

California Regional Water Quality Control Board
North Coast Region

ORDER NO. R1-2012-0011
As Modified by Order No. R1-2017-0048

REQUIRING THE FORESTVILLE WATER DISTRICT
WASTEWATER TREATMENT FACILITY
TO CEASE AND DESIST FROM DISCHARGING OR THREATENING
TO DISCHARGE EFFLUENT IN VIOLATION OF
WASTE DISCHARGE REQUIREMENTS

ORDER NO. R1-2012-0012
WDID No. 1B831000SON

Sonoma County

The Regional Water Quality Control Board, North Coast Region (hereinafter Regional Water Board), finds that:

1. The Forestville Water District (hereinafter Permittee) owns and operates a municipal wastewater treatment facility (WWTF) located in Forestville, California adjacent to Jones Creek, a tributary to Green Valley Creek and thence the Russian River. The WWTF provides advanced wastewater treatment and consists of a collection system, screening, a 2.67 million gallon (MG) aerated pond, a 0.7 MG settling pond, a prefilter pump station, two microfiltration modules and microfiltration control facilities, and chlorination/dechlorination. Design treatment capacities are 0.13 million gallons per day (mgd) (average daily dry weather flow), 0.58 mgd (peak weekly wet weather flow), and 0.78 mgd (peak daily wet weather flow).
2. Regional Water Board Order No. R1-2012-0012, WDRs and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0023043, WDID No. 1B831000SON was adopted by the Regional Water Board on January 19, 2012. Order No. R1-2012-0012 includes discharge prohibitions, effluent and receiving water limitations, and compliance provisions, including final effluent limitations for copper.
3. Section 13301 of the California Water Code states "When a regional board finds that a discharge of waste is taking place, or threatening to take place, in violation of requirements or discharge prohibitions prescribed by the regional board or the state board, the board may issue an order to cease and desist and direct that those persons not complying with the requirements or discharge prohibitions (a) comply forthwith, (b) comply in accordance with a time schedule set by the board, or (c) in the event of a threatened violation, take appropriate remedial or preventative action."
4. The Order identified in Finding 2 above implements provisions of the California Toxics Rule (CTR) and the *Policy for Implementation of Toxics Standards for Inland*

Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP) by requiring the Permittee to monitor its effluent for CTR constituents that may have reasonable potential to cause or contribute to an excursion above a water quality criterion or objective applicable to the receiving water. The SIP also requires compliance with all final effluent limitations for CTR constituents by May 18, 2010.

Section 1.2 of the SIP allows the Regional Water Board to adjust the criteria/objectives for metals with discharge-specific water effect ratios (WERs) established in accordance with U.S. Environmental Protection Agency (U.S. EPA) guidance established in *Interim Guidance on Determination and Use of Water Effect Ratios for Metals* (EPA-823-B-94-001) (Interim Guidance) or *Streamlined Water Effect Ratio Procedure for Discharges of Copper* (EPA-822-R-01-005) (Streamlined Procedure). The Interim Guidance and Streamlined Procedure determine site-specific values for a WER, a criteria adjustment factor accounting for the effect of site-specific water characteristics on pollutant bioavailability and toxicity to aquatic life.

The State Water Board amended the SIP in 2005 to allow WERs to be established through the normal NPDES permit modification process, rather than through the Basin Planning process. The procedures followed to develop the copper WER identified in this Order are consistent with the Interim Guidance, Streamlined Procedure, and the amended SIP.

5. The Permittee is violating or threatening to violate the following terms in Order No. R1-2012-0012:

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. EFFLUENT LIMITATIONS

3. Final Effluent Limitations – Discharge Point 002 (Discharge to Jones Creek)

- b. The Permittee shall maintain compliance with the following final effluent limitations at Discharge Point 002, with compliance measured at Monitoring Location EFF-002, as described in the attached MRP.

Table 7. Final Effluent Limitations for Discharge Point 002 (Discharge to Jones Creek)

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Maximum Daily
Copper	µg/L	[9]	---	[9]

- [9] Final effluent limitations for copper are hardness-dependent. See Appendix E-1 to Attachment E for the full table of hardness-dependent final copper effluent limitations, which are determined based on the hardness of the effluent at the time the discharge is sampled.
6. Monitoring data collected prior to adoption of Order No. R1-2012-0012) revealed that the discharge contained levels of copper that may be discharged at concentrations that will cause, have the reasonable potential to cause, or contribute to an excursion above water quality objectives for copper, and final effluent limitations for copper were established in Order No. R1-2012-0012. The Permittee continued to monitor during the term of Order No. R1-2012-0012. The data consisted of 23 samples collected between April 2012 and May 2017 with all results ranging from 0.07 to 9.9 µg/L, with the exception of one result of 61 µg/L. Based on the result of 61 µg/L, the data continues to show reasonable potential for copper.
 7. The Permittee previously submitted two reports that address its compliance efforts with regard to copper. The reports include the May 30, 2008, report titled *Implementation Plan to Achieve Compliance with Final Effluent Limitations for Copper, Lead, Zinc, and Dichlorobromomethane* and the August 26, 2010, report titled *Copper Infeasibility Study, Forestville Water District*. According to these reports, the Permittee completed monitoring and several other tasks for the purpose of achieving compliance with CTR water quality objectives for copper. The Permittee reviewed the status of source water control efforts by the Sonoma County Water Agency (Forestville's water supplier), reviewed drinking water tap sampling results, and surveyed other local municipalities regarding their strategies and possible success in reducing effluent copper.
 8. The August 26, 2010, Copper Infeasibility Study report states that the Permittee is unable to comply with final effluent limitations for copper, contains an analysis of the Permittee's inability to comply with final effluent limitations for copper and identifies proposed actions and compliance schedules to comply with final copper effluent limitations. The Regional Water Board concurred with the Permittee's assessment that it is infeasible to comply with final effluent limitations for copper based on the fact that approximately 75 percent of the copper monitoring results exceeded the final average monthly effluent limitation (AMEL) and approximately 25 percent of the copper results exceeded the maximum daily effluent limitation (MDEL). The Copper Infeasibility Study report included a request for the Regional Water Board to adopt a Cease and Desist Order.
 9. The Regional Water Board adopted Cease and Desist Order No. R1-2012-0011 on January 19, 2012, that included a requirement for the Permittee to conduct a WER study and submit a final WER study report by January 15, 2016 (Requirement 1, Task 4).

10. The Permittee conducted the WER study and submitted the final WER study report as required by Requirement 1, Task 4 of this cease and desist order (CDO). Regional Water Board staff has reviewed the WER Study Report and finds that the Permittee conducted the WER study in accordance with the Interim Guidance, the Streamlined Procedure, and the amended SIP, and the WER study report supports the Permittee's request for a WER for copper at the discharge to Jones Creek.
11. The Permittee's WER study determined the site-specific toxicity of copper in the receiving water and concluded that a site-specific WER of 8.39 for total recoverable copper and 7.98 for total dissolved copper applies to the discharge. Regional Water Board staff evaluated the results of the study and determined that (1) the results of the study are within the expected range for a WER for a municipal wastewater discharge; (2) the study followed the guidance in the Interim Guidance and Streamlined Procedure; and (3) the results of the study are supported by data that generated scientifically defensible results.
12. Regional Water Board staff revised the reasonable potential analysis for copper, and found that, based on this new information, effluent copper concentrations continue to demonstrate reasonable potential to exceed the WER-adjusted water quality criteria for copper due to the single monitoring result of 61 µg/L that exceeds the water quality objective for copper.
13. The Permittee's NPDES permit is in the process of being renewed and is scheduled for adoption in early 2018. The permit renewal will include WER-adjusted effluent limitations for copper based on the revised reasonable potential analysis that utilizes the Permittee's copper WER results. The Permittee believes that the single high monitoring result for copper described in Findings 6 and 12, above, is an outlier and that it will be able to comply with WER-adjusted effluent limitations for copper.
14. Until the new permit is adopted in 2018, the Permittee would be subject to mandatory penalty (MMP) violations under Order No. R1-2012-0012 since the CDO required compliance with final copper effluent limitations by June 30, 2016. This is unreasonable because the Permittee completed its copper WER study and submitted the final WER report in compliance with Requirement 1, Task 4 of CDO; the Permittee's WER will result in higher effluent limitations for copper; and the Permittee's monitoring data demonstrates that the Permittee should be able to comply with the WER-adjusted copper effluent limitations upon completion of the permit renewal.
15. Pursuant to Water Code section 13385(j)(3), mandatory minimum penalties (MMPs) will not apply to future violations of the final effluent limitations for copper if:

- a. A cease and desist order is issued on or after July 1, 2000, and specifies the actions that the discharger is required to take in order to correct the violations that would otherwise be subject to MMPs;
 - b. The regional board finds that the discharger is not able to consistently comply with one or more of the effluent limitations established in the waste discharge requirements applicable to the waste discharge because the effluent limitation is a new or more stringent regulatory requirement that has become applicable to the waste discharge after the effective date of the waste discharge requirements and after July 1, 2000, new or modified control measures are necessary in order to comply with the effluent limitation, and the new or modified control measures cannot be designed, installed, and put into operation within 30 calendar days;
 - c. The regional board establishes a time schedule for bringing the waste discharge into compliance with the effluent limitations that is as short as possible, taking into account the technological, operational, and economic factors that affect the design, development, and implementation of the control measures that are necessary to comply with the effluent limitations, and where the time schedule exceeds one year, the time schedule includes interim requirements and actions and milestones leading to compliance, and
 - d. The discharger has prepared and is implementing in a timely and proper manner, or is required by the regional board to prepare and implement, a pollution prevention plan pursuant to Water Code section 13263.3.
16. Because this Order establishes a CDO for anticipated future violations of final copper effluent limitations, after making specific findings and setting interim requirements and specific actions and milestones to lead to compliance with final effluent limitations, in accordance with the Water Code section 13385(j)(3) and the terms of this Order, no MMPs will be assessed for violations of the final copper effluent limitations. Specifically, the Regional Water Board finds that:
- a. The CDO is being issued after July 1, 2000, and specifies the actions the Permittee is required to take to correct the violations of Order No. 2012-0012 (Effluent Limitation IV.A.3.b), as set out in Finding 8, respectively, above.
 - b. The Permittee is unable to consistently comply with final copper effluent limitations that are in effect because new or modified control measures will be needed for the Permittee to comply, and the new or modified control measures are dependent on the completion of a series of studies, thus the new or modified control measures cannot be designed, installed, and put into operation within 30 calendar days;

- c. Requirement 1 of this Order establishes a time schedule for bringing the WWTF into compliance with the final copper effluent limitations that is as short as possible. A maximum of 60 months are provided to the Permittee to complete a series of studies, and based upon the findings from those studies, to design, install and implement control measures that will lead to compliance with final effluent limitations for copper.
 - d. The Permittee's Copper Infeasibility Study identified pollution prevention activities designed to minimize the potential for permit violations. These activities include efforts to reduce influent copper by controlling industrial/commercial discharges, evaluating opportunities to modify the treatment process to reduce the amount of copper carrying through to the effluent, and evaluating sampling procedures to ensure that they are producing representative copper results.
17. Accordingly, the Regional Water Board finds that MMPs for violations of effluent limitations for copper when discharging to Jones Creek do not apply, so long as the Permittee complies with the interim effluent limitations and compliance schedules included in this Order.
18. The compliance schedule established for copper in this Order is intended to be as short as possible. The compliance schedule for copper accounts for the considerable uncertainty in determining effective measures (e.g., evaluate industrial/commercial sources of copper and identify possible actions, source water quality verification, applicability of a site specific water effect ratio) necessary to achieve compliance with final effluent limitations for copper. This Order allows time for the Permittee to first evaluate industrial/commercial sources of copper and identify possible actions and verify source water quality before requiring further actions which are likely to be more costly and take more time to explore and implement. The copper compliance schedule is based on reasonably expected times needed to evaluate potential compliance measures in a step-wise manner. The Regional Water Board may wish to revisit these assumptions as more information becomes available from the Permittee's evaluations.
19. This Order requires the Permittee to comply with interim effluent limitations for copper. The SIP requires that interim limitations be based on past performance or limits in previous orders, whichever is more stringent. In this case, interim limitations are based on limits established in Attachment E-1 of Order No. R1-2012-0012. These interim limitations are intended to ensure that the Permittee maintains at least its existing performance while completing all tasks required by the compliance schedules.
20. Pursuant to Water Code section 13389 and section 15321 of title 14 of the California Code of Regulations, this is an enforcement action for violations and threatened

violations of waste discharge requirements, and as such is exempt from the requirements of the California Environmental Quality Act (Public Resources Code sections 21000-21177).

21. On December 13, 2017, after due notice to the Permittee and all other interested persons, the Regional Water Board conducted a public hearing and received evidence regarding this Order.
22. Any person affected by this action of the Regional Water Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with Water Code Section 13320 and Title 23, California Code of Regulations, Section 2050. The petition must be received by the State Water Board within 30 days of the date of this Order. Copies of the law and regulations applicable to filing petitions will be provided upon request. In addition to filing a petition with the State Water Board, any person affected by this Order may request the Regional Water Board to reconsider this Order. To be timely, such request must be made within 30 days of the date of this Order. Note that even if reconsideration by the Regional Water Board is sought, filing a petition with the State Water Board within the 30-day period is necessary to preserve the petitioner's legal rights. If you choose to request reconsideration of this Order or file a petition with the State Water Board, be advised that you must comply with the Order while your request for reconsideration and/or petition is being considered.

THEREFORE, IT IS HEREBY ORDERED, that pursuant to Water Code sections 13300 and 13301, the Permittee shall cease discharging waste contrary to the prohibitions and effluent limitations contained in Finding 85, above, and comply with the following requirements:

1. The Permittee shall cease and desist from discharging and threatening to discharge waste in violation of the terms of Order No. R1-2012-0012 described in Finding 5 above and achieve compliance with copper effluent limitations at the earliest possible date in accordance with the following compliance schedule:

Compliance Schedule for Final Effluent Limitations for Copper.

Task	Task Description	Compliance Date
1	Evaluate industrial/commercial sources of copper and submit report and identify possible actions (e.g., programs, ordinances) to be implemented if industrial or commercial sources of copper are present in the Forestville Water District and submit report.	January 15, 2013 (Completed)
2	Evaluate copper concentrations through the wastewater treatment plant over annual cycle to identify any trends and submit final report with findings and recommendations. This effort was started in October 2010.	January 15, 2014 (Completed)
3	Conduct a source water quality verification. If results of initial testing indicate that this is a viable method to address copper, continue testing and submit final report with findings and recommendations.	January 15, 2015 (Completed)
4	Conduct a discharger-specific WER study, if necessary, based on the results of Tasks 1 through 3 and submit study results.	January 15, 2016 (Completed)
5	Permittee must comply with final effluent limitations for copper no later than June 30, 2018.	June 30, 2018

- The Permittee shall comply with the following interim effluent limitations for copper in the interim period established by this Order for the Permittee to reach compliance with final effluent limitations set forth in Order No. R1-2012-0012:

Interim Effluent Limitations for Discharge Point 002, Discharge to Jones Creek

Parameter	Units	Average Monthly Effluent Limitation	Maximum Daily Effluent Limitation
Copper	µg/L	Attachment 1	Attachment 1

- In the interim period for the Permittee to achieve full compliance with Order No. R1-2012-0012, the Permittee shall operate and maintain, as efficiently as possible, all facilities and systems necessary to comply with all prohibitions, effluent limitations, and requirements identified in Order No. R1-2012-0012 or any future waste discharge requirements issued for the WWTF.
- If, for any reason, the Permittee is unable to perform any activity or submit any documentation in compliance with the deadlines set forth in Requirement 1 above, the Permittee may request, in writing, that the Regional Water Board grant an extension of the time. The extension request shall include justification for the delay.

5. If the Executive Officer of the Regional Water Board finds that the Permittee fails to comply with the provisions of this Order, the Executive Officer may take all actions authorized by law, including referring the matter to the Attorney General for judicial enforcement or issuing a complaint for administrative civil liability pursuant to Water Code sections 13350 and 13385. The Regional Water Board reserves the right to take any enforcement actions authorized by law.

CERTIFICATION

I, Matthias St. John, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, North Coast Region, on December 13, 2017, as modified by Order No. R1-2017-0048.

Matthias St. John
Executive Officer