

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

ORDER NO. R5-2009-0037

AMENDING WASTE DISCHARGE REQUIREMENTS  
ORDER NO. R5-2008-0108 (NPDES PERMIT NO. CA0079588)

CITY OF RIO VISTA  
RIO VISTA BEACH WASTEWATER TREATMENT PLANT  
SOLANO COUNTY

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

1. On 31 July 2008, the Regional Water Board adopted Waste Discharge Requirements Order No. R5-2008-0108, prescribing waste discharge requirements for the City of Rio Vista, Rio Vista Beach Wastewater Treatment Plant, Solano County. For the purposes of this Order, the City of Rio Vista is hereafter referred to as "Discharger" and the Beach Wastewater Treatment Plant is hereafter referred to as "Facility."
2. The Facility provides sewerage service for the City of Rio Vista community and serves a population of approximately 4,500 people. The Facility discharges up to 0.65 million gallons per day (mgd) of secondary level treated effluent to the Sacramento River, a water of the United States, within Sacramento-San Joaquin Delta. The effluent is chlorinated and dechlorinated prior to discharge to the Sacramento River.
3. Order No. R5-2008-0108 includes maximum daily effluent limitations (MDELs) for dibromochloromethane and dichlorobromomethane, of 2.8 µg/L and 5.6 µg/L, respectively. The Sacramento River, under the worst-case conditions provides a minimum dilution of 1,000 to 1 for human health criteria. Using this allowed dilution credit result in water quality-based effluent limits for dibromochloromethane and dichlorobromomethane of 463 µg/L and 724 µg/L as MDELs, respectively. The Regional Water Board found, however, that allowing these effluent limits could result in allocating an unnecessarily large portion of the receiving water's assimilative capacity and could violate the Anti-degradation Policy. Therefore, more stringent performance-based effluent limits were required in Order No. R5-2008-0108, which were developed based on past performance of the Facility.
5. Based on the effluent data collected by the Discharger since the permit took effect, the effluent concentrations of dibromochloromethane and dichlorobromomethane have consistently exceeded the final effluent limits. The Discharger's initial investigation of sample sites and sample collection indicate that the samples collected prior to adoption of Order No. R5-2008-0108 are not representative of the current discharge. Therefore, the Discharger believes that the Facility will continue to be in violation of the effluent limits.

6. The Discharger, by letter dated 5 December 2008, requested that the effluent limitations for dibromochloromethane and dichlorobromomethane be recalculated based on more recent data. The Discharger also requested that the monitoring frequencies for dibromochloromethane and dichlorobromomethane be reduced from once per month to once per quarter.
7. Modifying the effluent limitations for dibromochloromethane and dichlorobromomethane based on recent facility performance result in effluent limitations that are substantially less than WQBELs calculated using allowable dilution. Therefore, the Regional Water Board finds that the requested modifications to the effluent limits are reasonable and justified. In addition, due to the low risk posed by these two pollutants, considering the substantial dilution in the receiving water, the Discharger's request for the reduction in the monitoring frequencies is also justified.
8. This Order amends Order No. R5-2008-0108 by relaxing the effluent limitations for dibromochloromethane and dichlorobromomethane and reducing the effluent monitoring frequencies for these two constituents from monthly to quarterly. The relaxation of the effluent limitations is based on new information and is consistent with the anti-backsliding requirements of the Clean Water Act and federal regulations. The relaxation of the effluent limitations is consistent with the antidegradation provisions of 40 CFR 131.12 and State Water Resources Control Board Resolution 68-16. Any impact on existing water quality will be insignificant and will be limited to the existing mixing zone. The change in effluent monitoring frequency is not considered backsliding according to the Clean Water Act and federal regulations.
9. 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.
10. The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to amend Waste Discharge Requirements and the Monitoring Program Requirements for this discharge and has provided them with an opportunity to submit their written views and recommendations.
11. Any person adversely affected by this action of the 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:**

Waste Discharge Requirements Order No. R5-2008-0108 (NPDES No. CA0079588) is amended solely to modify the effluent limitations for dibromochloromethane and dichlorobromomethane and the monitoring frequencies for these constituents. Order No. R5-2008-0108 shall be amended as follows.

1. Limitations and Discharge Specifications, Effluent Limitations, IV.A.1.a, Table 6, is amended as follows:

**Table 6. Effluent Limitations**

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Dibromochloromethane	µg/L	--	--	<del>2-8</del> 41	--	--
Dichlorobromomethane	µg/L	--	--	<del>5-6</del> 38	--	--

These modifications to the effluent limitations for Dibromochloromethane and Dichlorobromomethane are also made in the Fact Sheet (Attachment F), Table F-16.

2. The Fact Sheet (Attachment F), Section IV.C.3.m, Determining the Need for WQBELs for Dibromochloromethane, is amended as follows:
  - m. **Dibromochloromethane.** The CTR includes a dibromochloromethane criterion of 0.41 µg/L for the protection of human health and is based on a one-in-a-million cancer risk for waters from which both water and organisms are consumed. The MEC for dibromochloromethane was ~~0-9~~ 29 µg/L, based on ~~five ten~~ samples collected between ~~January 2002 and September 2004~~ September 2008 and January 2009, while the upstream receiving water dibromochloromethane concentration was not detected based on four samples collected between January 2002 and December 2002. Therefore, the discharge has a reasonable potential to cause or contribute to an in-stream excursion above the CTR criterion for dibromochloromethane.

The maximum ambient background dibromochloromethane concentration is less than the applicable criteria, therefore, the receiving water has assimilative capacity for dibromochloromethane. As described in Section IV.C.2.c. of this Fact Sheet, a dilution credit of up to 1000:1 may be allowed for CTR human health criteria, which results in an AMEL and MDEL for dibromochloromethane of 230 µg/L and 463 µg/L, respectively. However, the Regional Water Board finds that granting of this dilution credit could allocate an unnecessarily large portion of the receiving water's assimilative capacity for dibromochloromethane and could violate the Antidegradation Policy. For this reason, a more stringent performance-based effluent limitation is included in this order that is calculated in the same way that interim limits are calculated (see Section IV.E.1 below). A MDEL for dibromochloromethane of ~~2-8~~ 41 µg/L is included in this Order.

3. The Fact Sheet (Attachment F), Section IV.C.3.n., Determining the Need for WQBELs for Dichlorobromomethane, is amended as follows:

- n. **Dichlorobromomethane.** The CTR includes a dichlorobromomethane criterion of 0.56 µg/L for the protection of human health and is based on a one-in-a-million cancer risk for waters from which both water and organisms are consumed. The MEC for dichlorobromomethane was ~~1.8~~ 29 µg/L, based on ~~five~~ ten samples collected between ~~January 2002 and September 2004~~ September 2008 and January 2009, while the upstream receiving water dichlorobromomethane concentration was not detected based on four samples collected between January 2002 and December 2002. Therefore, the discharge has a reasonable potential to cause or contribute to an in-stream excursion above the CTR criterion for dichlorobromomethane.

The maximum ambient background dichlorobromomethane concentration is less than the applicable criteria, therefore, the receiving water has assimilative capacity for dichlorobromomethane. As described in Section IV.C.2.c. of this Fact Sheet, a dilution credit of up to 1000:1 may be allowed for CTR human health criteria, which results in an AMEL and MDEL for dichlorobromomethane of 360 µg/L and 724 µg/L, respectively. However, the Regional Water Board finds that granting of this dilution credit could allocate an unnecessarily large portion of the receiving water's assimilative capacity for dichlorobromomethane and could violate the Antidegradation Policy. For this reason, a more stringent performance-based effluent limitation is included in this order that is calculated in the same way that interim limits are calculated (see Section IV.E.1 below). A MDEL for dichlorobromomethane of ~~5.6~~ 38 µg/L is included in this Order.

4. The Fact Sheet (Attachment F), Table F-17, is amended as follows:

**Table F-17. Performance-based Effluent Limitation Calculation Summary**

Parameter	Unit	MEC	Mean	Std. Dev.	# of Samples	Performance-based Limit
Dibromochloromethane	µg/L	<del>0.9</del> 29	<del>-13.4</del>	<del>-8.42</del>	<del>5</del> 10	<del>2.8</del> 41
Dichlorobromomethane	µg/L	<del>1.8</del> 29	<del>-16.1</del>	<del>-6.73</del>	<del>5</del> 10	<del>5.6</del> 38

5. The Monitoring and Reporting Program (Attachment E), Section IV.A, Table E-3, Effluent Monitoring Requirement, is amended are as follows:

**A. Monitoring Location EFF-001**

**Table E-3. Effluent Monitoring**

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Dibromochloromethane	µg/L	Grab	<del>1/month</del> 1/quarter	1
Dichlorobromomethane	µg/L	Grab	<del>1/month</del> 1/quarter	1

6. Attachment G, Table for Summary of Reasonable Potential Analysis, is amended as follows:

**ATTACHMENT G - SUMMARY OF REASONABLE POTENTIAL ANALYSIS**

Constituent	Units	MEC	B	C	CMC	CCC	Water & Org	Org. Only	Basin Plan	MCL	Reasonable Potential
Dibromochloromethane	µg/L	<del>0.9</del> 29	ND	0.41	--	--	0.41	--	--	100	Yes
Dichlorobromomethane	µg/L	<del>1.8</del> 29	ND	0.56	--	--	0.56	--	--	80	Yes

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 **24 April 2009**.

Original Signed by

PAMELA C, CREEDON, Executive Officer