

**California Regional Water Quality Control Board
San Francisco Bay Region**

Order No. R2-2016-0019

**Rescission of Cease and Desist Order No. R2-2010-0107 and
Amendment of Cease and Desist Order No. R2-2014-0043
for the City of Calistoga
Dunaweal Wastewater Treatment Plant
Calistoga, Napa County**

WHEREAS the California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter “Regional Water Board”), finds that:

Background

1. The City of Calistoga (Discharger) owns and operates the Dunaweal Wastewater Treatment Plant located at 1100 Dunaweal Lane, Calistoga. The plant treats domestic, commercial, and industrial wastewater from Calistoga. It has a dry weather design capacity of 0.84 million gallons per day (MGD).
2. On April 13, 2016, the Regional Water Board adopted Order No. R2-2016-0018, which reissued NPDES Permit No. CA0037966 (Permit) regulating the plant’s discharges to the Napa River. Order No. R2-2016-0018 (the 2016 Permit) rescinded Order No. R2-2010-0104 (the 2010 Permit), under which the Regional Water Board had previously issued the Permit.
3. For Discharge Point No. 001, the 2016 Permit established essentially the same discharge prohibitions as the 2010 Permit, and identical limits on chlorodibromomethane, dichlorobromomethane, and antimony. The 2016 Permit added Discharge Point No. 003 and applied these same discharge prohibitions and limits as those for Discharge Point No. 001. The 2016 Permit established separate discharge prohibitions and less stringent limits for Discharge Point No. 002. The Discharger is expected to be able to comply with these new limits.
4. The 2016 Permit also permitted the Discharger to reconstruct a former Napa River discharge point, Discharge Point No. 003; added an associated Monitoring Location, EFF-003; and renamed previous Monitoring Location EFF-003 to REC-001.

Chlorodibromomethane and Dichlorobromomethane

5. On September 8, 2010, the Regional Water Board adopted Cease and Desist Order (CDO) No. R2-2010-0107 (the 2010 CDO), which established tasks and a time schedule for the Discharger to comply with the chlorodibromomethane and dichlorobromomethane effluent limits in the 2010 Permit by August 31, 2014. The 2010 CDO also required the Discharger to propose tasks and a time schedule to comply as soon as possible if the Discharger failed to fully comply by that date.

6. On August 31, 2014, the Discharger reported compliance with the chlorodibromomethane and dichlorobromomethane effluent limits at Discharge Point No. 001, but not at Discharge Point No. 002. The Discharger had taken the following actions under the 2010 CDO to comply with the effluent limits:
 - a. Operated the four Riverside Ponds in series, increasing retention time and THM removal.
 - b. Reduced the chlorine residual used to meet bacteria limits.
 - c. Installed a low-energy mixer in Riverside Pond 4.
7. On December 29, 2014, the Discharger submitted tasks and a time schedule to comply with the chlorodibromomethane and dichlorobromomethane effluent limits at Discharge Point No. 002 by November 1, 2015.
8. Since August 31, 2014, the Discharger has exceeded the dichlorobromomethane average monthly limit of 4.9 µg/L twice and the maximum daily limit of 9.0 µg/L once at Discharge Point No. 001 (based on one sample in January 2015 and one sample in December 2015). Therefore, further measures to control chlorodibromomethane and dichlorobromomethane at Discharge Point No. 001 are necessary.
9. The Discharger has completed the following additional tasks to comply with the chlorodibromomethane and dichlorobromomethane effluent limits at Discharge Point Nos. 001 and 002 since about December 2014:
 - a. Added two recirculating sump pumps to Riverside Pond 2 to increase aeration and remove some chlorodibromomethane and dichlorobromomethane.
 - b. Modified treatment operations to further reduce the amount of chlorine added during treatment processes.
 - c. Re-plumbed the 20-million-gallon tertiary effluent storage pond to allow recirculation (by turning over water) and provide aeration (by spraying recirculated effluent back into the pond).
10. Due to low river flows, there were no discharges from Discharge Point No. 001 from February 2015 through November 2015, nor from Discharge Point No. 002 from December 2014 through December 2015. Thus, sufficient effluent data are not available to evaluate the effectiveness of the additional tasks implemented.
11. Discharges from Discharge Point No. 003 would not flow through the Riverside Ponds; therefore, the 2016 Permit's authorization of Discharge Point No. 003 is contingent upon chlorodibromomethane and dichlorobromomethane treatment sufficient to ensure compliance with Permit limits.

Antimony

12. On November 12, 2014, the Regional Water Board adopted CDO No. R2-2014-0043 (the 2014 CDO), which established tasks and a time schedule for the Discharger to (a) comply with the 2010 Permit prohibitions against discharges to the Napa River when the river flow-

to-effluent flow ratio is insufficient to provide adequate dilution and (b) comply with antimony effluent limits.

13. The 2014 CDO addresses Discharge Point Nos. 001 and 002 but does not address newly authorized Discharge Point No. 003; discharges from Discharge Point No. 003 present the same threat to violate Permit discharge prohibitions and antimony limits as the discharges from Discharge Point No. 001. Use of Discharge Point No. 003 provides the Discharger with a new option for compliance with the 2010 Permit prohibitions against discharge without a sufficient river flow-to-effluent flow ratio.

Purpose of this Order

14. This Order amends the 2014 CDO to do the following:
 - a. Expand its reach to also require compliance at Discharge Point No. 003 for antimony and the prohibition requiring sufficient river flow-to-effluent flow.
 - b. Remove requirements related to antimony, chlorodibromomethane, and dichlorobromomethane at Discharge Point No. 002.
 - c. Incorporate new tasks to address continued threatened violations of chlorodibromomethane and dichlorobromomethane effluent limitations because violations in December 2014 and January and December 2015 show that there is still a threat to violate the effluent limitations for those pollutants at Discharge Point Nos. 001 and 003.
 - d. Clarify language pertaining to mandatory minimum penalties (not a substantive change).
15. This Order rescinds the 2010 CDO because this Order requires additional tasks to comply with the chlorodibromomethane and dichlorobromomethane limits through amendments to the 2014 CDO.

IT IS HEREBY ORDERED, pursuant to the provisions of California Water Code Division 7 and regulations adopted thereunder, and the provisions of the federal Clean Water Act and regulations and guidelines adopted thereunder, that Order No. R2-2010-0107 is rescinded upon the effective date of this Order, except for enforcement purposes, and the Discharger shall comply with Cease and Desist Order No. R2-2014-0043 as amended by this Order. Amended provisions of Cease and Desist Order No. R2-2014-0043 are shown with underline for additions and ~~striketrough~~ for deletions. Changes to previous revisions are shown in double-underline and double striketrough.

1. Provision 1 is amended as follows:

1. **Interim Effluent Limitation and Requirements.** The Discharger shall comply with the following interim effluent limitation and requirements at Discharge Point Nos. 001 and 003:
 - a. The Discharger shall comply with an interim antimony MDEL of 43 µg/L. Compliance shall be measured at Monitoring Locations EFF-001, and 002, and 003 when discharging directly to the Napa River and at Monitoring Location ~~EFF-003~~ REC-001 when bypassing in accordance with

provision 1.b, below. Monitoring Locations EFF-001 through, EFF-003, and REC-001 are described in Permit Attachment E.

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2. Table 3 is added as follows:

Table 3
Time Schedule and Prescribed Actions to Comply with Permit Chlorodibromomethane and Dichlorobromomethane Effluent Limits

<u>Task</u>	<u>Compliance Date</u>
<p>a. <u>Submit a Source Identification and Control Plan for Chlorodibromomethane and Dichlorobromomethane (THMs):</u> Submit a source identification and control plan to identify and reduce THM sources and comply with Permit chlorodibromomethane and dichlorobromomethane limitations. The plan shall update and expand source control activities conducted from 2006 to 2008, include completion dates, and describe efforts to complete, at a minimum, the following:</p> <ol style="list-style-type: none"> 1. <u>Identification and estimation of loading from THM sources and potential sources in plant influent, including sampling the drinking water distribution system, wastewater collection system, and plant influent.</u> 2. <u>Analysis of methods to prevent THM formation and discharges from identified sources.</u> 3. <u>Estimation of potential load reductions attainable through the methods identified in Task "a.2."</u> 4. <u>Plan for evaluating the results of the source control plan.</u> 5. <u>Description of the tasks, costs, and time required to investigate and implement the various elements of the source identification and control program.</u> 	<p><u>May 1, 2016</u></p>
<p>b. <u>Submit THMs Source Inventory and Implement THMs Control Plan:</u> Submit an inventory of potential THM sources and begin implementation of the plan developed in Task "a" to reduce THM loads.</p>	<p><u>July 1, 2016</u></p>
<p>c. <u>Implement additional in-plant controls:</u> Implement additional in-plant controls such as additional mixers, aerators, and spray monitors in the clearwell and effluent storage ponds to improve THM destruction during storage.</p>	<p><u>September 1, 2016</u></p>
<p>d. <u>Submit Additional Actions Plan:</u> If by November December 1, 2016, data continue to show violations or threatened violations of Permit chlorodibromomethane or dichlorobromomethane limits, submit a process control study plan to evaluate plant treatment practices, determine how and where THMs are created and destroyed, and identify methods to reduce THM formation. At a minimum, the plan shall include sampling between treatment processes and before and after effluent storage to represent the hydraulic residence time through the plant.</p>	<p><u>January 12, 2017</u></p>
<p>e. <u>Implement Additional Actions Plan:</u> Begin implementation of the plan required in Task "d."</p>	<p><u>March 1, 2017</u></p>
<p>f. <u>Disinfection Alternatives Plan:</u> If by June July 1, 2017, data continue to show violations or threatened violations of Permit chlorodibromomethane and dichlorobromomethane limits, submit a plan to develop and implement alternative disinfection practices. The plan shall include, at a minimum, bench-scale or pilot study testing of alternative disinfection chemicals and evaluation of alternate dosing locations to maintain chlorine residual for recycled water.</p>	<p><u>September 1, 2017</u></p>

<u>Task</u>	<u>Compliance Date</u>
g. Implement Disinfection Alternatives Plan: <u>Submit a report identifying the chosen disinfection alternatives and begin implementation.</u>	<u>November 1, 2017</u>
h. Report on Progress: <u>Continue to implement the plans described in Tasks “b,” “e,” and “g,” and submit monthly status reports that evaluate their effectiveness. Reports shall determine whether the plans have brought the discharge into compliance with Permit chlorodibromomethane and dichlorobromomethane limits. If not, the Discharger shall identify in these reports additional measures to further reduce THM discharges and implement them.</u>	<u>With monthly self-monitoring reports starting with the report due July 30, 2016</u>
i. Comply with Permit THM limits: <u>Submit documentation confirming complete implementation of the plans required by Task “b” and, if necessary, Tasks “e” and “g,” and comply with Permit chlorodibromomethane and dichlorobromomethane effluent limitations.</u>	<u>December 1, 2017</u>

3. Provision 6 is amended as follows:

6. Mandatory Minimum Penalties. Violations of the Permit’s antimony effluent limitations shall not be subject to the mandatory minimum penalties required by Water Code sections 13385(h) and (i) as long as the Discharger complies with the numeric and narrative antimony requirements of this Order.

If the Discharger fails to comply with ~~this Order, including, but not limited to,~~ the numeric interim effluent limitation specified in Provision 1 at Discharge Point Nos. 001 or 003, or any narrative antimony requirement (e.g., those in Table 2), the Discharger shall be subject to mandatory minimum penalties for all Permit violations at Discharge Point Nos. 001 and 003 for the entire calendar month during which the non-compliance occurs. If the Discharger returns to compliance, Permit violations shall again not be subject to mandatory minimum penalties as of the first day of the month following the return to full compliance.

4. This Order shall be effective immediately upon Regional Water Board adoption.

I, Bruce H. Wolfe, 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, San Francisco Bay Region, on April 13, 2016.

BRUCE H. WOLFE
Executive Officer