek would be subject to a separate public process. Based on the *Facility Plan*, referenced in Finding No. 12 of the proposed TSO, it is clear the Discharger intends to pursue Facility upgrades to comply with final effluent limitations that are based on the protection of the municipal and domestic supply beneficial use.