

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

TIME SCHEDULE ORDER R5-2012-0073

REQUIRING THE MOUNTAIN HOUSE COMMUNITY SERVICES DISTRICT  
MOUNTAIN HOUSE WASTEWATER TREATMENT PLANT  
SAN JOAQUIN COUNTY  
TO COMPLY WITH REQUIREMENTS PRESCRIBED IN ORDER NO. R5-2007-0039  
(NPDES PERMIT NO. CA0084271)

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

1. On 4 May 2007, the Central Valley Water Board adopted Waste Discharge Requirements (WDR) Order R5-2007-0039 and Time Schedule Order (TSO) R5-2007-0040, prescribing waste discharge requirements and compliance time schedules, for the Mountain House Community Services District (hereafter Discharger) Mountain House Wastewater Treatment Facility (hereafter Facility), in San Joaquin County. TSO R5-2007-0040 provided time schedules for compliance with the effluent limitations for group A pesticides, cyanide, bis(2-ethylhexyl)phthalate, and iron.
2. On 3 November 2008, the Discharger requested a time schedule for compliance with the effluent limitations for dibromochloromethane, dichlorobromomethane, and total trihalomethanes. On 9 February 2009, the Central Valley Water Board adopted TSO R5-2009-0013, which replaced TSO R5-2007-0040, by adding a compliance schedule and interim effluent limitations for dibromochloromethane, dichlorobromomethane, and total trihalomethanes. The time schedules for compliance for group A pesticides, cyanide, bis(2-ethylhexyl)phthalate, and iron were no longer needed and not included in TSO R5-2009-0013.
3. WDR Order R5-2007-0039, contains Final Effluent Limitations IV.A.1.a., which reads, in part, as follows:

**Table 1: Final Effluent Limitations**

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Dichlorobromomethane	µg/L	0.56	--	1.1	--	--
Dibromochloromethane	µg/L	0.41	--	0.82	--	--

**Need for Time Schedule Extension and Legal Basis**

4. The Facility provides tertiary treated effluent that is filtered and then undergoes ultraviolet light (UV) disinfection. Although the Facility does not use chlorine, the Discharger cannot comply with the effluent limitations for the disinfection byproducts, dibromochloromethane or dichlorobromomethane due to the formation of these compounds at the Mountain House Water Treatment Plant (MHWTP). The Discharger has requested a mixing zone for human

health criteria for the upcoming NPDES permit renewal that would resolve the issue with compliance with the effluent limits for dibromochloromethane and dichlorobromomethane. Renewal of the waste discharge requirements is expected at the end of 2012, however, the existing compliance schedule expires on 30 August 2012. In the event a mixing zone is not approved by the Board, the Discharger has also evaluated the possibility of using chloramine disinfection at the MHWTP that may reduce trihalomethanes sufficiently to meet the existing end-of-pipe effluent limits for dibromochloromethane and dichlorobromomethane. The Discharger has proposed a schedule to achieve compliance with the final effluent limitations for dibromochloromethane and dichlorobromomethane by **23 June 2017**.

5. On 27 April 2012, the Discharger submitted an infeasibility analysis and request for additional time to comply with the final effluent limitations for dibromochloromethane and dichlorobromomethane.

### **Mandatory Minimum Penalties**

6. California Water Code (CWC) sections 13385(h) and (i) require the Central Valley Water Board to impose mandatory minimum penalties (MMP's) upon dischargers that violate certain effluent limitations. CWC section 13385(j)(3) exempts the discharge from MMP's, *"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 or 13308, if all the [specified] requirements are met...for the purposes of this subdivision, the time schedule may not exceed five years in length..."*.
7. Per the requirements of CWC section 13385(j)(3), the Central Valley Water Board finds that:
  - a. This Order specifies the actions that the Discharger is required to take in order to correct the violations that would otherwise be subject to CWC section 13385(h) and (i).
  - b. To comply with final effluent limitations, the Discharger has determined that an additional five years is necessary to 1) consider the use of chloramines residual in the water supply to reduce potential trihalomethane loading to the Facility and 2) investigate opportunities for Facility optimization and treatment to reduce trihalomethanes.
  - c. This Order establishes a time schedule to bring 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.
8. The final effluent limitations for dichlorobromomethane and dibromochloromethane became applicable to the waste discharge on the effective date of WDR Order R5-2007-0039 (23 June 2007). TSO R5-2009-0013 provided protection from MMP's from 5 February 2009 to 30 August 2012 for violations of effluent limitations for dichlorobromomethane and dibromochloromethane.

9. By statute, a Cease and Desist Order or Time Schedule Order may provide protection from MMP's for no more than five years, except as provided in CWC section 13385(j)(3)(C)(ii).
10. Per the requirements of CWC Section 13385(j)(3)(C)(ii)(I) for the purpose of treatment facility upgrade, the time schedule shall not exceed 10 years. Per the requirements of 13385(j)(3)(C)(ii)(II) following a public hearing, and upon a showing that the Discharger is making diligent progress toward bringing the waste discharge into compliance with the effluent limitation, the Central Valley Water Board may extend the time schedule for an additional five years, if the Discharger demonstrates that the additional time is necessary to comply with the effluent limitation. In accordance with CWC Section 13385(j)(3)(C)(ii)(I) the total length of the compliance schedules is less than ten years. The Central Valley Water Board finds, as described in previous findings in this Order, that the Discharger has demonstrated due diligence and is making diligent progress to bring the waste discharge into compliance with final effluent limitations for dichlorobromomethane and dibromochloromethane contained in WDR Order R5-2007-0039.
11. Compliance with this Order exempts the Discharger from MMP's for violations of the final effluent limitations for dichlorobromomethane and dibromochloromethane from the date of this Order until **23 June 2017**.
12. If an interim effluent limit contained in this Order is exceeded, then the Discharger is subject to MMPs for that particular exceedance as it will no longer meet the exemption in CWC Section 13385(j)(3).
13. In accordance with CWC section 13385(j)(3), the total length of protection from MMP's for dichlorobromomethane and dibromochloromethane does not exceed ten years from the date the effluent limits became applicable to the waste discharge.
14. This Order provides a time schedule for completing the actions necessary to ensure compliance with the final effluent limitations for dichlorobromomethane and dibromochloromethane contained in WDR Order R5-2007-0039. Since the time schedule for completion of actions necessary to bring the waste discharge into compliance exceeds one year, this Order includes interim effluent limitations and interim requirements and dates for their achievement.
15. This Order includes performance-based interim effluent limitations for dichlorobromomethane and dibromochloromethane. The interim average monthly effluent limitations (AMEL) consist of the maximum effluent concentration derived using sample data provided by the Discharger. In developing the interim limitations, 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 or log-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*). Performance-based effluent limitations were calculated for dichlorobromomethane and dibromochloromethane by plotting the data to determine normality for non-transformed and log-normal transformed data sets. The 99.9<sup>th</sup> percentile was determined from the best fit

data set (log-normal) and represents the AMEL for dichlorobromomethane and dibromochloromethane. Interim maximum daily effluent limitations (MDEL) were also calculated using the MDEL/AMEL multiplier from Table 2 of the SIP<sup>1</sup> to convert the AMEL to a MDEL.

Parameter	Units	# of Samples	MEC	Mean (ln x)	Std. Dev. (ln sd)	AMEL <sup>1</sup>	MDEL <sup>2</sup>
dichlorobromomethane	µg/L	51	3.14	-0.60	0.56	3.5	5.9
dibromochloromethane	µg/L	51	2.58	-0.79	0.72	5.0	8.3

<sup>1</sup> AMEL calculated as 99.9<sup>th</sup> percentile (i.e., mean + 3.3 x standard deviation).

<sup>2</sup> MDEL calculated as the AMEL x MDEL/AMEL multiplier (Table 2 of SIP)

16. The Central Valley Water Board finds that the Discharger can maintain compliance with the interim effluent limitations included in this Order. Interim effluent limitations are established when compliance with the final effluent limitations cannot be achieved by the existing Facility. 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 effluent limitations, however, establish an enforceable ceiling concentration until compliance with the final effluent limitation can be achieved.

### Other Regulatory Requirements

17. 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.”*
18. CWC section 13267 states in part: *In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.*

<sup>1</sup> Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP), State Water Resources Control Board (February 2005)

19. The Discharger owns and operates the treatment facility which is subject to this Order. The technical and monitoring reports required by this Order are necessary to determine compliance with the WDRs and with this Order.
20. Issuance of this Order is exempt from the provisions of the California Environmental Quality Act (Pub. Resources Code, § 21000 et seq.) (“CEQA”) pursuant to CWC section 13389, since the adoption or modification of a NPDES permit for an existing source is statutorily exempt and this Order only serves to implement a NPDES permit. (*Pacific Water Conditioning Ass’n, Inc. v. City Council of City of Riverside* (1977) 73 Cal.App.3d 546, 555-556.).
21. On 2 August 2012, 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 this Cease and Desist Order under CWC section 13301 to establish a time schedule to achieve compliance with waste discharge requirements.

**IT IS HEREBY ORDERED THAT:**

1. Time Schedule Order R5-2009-0013 is rescinded upon the effective date of this Order except for enforcement purposes.
2. Pursuant to CWC Section 13300 and 13267, the Discharger shall comply with the following time schedule to ensure completion of the compliance project described in Finding 7b, above:

Task	Compliance Date
<p><b>Submit Work Plan and schedule for compliance with the final effluent limitations for dibromochloromethane and dichlorobromomethane.</b> The work plan shall include the tasks the Discharger will take to implement chloramine disinfection and evaluate treatment modifications to comply with the final effluent limits for dibromochloromethane and dichlorobromomethane.</p>	<p><b>1 April 2013</b></p>
<p><b>Submit and implement a Pollution Prevention Plan (PPP) for dibromochloromethane and dichlorobromomethane.</b> The PPP shall meet the requirements specified in CWC Section 13263.3(d)(3).</p>	<p><b>1 April 2013</b></p>
<p><b>Water supply chloramine residual public notice/education.</b> Submit proof of posting and education documentation.</p>	<p><b>30 June 2013</b></p>
<p><b>Implement chloramine disinfection system.</b> Submit notice of completion of project to install chloramine disinfection system at the MHWTP.</p>	<p><b>1 July 2013</b></p>
<p><b>Evaluation of water supply chloramine disinfection.</b> Conduct MHWTP influent and effluent monitoring of dibromochloromethane and dichlorobromomethane and submit results of evaluation with Annual Progress Report. The Annual Progress Report shall indicate if additional measures are needed for full compliance.</p>	<p><b>31 August 2014</b></p>

Task	Compliance Date
<b>Facility operations and treatment evaluation.</b> If the chloramine disinfection project does not result in full compliance, submit evaluation for Facility operations and treatment to reduce dibromochloromethane and dichlorobromomethane further to meet the final effluent limitations.	<b>30 December 2014</b>
<b>Facility Modifications.</b> Implement Facility modifications identified in the evaluation and submit report of compliance.	<b>23 June 2017</b>
<b>Submit Annual Progress Reports.</b> The annual progress reports shall document the steps taken to comply with the final effluent limits for dibromochloromethane and dichlorobromomethane and with this Order. The reports shall describe the completion of tasks, evaluation of the effectiveness of the implemented measures, and an assessment of whether additional measures are necessary to meet the final compliance date.	<b>31 August 2013, 31 August 2014, 31 August 2015, 31 August 2016</b>
<b>Comply with Final Effluent Limitations for dibromochloromethane and dichlorobromomethane</b>	<b>23 June 2017</b>

2. The following interim effluent limitations for dichlorobromomethane and dibromochloromethane shall be effective upon adoption of this Order. The Discharger shall maintain compliance with the following interim effluent limitations through **23 June 2017**, or when the Discharger is able to come into compliance with the final effluent limitations shown in Finding 2, whichever is sooner.

Constituent	Units	Interim Effluent Limit	
		Average Monthly	Maximum Daily
Dichlorobromomethane	µg/L	3.5	5.9
Dibromochloromethane	µg/L	5.0	8.3

3. Any person signing a document submitted under this Order shall make the following certification:

*“I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my knowledge and on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.”*

If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement, may issue a complaint for administrative civil liability, or may take other enforcement actions. Failure to comply with this Order or with the WDRs may result in the assessment of Administrative Civil Liability of up to \$10,000 per violation, per day, depending on the violation, pursuant to the CWC, including sections 13268, 13350 and 13385. The Central Valley Water Board reserves its right to take any enforcement actions authorized by law.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with CWC section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:

[http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality](http://www.waterboards.ca.gov/public_notices/petitions/water_quality)

or will be provided upon request.

I, PAMELA C. CREEDON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order signed by the Executive Officer of the California Regional Water Quality Control Board, Central Valley Region, on **3 August 2012**.

*Original Signed By*

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PAMELA C. CREEDON, Executive Officer