

California Regional Water Quality Control Board
North Coast Region

ORDER NO. R1-2010-0079

REQUIRING
THE COLLEGE OF THE REDWOODS WASTEWATER TREATMENT FACILITY
TO CEASE AND DESIST FROM DISCHARGING OR THREATENING
TO DISCHARGE EFFLUENT IN VIOLATION OF
WASTE DISCHARGE REQUIREMENTS ORDER NO. R1-2010-0003
NPDES NO. CA0006700
WDID No. 1B80121OHUM

Humboldt County

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

1. The College of the Redwoods (hereinafter Discharger) owns and operates a municipal wastewater treatment facility (WWTF) located in Eureka, California. The WWTF provides secondary level treatment of domestic and commercial wastewater for a population of approximately 5,700 on the College of the Redwoods campus complex by treating up to 0.1 million gallons per day (MGD). Wastewater is treated in a package plant by activated sludge and clarification processes, then disinfected with sodium hypochlorite, and dechlorinated with sodium metabisulfate prior to discharge. Treated wastewater travels overland to White Slough, a tidally influenced estuarine tributary of Humboldt Bay.
2. The WWTF is currently regulated by Waste Discharge Requirements, Order No. R1-2010-0003, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0006700, WDID No. 1B80121OHUM, adopted by the Regional Water Board on June 10, 2010 with an effective date of September 1, 2010. Order No. R1-2010-0003 includes discharge prohibitions, effluent and receiving water limitations, and compliance provisions, including final effluent limitations for copper, lead, nickel, silver, carbon tetrachloride, chlorodibromomethane, dichlorobromomethane, bis(2-ethylhexyl)phthalate, and 2,3,7,8-TCDD equivalents.
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 to (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 Discharger 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. As further described in Finding 7, the Discharger has indicated concerns that it will be unable to comply with final effluent limitations for copper, lead and silver by the September 1, 2010 effective date of Order No. R1-2010-0003.

5. The Discharger is violating or threatening to violate the following terms in Order No. R1-2010-0003:

IV. Effluent Limitations and Discharge Specifications

A. Final Effluent Limitations

1. Final Effluent Limitations – Discharge Point 001

- a. The Discharger shall maintain compliance with the following final effluent limitations at Discharge Point 001, with compliance measured at Monitoring Location EFF-001, as described in the attached MRP.

Effluent Limitations for Discharge Point 001

Parameter	Units	Effluent Limitations	
		Average Monthly (AMEL)	Maximum Daily (MDEL)
Copper ¹	µg/L	2.2	4.4
Lead ¹	µg/L	0.54	1.1
Silver ¹	µg/L	0.24	0.48

6. The Discharger collected additional monitoring data for copper, lead and silver that indicate the effluent contains levels of these metals that may be discharged at concentrations that will cause, have the reasonable potential to cause, or contribute to an excursion above applicable water quality objectives. The data collected shows the following:

Parameter	Units	Minimum Detection	Maximum Detection
Copper	µg/L	6.2	21
Lead ¹	µg/L	0.76	1.0
Silver ¹	µg/L	0.08	1.9

7. On May 4, 2010, the Discharger submitted a Statement of Infeasibility for the College of the Redwoods WWTF indicating that it is unable to comply with final effluent limitations for copper and silver by September 1, 2010 as required by

¹ Final effluent limitations for this metal are dependent on the hardness of the receiving water and shall be determined at each time that effluent is monitored in accordance with Appendix E-1 contained in Attachment E of the Order.

Order No. R1-2010-0003. The May 4, 2010 submittal was amended on August 27, 2010. The August 27, 2010 amendment provided that it would be infeasible to meet effluent limits for lead which went into effect on September 1, 2010 as required by Order No. R1-2010-0003. As amended, the Statement of Infeasibility contains proposed actions and compliance schedules to comply with final effluent limitations for copper, lead, and silver.

[In a Statement of Infeasibility dated May 4, 2010, and amended on August 27, 2010, the Discharger indicated that it would be unable to comply with final effluent limitations for copper, silver, and lead by September 1, 2010 as required by Order No. R1-2010-0003. The Statement of Infeasibility contained proposed actions and a schedule for ensuring compliance with the final effluent limitations for copper, lead, and silver.]

8. The Regional Water Board concurs with the Discharger's assessment that it is infeasible to comply with final effluent limitations for copper, lead, and silver because the data demonstrating the Facility's current performance capabilities, exceed the AMEL and/or MDEL for each of these parameters.
9. Pursuant to California Water Code section 13385(j)(3), mandatory minimum penalties (MMPs) will not apply to future violations of the final effluent limitations for copper, lead, or silver 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.

10. Pursuant to California Water Code section 13385(j)(3)(B) , the Regional Water Board finds that:
 - a. The CDO is being issued after July 1, 2000, and specifies the actions the Discharger is required to take to correct the violations of Order No. R1-2010-0003, specifically Effluent Limitations IV.A. as set out in Finding 5, above.
 - b. The Discharger will be unable to consistently comply with the new final copper lead, or silver effluent limitations by September 1, 2010 effective date established for Order No. R1-2010-0003 because new or modified control measures will be needed for the Discharger 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. Requirements of this Order establishes a time schedule for bringing the WWTF into compliance with the final copper, lead, and silver effluent limitations that is as short as possible. A maximum of 37 months are provided to the Discharger 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.
 - d. Provisions VI.C.3 and VI.C.5 of Order No. R1-2010-0003 require the Discharger to develop and implement a pollution minimization program and source control measures designed to identify and control pollutant sources including, but not limited to copper, lead and silver at the WWTF. The specific elements needed for completion are included in the Requirements of this Order.
11. The compliance schedule for copper, lead and silver established in the Order accounts for the considerable uncertainty in determining effective measures (e.g., address water supply corrosivity, treatment plant upgrades, applicability of a site specific translator or water effect ratio) necessary to achieve compliance with final effluent limitations. This Order allows time for the Discharger to first explore measures to address water supply corrosivity and treatment plant modifications before requiring further actions which are likely to be more costly and take more time to explore and implement. The 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 Discharger's evaluations.
12. This Order requires the Discharger to comply with interim effluent limitations for copper, lead and silver. Interim limitations for copper, lead and silver are new and are based on existing performance of the WWTF. These interim limitations are intended to ensure that the Discharger maintains at least the existing performance while completing all tasks required by the compliance schedules.
13. Because this Order establishes a Cease and Desist Order (CDO) for anticipated future violations of final effluent limitations established for copper, lead, and silver, 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, lead, or silver effluent limitations when they become effective on September 1, 2010. Accordingly, the Regional Water Board finds that MMPs for violations of effluent limitations for copper, lead and silver when discharging to White Slough do not apply, so long as the Discharger complies with the interim effluent limitations and compliance schedules included in this Order.

14. 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).
15. On October 28, 2010, after due notice to the Discharger and all other interested persons, the Regional Water Board conducted a public hearing and received evidence regarding this Order.
16. 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, 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 California Water Code sections 13300 and 13301, the Discharger shall cease discharging waste contrary to the effluent limitations contained in Finding 5, above, and comply with the following requirements:

1. The Discharger shall cease and desist from discharging and threatening to discharge waste in violation of the terms of Order No. R1-2010-0003 (NPDES Permit No. CA0006700) described in Finding 5 above by implementing the following compliance schedule:

Task	Task Description	Compliance Date
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Task	Task Description	Compliance Date
A	Collect and analyze additional effluent samples for copper, lead, and silver. Obtain concurrent hardness concentrations from receiving water in White Slough across the diurnal tidal cycle. Collect and analyze copper, lead, and silver concentrations from at least one round of samples at key locations within the potable water system. Summarize all data required under Task A in a written report of findings and submit for Regional Water Board staff review.	January 1, 2011
B	Complete a comprehensive inventory of potential copper, lead, and silver sources on campus. Develop a workplan and implementation schedule for Regional Water Board staff concurrence to conduct monitoring of identified potential sources.	April 1, 2011
C	Submit a written report, including a map, descriptive summary of findings, and actions proposed to reduce/eliminate identified sources. The source reduction action plan shall include verification monitoring and a proposed implementation schedule.	March 1, 2012
D	If compliance with final effluent limitations is not achieved through implementation of source control measures, prepare and submit a Feasibility Study for Regional Water Board staff approval. In addition to other measures, the Feasibility Study may include a workplan to conduct a translator study and/or a water effects ratio study.	December 1, 2012
E	The Discharger shall achieve compliance with final copper, lead, and silver effluent limitations at the earliest possible date, and no later than December 1, 2013.	December 1, 2013

- The Discharger shall comply with the following interim effluent limitations for copper, lead, and silver in the interim period established by this Order for the Discharger to reach compliance with final effluent limitations set forth in Order No. R1-2010-0003:

Interim Effluent Limitations for Discharge Point 001

Parameter	Units	Maximum Daily Effluent Limitation
Copper	µg/L	21
Lead	µg/L	1.0
Silver	µg/L	1.9

- In the interim period for the Discharger to achieve full compliance with Order No. R1-2010-0003, the Discharger 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. R1-2010-0003 or any future waste discharge requirements issued for the WWTF.

4. If the Discharger is unable to perform any activity or submit any documentation in compliance with the deadlines set forth in Requirements above, the Discharger may request, in writing, that the Regional Water Board grant an extension of the time. The extension request shall include justification for the delay and shall be submitted at least seven days prior to the respective deadline to be considered timely. An extension may be granted by the Regional Water Board Executive Officer for good cause, in which case this Order will be accordingly revised in writing.
5. If the Executive Officer of the Regional Water Board finds that the Discharger 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, Catherine Kuhlman, 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 October 28, 2010.

Catherine Kuhlman
Executive Officer