

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

TIME SCHEDULE ORDER R5-2011-0054

REQUIRING THE BEAR VALLEY WATER DISTRICT
WASTEWATER TREATMENT PLANT
ALPINE COUNTY
TO COMPLY WITH REQUIREMENTS PRESCRIBED IN ORDER R5-2011-0053
(NPDES PERMIT NO. CA0085146)

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Central Valley Water Board) finds that:

1. On 4 August 2011, the Central Valley Water Board adopted Waste Discharge Requirements (WDR) Order R5-2011-0053, prescribing waste discharge requirements for the Bear Valley Water District (hereafter Discharger), Wastewater Treatment Plant (hereafter Facility) in Alpine County.
2. WDR Order R5-2011-0053 section IV.A.1.a contains Final Effluent Limitations for Discharge Point 001 which read, in part, as follows:

Table 6. Final Effluent Limitations

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Priority Pollutants						
Copper, Total Recoverable	µg/L	0.56	--	1.1	--	--
Lead, Total Recoverable	µg/L	0.082	--	0.16	--	--

3. The effluent limitations at Discharge Point 001 specified in Order R5-2011-0053 for copper and lead are based on implementation of the California Toxics Rule (CTR). The effluent limitations for lead are new limitations that were not prescribed in previous WDR Order R5-2005-0139, adopted by the Central Valley Water Board on 20 October 2005. The effluent limitations for copper are more stringent than those required in Order R5-2005-0139.
4. California Water Code (CWC) section 13300 states: *"Whenever a regional board finds that a discharge of waste is taking place or threatening to take place that violates or will violate requirements prescribed by the regional board, or the state board, or that the waste collection, treatment, or disposal facilities of a discharger are approaching capacity, the board may require the discharger to submit for approval of the board, with such modifications as it may deem necessary, a detailed time schedule of specific actions the discharger shall take in order to correct or prevent a violation of requirements."*
5. Federal regulations, 40 CFR 122.44 (d)(1)(i), require that NPDES permit effluent limitations must control all pollutants which are or may be discharged at a level which will

cause or have the reasonable potential to cause or contribute to an in-stream excursion above any State water quality standard, including any narrative criteria for water quality. Beneficial uses, together with their corresponding water quality objectives or promulgated water quality criteria, can be defined per federal regulations as water quality standards.

6. In accordance with CWC section 13385(j)(3), the Central Valley Water Board finds that, based upon results of effluent monitoring, the Discharger is not able to consistently comply with the new effluent limitations for copper and lead at Discharge Point 001. These limitations are based on new requirements that become applicable to the Order after the effective date of the waste discharge requirements, and after 1 July 2000, for which new or modified control measures are necessary in order to comply with the limitation, and the new or modified control measures cannot be designed, installed, and put into operation within 30 calendar days.
7. Immediate compliance with the new effluent limitations for copper and lead at Discharge Point 001 are not possible or practicable. The Clean Water Act and the California Water Code authorize time schedules for achieving compliance. The Discharger indicated that additional time is required to comply with the final effluent limitations for copper and lead and requested a compliance schedule in their 28 April 2011 infeasibility report. The Discharger proposes to conduct further study and monitoring to determine the potential sources of copper and lead, prior to identifying the appropriate compliance project. This Order requires the Discharger to: (1) collect two years of data to provide sufficient information regarding concentration variability, and (2) submit a method of compliance by January 2014. This schedule allows for 30 months after this January 2014 date for the Discharger to implement its compliance project and comply with final effluent limitations. This time schedule is as short as possible due to the need of further data collection to determine the necessary treatment/control measures. The Central Valley Water Board is providing no later than 1 August 2016 for the Discharger to comply with the final effluent limitations for copper and lead at Discharge Point 001.
8. This Order provides a time schedule for the Discharger to develop, submit, and implement methods of compliance, including developing and implementing pollution prevention activities or constructing necessary treatment facilities to meet these new effluent limitations.
9. CWC sections 13385(h) and (i) require the Central Valley Water Board to impose mandatory minimum penalties upon dischargers that violate certain effluent limitations. CWC section 13385(j)(3) exempts certain violations from the mandatory minimum penalties, *"where the waste discharge is in compliance with either a cease and desist order issued pursuant to Section 13301 or a time schedule order issued pursuant to Section 13300, if all the [specified] requirements are met."*
10. Compliance with this Order exempts the Discharger from mandatory penalties for violations of effluent limitations at Discharge Point 001 for copper and lead only, in accordance with CWC section 13385(j)(3). CWC section 13385(j)(3) requires the Discharger to prepare and implement a pollution prevention plan pursuant to section 13263.3 of the California Water Code. Therefore, a pollution prevention plan will be

necessary for copper and lead in order to effectively reduce the effluent concentrations by source control measures.

11. Since the time schedule for completion of action necessary to bring the waste discharge into compliance exceeds 1 year, this Order includes interim requirements and dates for their achievement. The time schedule does not exceed 5 years.

The compliance time schedule in this Order includes interim performance-based effluent limitations for copper and lead at Discharge Point 001. The interim effluent limitations consist of a maximum daily and average monthly effluent concentration derived using sample data provided by the Discharger. For copper there were sufficient data to conduct a statistical analysis to develop a performance-based effluent limit. In developing the interim limitations for copper, where there were 10 sampling data points, sampling and laboratory variability was accounted for by establishing interim limits that are based on normally distributed data where 99.9 percent and 95 percent of the data points lie within 3.3 standard deviations of the mean for the maximum daily concentration and 2.0 standard deviations of the mean for the monthly average concentration (*Basic Statistical Methods for Engineers and Scientists, Kennedy and Neville, Harper and Row, 3rd Edition, January 1986*). For lead, however, there was only one data point, so a statistical evaluation could not be conducted to calculate a performance-based effluent limit. Consequently, a maximum daily effluent limit equivalent to the CTR acute criterion has been established for lead to ensure the discharge does not cause acutely toxic conditions in the receiving water. Based on the lowest observed receiving water hardness of 10 mg/L as CaCO₃, the CTR acute criterion is 4.4 µg/L. The interim maximum daily effluent limitations for lead have been established equivalent to the CTR acute criterion.

The following tables summarize the calculations of the interim performance-based effluent limitations at Discharge Point 001:

Interim Effluent Limitation Calculation Summary for Discharge Point 001

Parameter	Units	MEC	Mean	Std. Dev.	# of Samples	Interim Average Monthly Effluent Limitation	Interim Maximum Daily Effluent Limitation
Copper, Total Recoverable	µg/L	5.6	2.5	2.0	10	6.5	9.1
Lead, Total Recoverable	µg/L	0.1	--	--	1	4.4 ¹	4.4 ¹

¹ Based on CTR acute criterion for lead using a hardness of 10 mg/L as CaCO₃.

12. The Central Valley Water Board finds that the Discharger can, in addition to other treatment and control options, undertake source control to maintain compliance with the interim limitation included in this Order. Interim limitations are established when compliance with the final effluent limitations cannot be achieved by the existing discharge. Discharge of constituents in concentrations in excess of the final effluent limitations, but in compliance with the interim effluent limitations, can significantly degrade water quality and adversely affect the beneficial uses of the receiving stream on a long-term basis. The interim limitation, however, establishes an enforceable ceiling concentration until compliance with the effluent limitations can be achieved.

13. On 4 August 2011, in Rancho Cordova, California, after due notice to the Discharger and all other affected persons, the Central Valley Water Board conducted a public hearing at which evidence was received to consider a Time Schedule Order under CWC section 13300 to establish a time schedule to achieve compliance with waste discharge requirements.
14. Issuance of this Order is exempt from the provisions of the California Environmental Quality Act (Public Resources Code section 21000, et seq.), in accordance with CWC section 15321 (a)(2), Title 14, California Code of Regulations.
15. Any person adversely affected by this action of the Central Valley Water Board may petition the State Water Resources Control Board to review this action. The petition must be received by the State Water Resources Control Board, Office of the Chief Counsel, P.O. Box 100, Sacramento, CA 95812-0100, within 30 days of the date on which this action was taken. Copies of the law and regulations applicable to filing petitions will be provided on request.

IT IS HEREBY ORDERED THAT:

1. The Discharger shall comply with the following time schedule to ensure compliance with copper and lead effluent limitations at Discharge Point 001 at section IV.A.1.a, contained in WDR Order R5-2011-0053 as described in the above Findings.

<u>Task</u>	<u>Date Due</u>
i. Submit and Implement Pollution Prevention Plan (PPP) ¹ for Copper and Lead	Within 1 year after adoption of this Order
ii. Submit report summarizing additional data collection and effluent and receiving water characterization for lead and copper	1 October 2013
iii. Progress Reports ³	1 August , annually, after Order adoption until final compliance
iv. Submit Method of Compliance Workplan/Schedule ²	1 January 2014
v. Full Compliance	1 August 2016

¹ The PPP for copper and lead shall be prepared and implemented in accordance with CWC section 13263.3(d)(3).

² The workplan/schedule shall indicate whether collection of data performed under Task ii show that treatment plant upgrades, diffuser installation, performing a mixing zone study, water effects ratio study, and/or metal translator study are necessary to comply with effluent limitations and the preferred method of achieving compliance.

³ The progress reports shall detail what steps have been implemented towards achieving compliance with waste discharge requirements, including studies, construction progress, evaluation of measures implemented, and recommendations for additional measures as necessary to achieve full compliance by the final compliance date.

2. The following interim effluent limitations shall be effective immediately. The interim effluent limitations at Discharge Point 001 for copper and lead shall be effective up through 1 August 2016, or when the Discharger is able to come into compliance with final effluent limitations, whichever is sooner:

Parameter	Units	Average Monthly Effluent Limitation	Maximum Daily Effluent Limitation
Copper, Total Recoverable	µg/L	6.5	9.1
Lead, Total Recoverable	µg/L	4.4	4.4

3. For the compliance schedule required by this Order, the Discharger shall submit to the Central Valley Water Board on or before each compliance report due date, the specified document or, if appropriate, a written report detailing compliance or noncompliance with the specific schedule date and task. If noncompliance is being reported, the reasons for such noncompliance shall be stated, and shall include an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Central Valley Water Board by letter when it returns to compliance with the time schedule.
4. If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may apply to the Attorney General for judicial enforcement. If compliance with these effluent limitations is not achieved by the full compliance date, the discharge would not be exempt from the mandatory minimum penalties for violation of certain effluent limitations, and would be subject to issuance of a Cease and Desist Order in accordance with CWC section 13301.

I, PAMELA C. CREEDON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 4 August 2011.

Original Signed By

PAMELA C. CREEDON, Executive Officer