

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

TIME SCHEDULE ORDER NO. R5-2009-0005

REQUIRING THE  
NEVADA COUNTY SANITATION DISTRICT NO. 1  
LAKE WILDWOOD WASTEWATER TREATMENT PLANT  
NEVADA COUNTY

TO COMPLY WITH REQUIREMENTS PRESCRIBED IN ORDER NO. R5-2009-0004  
NPDES PERMIT NO. CA0077828

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

1. On 5 February 2009, the Regional Water Board adopted Waste Discharge Requirements (WDR) Order No. R5-2009-0004, prescribing waste discharge requirements for Nevada County Sanitation District No. 1, (hereafter Discharger), Lake Wildwood Wastewater Treatment Plant (hereafter Facility), Nevada County.
2. WDR Order No. R5-2009-0004, contains Final Effluent Limitations IV.A.1.a, which reads in part as follows:

Tables 6. Effluent Limitations

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Dibromochloromethane <sup>2</sup>	µg/L	0.41	--	0.82	--	--
Dichlorobromomethane <sup>2</sup>	µg/L	0.56	--	1.12	--	--

<sup>2</sup> These effluent limitations are in effect until the Discharger submits written certification that a chlorine-based disinfection system is no longer in use and chlorine containing chemicals are not added to the treatment process for wastewater discharge to surface waters.

3. The effluent limitations specified in Order No. R5-2009-0004 for dibromochloromethane and dichlorobromomethane are based on implementation of the California Toxics Rule. The effluent limitations for dibromochloromethane and dichlorobromomethane are new limitations which were not prescribed in previous WDR Order No. R5-2002-0093, adopted by the Regional Water Board on 7 June 2002.
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 at 40 CFR section 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 used, 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 Regional Water Board finds that, based on the results of effluent monitoring, the Discharger is not able to consistently comply with the new effluent limitations for dibromochloromethane and dichlorobromomethane. These limitations are new requirements that become applicable to the Discharger after the effective date of adoption 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 with 30 calendar days.
7. The Discharger is not able to immediately comply with the new effluent limitations for dibromochloromethane and dichlorobromomethane. Dibromochloromethane and dichlorobromomethane are byproducts produced as a result of chlorine currently utilized by the Discharger for disinfection of wastewater. The Clean Water Act and the California Water Code authorize time schedules for achieving compliance. The Discharger has indicated in its Revised Infeasibility Report submitted 1 August 2008, that additional time is necessary to comply with final effluent limitations for dibromochloromethane and dichlorobromomethane. The Discharger anticipates that the addition of ultraviolet (UV) disinfection and the elimination of chlorine in its treatment process will be necessary to comply with the new effluent limitations. However, the new or modified disinfection system cannot be designed, installed and placed into operation until December 2012. The Discharger is requesting an additional 9 months after completion of the UV system for the treatment processes to be optimized and to verify compliance. Therefore, the Regional Water Board is providing until **30 September 2013** for the Discharger to complete construction of the new disinfection system, evaluate and optimize performance of the UV system, and to verify compliance with the final effluent limitations for dibromochloromethane and dichlorobromomethane.

8. This Order provides a time schedule for the Discharger to develop, submit, and implement methods of compliance, including constructing necessary treatment facilities to meet these new limitations.
9. California Water Code (CWC) Section 13385(h) and (i) require the Regional Board to impose mandatory minimum penalties upon dischargers that violate certain effluent limitations. CWC Section 13385(j)(3) exempts certain violations from mandatory 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 for dibromochloromethane and dichlorobromomethane 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 CWC. The formation of the chlorine disinfection byproducts will be prevented with the elimination of chlorine and installation of a UV disinfection system proposed by the Discharger in the 1 August 2008 Revised Infeasibility Report. No additional pollution prevention measures or source control measures are available to prevent dibromochloromethane and dichlorobromomethane in the effluent. Therefore, the Regional Water Board has determined that another pollution prevention plan is not required and the Discharger has met the requirements of 13263.3 of the CWC.
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 interim limitations for dibromochloromethane and dichlorobromomethane in this Order are based on the current treatment plant performance. The interim effluent limitations consist of a maximum daily effluent concentration derived using sample data provided by the Discharger. In developing the interim limitation, where there are ten sampling data points or more, sampling and laboratory variability is accounted for by establishing interim limits that are based on normally distributed data where 99.9% of the data points will lie within 3.3 standard deviations of the mean (*Basic Statistical Methods for Engineers and Scientists, Kennedy and Neville, Harper and Row, 3<sup>rd</sup> Edition January 1986*). Therefore, the interim limitations in this Order are established as the mean plus 3.3 standard deviations of the available data.

In developing the interim limitations, when there are less than ten sampling data points available, the *Technical Support Document for Water Quality-based Toxics Control* [(EPA/505/2-90-001), TSD] recommends a coefficient of variation of 0.6 be utilized as representative of wastewater effluent sampling. The TSD recognizes that a minimum of ten data points is necessary to conduct a valid statistical analysis. The

multipliers contained in Table 5-2 of the TSD are used to determine a maximum daily limitation based on a long-term average objective. In this case, the long-term average objective is to maintain, at a minimum, the current plant performance level. Therefore, when there are less than ten sampling points for a constituent, an interim limitation is based on 3.11 times the maximum observed effluent concentration to obtain the daily maximum interim limitation (TSD, Table 5-2).

The following table summarizes the calculations of the interim performance-based effluent limitations for dibromochloromethane and dichlorobromomethane:

**Interim Effluent Limitation Calculation Summary**

Parameter	MEC (µg/L)	Mean (µg/L)	Std. Dev.	Number of Samples	Interim Limitation (µg/L)
Dibromochloromethane	1.2	0.39	0.40	7	3.73
Dichlorobromomethane	14.6	7.64	4.24	7	45.41

12. The Regional Water Board finds that the Discharger can maintain compliance with the interim limitations included in this Order with existing chlorine disinfection practices. Interim limitations are established when compliance with 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 limitations, however, establish an enforceable ceiling concentration until compliance with the effluent limitation can be achieved.
13. On 5 February 2009 in Rancho Cordova, California, after due notice to the Discharger and all other affected persons, the Regional 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 13389 and Section 15321(a)(2), Title 14, California Code of Regulations.
15. Any person adversely affected by this action of the Regional 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 in which the 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 dibromochloromethane and dichlorobromomethane effluent limitations at Sections IV.A.1.a, contained in WDR Order No. R5-2009-0004 as described in the above findings.

<b>Task</b>	<b>Compliance Date</b>
A. Submit Workplan/Schedule for construction of UV disinfection system.	<b>Within 6 months</b> following Order adoption
B. Submit Construction Progress Reports <sup>1</sup>	<b>Quarterly</b> following submittal of construction schedule.
C. Notification of Completion of Construction and Initiation of Operation	<b>1 January 2013</b>
E. Full compliance with dibromochloromethane and dichlorobromomethane effluent limitations	<b>30 September 2013</b>

<sup>1</sup> 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 date.

2. The following interim effluent limitations shall be effective immediately, and shall remain in effect through **30 September 2013**, or when the Discharger is able to come into compliance with the final effluent limitations, whichever is sooner.

<b>Parameter</b>	<b>Units</b>	<b>Maximum Daily Effluent Limitation</b>
Dibromochloromethane	(µg/L)	3.73
Dichlorobromomethane	(µg/L)	45.41

3. For the compliance schedule required by this Order, the Discharger shall submit to the Regional 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 as estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Regional 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 effluent limitations contained in (WDR) Order No. R5-2009-0004 is not achieved by the full compliance date, the discharge would not be exempt from the mandatory minimum penalties for violation of effluent

limitations, and would be subject to issuance of a Cease and Desist Order in accordance with CWC section 13001.

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 5 February 2009.

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PAMELA C. CREEDON, Executive Officer