

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

CEASE AND DESIST ORDER R5-2014-0044
REQUIRING
DONNER SUMMIT PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT
NEVADA COUNTY

TO COMPLY WITH WASTE DISCHARGE REQUIREMENTS PRESCRIBED
IN ORDER R5-2009-0034 AND SUBSEQUENTLY ADOPTED ORDERS
(NPDES PERMIT NO. CA0081621)

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

1. On 6 June 2002, the Central Valley Water Board adopted Waste Discharge Requirements (WDRs) Order R5-2002-0088 (NPDES No. CA0081621), and Cease and Desist Order (CDO) R5-2002-0089 for Donner Summit Public Utility District (hereafter Discharger) Wastewater Treatment Plant (hereinafter Facility). CDO R5-2002-0089 included a compliance time schedule for the Discharger to meet effluent limitations contained in WDR Order R5-2002-0088 for ammonia and nitrate, with final compliance due on 1 April 2007.
2. WDR Order R5-2002-0088 included final limits for ammonia and nitrate as contained in Effluent Limitations section B.1, which reads, in part, as follows:

Constituent	Units	30-Day Average	1-Hour Average
Ammonia	mg/L	Attachment C [Floating Limits]	Attachment D [Floating Limits]
Nitrate (as N)	mg/L	10	--
	lbs/day	43	--

3. On 24 April 2009, the Central Valley Water Board adopted WDR Order R5-2009-0034 rescinding WDR Order R5-2002-0088 and CDO R5-2002-0089, and renewing waste discharge requirements for the Discharger.
4. WDR Order R5-2009-0034 contains Final Effluent Limitations IV.A.1., which reads, in part, as follows. Note, for ammonia, the final limits contained in WDR Order R5-2009-0034 are new and more stringent than the ammonia limits previously contained in WDR Order R5-2002-0088:

Table 6. Final Effluent Limitations

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Aluminum	µg/L	71	--	143	--	--
Ammonia (as N)	mg/L	2.1	--	5.6	--	--

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Copper, Total Recoverable	µg/L	1.5	--	3.1	--	--
Cyanide	µg/L	4.3	--	8.5	--	--
Dichlorobromomethane	µg/L	0.56	--	1.2	--	--
Nitrate (as N)	mg/L	10	--	--	--	--
	lbs/day ¹	43	--	--	--	--
Silver	µg/L	--	--	--	--	0.23
Zinc, Total Recoverable	µg/L	15	--	30	--	--

1. Based on the regulated average dry weather flow of 0.52 mgd.

h. Manganese. The annual average manganese concentration in the effluent shall not exceed 50 µg/L on a calendar year basis.

5. WDR Order R5-2009-0034 contains Interim Effluent Limitations IV.A.2, which reads, in part, as follows:

Table 7. Interim Effluent Limitations

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Aluminum	µg/L	--	--	1930	--	--

6. The interim effluent limitation for aluminum in WDR Order R5-2009-0034 expires on 1 April 2014, and the final effluent limitations for aluminum become effective 2 April 2014.
7. On 24 April 2009, the Central Valley Water Board also adopted a new CDO R5-2009-0035 for the Discharger. CDO R5-2009-0035 included a compliance time schedule and interim effluent limitations for the Discharger to meet effluent limitations contained in WDR Order R5-2009-0034 for ammonia, copper, cyanide, dichlorobromomethane, manganese, nitrate, silver, and zinc, with final compliance due on 24 April 2014. However, CDO R5-2009-0035 did not provide protection from mandatory minimum penalties (MMPs) for nitrate since the previous CDO R5-2002-0089 already provided MMP protection for nitrate for almost five years.

Need for Time Schedule Extension and Legal Basis

8. In September 2008, the Discharger submitted justification for a compliance schedule for copper, cyanide, dichlorobromomethane, manganese, silver, and zinc. CDO R5-2009-0035 included a time schedule requiring full compliance with the final effluent limitations for these constituents by 24 April 2014. The Discharger’s submittals included: (a) documentation that diligent efforts have been made to quantify pollutant levels in the discharge and the sources of the pollutant in the waste stream; (b) documentation of source control measures and/or pollution minimization efforts currently underway or completed; and (c) a proposal for additional or future source control measures, pollutant minimization actions, or waste

treatment (i.e., Facility upgrades) with projected time schedules to achieve compliance with final effluent limitations. The Discharger indicated that public outreach, receiving water studies, potential process improvements, additional source control measures, and site-specific translators and/or water effect ratios (for copper and zinc) may be required in order to comply with final effluent limitations, and therefore, the Central Valley Water Board provided up to 5 years for compliance with a compliance due date of 24 April 2014.

9. In July 2009, the Discharger submitted a Pollution Prevention Plan (PPP) for ammonia, copper, cyanide, dichlorobromomethane, manganese, nitrate, silver, and zinc as required by CDO R5-2009-0035. In the PPP, the Discharger identified domestic and light commercial users, the potable water supply and distribution system, infiltration and inflow (I&I) and the chlorine disinfection system as the main sources of these constituents in the influent and the discharge. The PPP also identified potential source control measures for these constituents.

In the PPP, no significant sources of copper, silver, and zinc were identified in the service area, therefore, these three constituents will be studied further to develop site-specific water quality objectives. In the PPP, the source of manganese is thought to be from naturally occurring deposits which may enter the system from I&I into the collection system. The Discharger proposed to evaluate monitoring data to determine if elevated manganese levels are seasonal, and thus, occurs due to I&I. In the PPP, the potential sources of cyanide were identified as improperly disposed rodent poison and as a byproduct of the chlorine disinfection system. The source of dichlorobromomethane is from the chlorine disinfection system. Ammonia and nitrate are intrinsic to domestic wastewater and the PPP concluded that a major wastewater treatment plant upgrade is required to comply with the final effluent limitations, which will likely benefit other constituents as well.

10. In November 2009, the Discharger submitted a PPP work plan and time schedule for aluminum as required by WDR Order R5-2009-0034. The PPP work plan indicated that the major source of aluminum was in the drinking water supply. It was unknown as to whether the source of most of the aluminum was as naturally occurring in the raw drinking water supply or if significant aluminum was added during treatment at the drinking water treatment plant. In December 2009, the Discharger submitted a treatment feasibility study for aluminum as required by WDR Order R5-2009-0034. The feasibility study identified two strategies to consider in order to comply with the final aluminum effluent limitations by 1 April 2014. The two strategies to consider, either separately or in combination, are: 1) source control measures, and 2) develop site-specific water quality objectives.
11. On 13 August 2010, the Discharger received approval of the PPPs for aluminum, ammonia, copper, cyanide, dichlorobromomethane, manganese, nitrate, silver, and zinc from the Central Valley Water Board Executive Officer.
12. The Discharger began construction on major facility upgrades in August 2012 in order to comply with final effluent limitations contained in WDR Order R5-2009-0034. The major facility upgrade project includes new influent flow equalization storage to control seasonal flow surges, new headworks and screening, lime addition equipment to control pH and reduce salinity, conversion of the existing activated sludge process to a membrane

bioreactor process, improved filtration, and conversion from chlorine to ultraviolet light disinfection. The capital costs of this project were estimated at approximately 19 million dollars. The major facility upgrade project demonstrates the Discharger's diligent efforts toward compliance with the final effluent limitations. Past financing delays and the short construction season at the Facility have contributed to the Discharger being unable to meet the 24 April 2014 compliance deadline. The construction project is approximately 63% complete. The Discharger requires additional time to complete construction of the major facility upgrade project and to start up the new facilities.

Mandatory Minimum Penalties

13. California Water Code (Water Code) sections 13385(h) and (i) require the Central Valley Water Board to impose MMPs upon dischargers that violate certain effluent limitations. Water Code section 13385(j)(3) exempts the discharge from 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 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..."*
14. Per the requirements of Water Code 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 Water Code section 13385(h) and (i).
 - b. To comply with final effluent limitations for ammonia, cyanide, dichlorobromomethane, manganese, nitrate, and silver the Discharger is constructing a Facility Upgrade and Expansion Project. Construction of the project began in August 2012 and is expected to be completed in December 2014. The Discharger has requested additional time to comply with final effluent limitations in order to finish construction of the upgrade and expansion project and time to start-up the new facilities, in particular, the membrane bioreactor process. Due to the extreme cold weather during the winter months, and the variable loading conditions due to the seasonal nature of the influent flow, the biological processes may require several months to obtain a steady-state operation.
 - c. To comply with final effluent limitations for aluminum, copper, and zinc the Discharger is constructing a Facility Upgrade and Expansion Project, however, this project alone may not be enough to comply with final effluent limitations. Therefore, the Discharger has requested additional time following the completion of the upgrade and expansion project in order to collect data, assess compliance, and conduct site-specific studies as necessary.
 - d. This Order establishes time schedules to bring the waste discharge into compliance with the final 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 final

effluent limitations. 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.

15. By statute, a Cease and Desist Order or Time Schedule Order may provide protection from MMPs for no more than five years.
16. Per the requirements of Water Code Section 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 beyond the initial five years, if the Discharger demonstrates that the additional time is necessary to comply with the effluent limitation.
17. Compliance with this Order exempts the Discharger from MMPs for violations of the final effluent limitations found in WDR Order R5-2009-0034, or subsequently adopted WDR Order, as follows:
 - a. Aluminum: WDR Order R5-2009-0034 contained an interim effluent limitation for aluminum that expires 1 April 2014. This Order provides protection for aluminum from MMPs, which have not been previously provided, from 28 March 2014 until 31 December 2017.
 - b. Ammonia: Previous CDO R5-2002-0089 provided protection for ammonia from MMPs from 6 June 2002 until 1 April 2007. Previous CDO R5-2009-0035 provided protection for the more stringent ammonia limits from MMPs from 24 April 2009 until 23 April 2014. This Order provides protection from MMPs for additional time, as allowed by Water Code Section 13385(j)(3)(C)(ii)(II), from 28 March 2014 until 1 April 2016.
 - c. Copper: Previous CDO R5-2009-0035 provided protection for copper from MMPs from 24 April 2009 until 23 April 2014. This Order provides protection from MMPs for additional time, as allowed by Water Code Section 13385(j)(3)(C)(ii)(II), from 28 March 2014 until 31 December 2017.
 - d. Cyanide: Previous CDO R5-2009-0035 provided protection for cyanide from MMPs from 24 April 2009 until 23 April 2014. This Order provides protection from MMPs for additional time, as allowed by Water Code Section 13385(j)(3)(C)(ii)(II), from 28 March 2014 until 1 April 2016.
 - e. Dichlorobromomethane: Previous CDO R5-2009-0035 provided protection for dichlorobromomethane from MMPs from 24 April 2009 until 23 April 2014. This Order provides protection from MMPs for additional time, as allowed by Water Code Section 13385(j)(3)(C)(ii)(II), from 28 March 2014 until 1 April 2016.

- f. Manganese: Previous CDO R5-2009-0035 provided protection for manganese from MMPs from 24 April 2009 until 23 April 2014. This Order provides protection from MMPs for additional time, as allowed by Water Code Section 13385(j)(3)(C)(ii)(II), from 28 March 2014 until 1 April 2016.
 - g. Nitrate: Previous CDO R5-2002-0089 provided protection for nitrate from MMPs from 6 June 2002 until 1 April 2007; additional MMP protection was not provided for nitrate in any subsequent Order. The Discharger has not been able to comply with the final nitrate effluent limitation in WDR Order R5-2009-0034. Therefore, in accordance with Water Code Section 13385(j)(3)(C)(ii)(II), this Order provides protection from MMPs for additional time, from 28 March 2014 until 1 April 2016.
 - h. Silver: Previous CDO R5-2009-0035 provided protection for silver from MMPs from 24 April 2009 until 23 April 2014. This Order provides protection from MMPs for additional time, as allowed by Water Code Section 13385(j)(3)(C)(ii)(II), from 28 March 2014 until 1 April 2016.
 - i. Zinc: Previous CDO R5-2009-0035 provided protection for zinc from MMPs from 24 April 2009 until 23 April 2014. This Order provides protection from MMPs for additional time, as allowed by Water Code Section 13385(j)(3)(C)(ii)(II), from 28 March 2014 until 31 December 2017.
18. In accordance with Water Code section 13385(j)(3), the total length of protection from MMPs for aluminum, ammonia, copper, cyanide, dichlorobromomethane, manganese, nitrate, silver, and zinc does not exceed ten years from the date the effluent limitations became applicable to the waste discharge.
19. The previously established interim effluent limitations for aluminum, ammonia, copper, cyanide, dichlorobromomethane, manganese, nitrate, silver, and zinc are based on the treatment plant performance and are carried forward in this Order as interim average monthly effluent limitations. New interim maximum daily effluent limitations for these constituents, calculated using the MDEL/AMEL multiplier from the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (SIP), section 1.4, Table 2, were added to this Order.
20. 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.
21. 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 Water

Code 13385(j)(3). It is the intent of the Central Valley Water Board that a violation of an interim monthly effluent limitation subjects the Discharger to only one MMP for that monthly averaging period. In addition, a violation of an interim daily maximum effluent limit subjects the Discharger to one MMP for the day in which the sample was collected.

Other Regulatory Requirements

22. California Water Code section 13301 states:
“When a regional board finds that a discharge of waste is taking place or threatening to take place in violation of requirements or discharge prohibitions prescribed by the regional board or the state board, the board may issue an order to cease and desist and direct that those persons not complying with the requirements or discharge prohibitions (a) comply forthwith, (b) comply in accordance with a time schedule set by the board, or (c) in the event of a threatened violation, take appropriate remedial or preventive action.”
23. California Water Code 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.*
24. The Discharger owns and operates the wastewater treatment facility which is subject to this Order. The technical and monitoring reports required by this Order are necessary to determine compliance with the requirements in WDR Order R5-2009-0034 and with this Order.
25. Issuance of this Order is exempt from the provisions of the California Environmental Quality Act (Pub. Resources Code, § 21000 et seq.) (“CEQA”) pursuant to Water Code 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. Discharger Council of Discharger of Riverside* (1977) 73 Cal.App.3d 546, 555-556.). Issuance of this Order is also exempt from the provisions of CEQA in accordance with California Code of Regulations, title 14, section 15321, subdivision (a)(2).
26. On 28 March 2014, 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 Water Code section

13301 to establish a time schedule to achieve compliance with waste discharge requirements.

IT IS HEREBY ORDERED THAT:

Cease and Desist Order R5-2009-0035 is rescinded, except for enforcement purposes, and, pursuant to Water Code Sections 13301 and 13267:

1. The Discharger shall comply with the following time schedule to submit reports and ensure completion of the compliance projects described in Findings 12 and 14.c, above:

Task	Compliance Date
Submit documentation that the construction of the facility upgrade and expansion project has been completed.	31 December 2014
Submit documentation that the new Facility is in full operation.	28 February 2015
Evaluate Facility data during climatic and wastewater loading seasonality's.	1 March 2016
Submit documentation that the discharge fully complies with the final effluent limitations for ammonia, cyanide, dichlorobromomethane, manganese, nitrate, and silver; or submit workplan proposing additional operational changes and proposed compliance date.	1 April 2016
Submit documentation that the discharge is able to comply with the final effluent limitations for aluminum, copper, and zinc; or submit Facility improvements and site-specific water quality study work plans for aluminum, copper, and zinc, and proposed time schedules.	1 May 2016
Submit documentation that the discharge fully complies with the final effluent limitations for aluminum, copper, and zinc.	31 December 2017

2. The following interim effluent limitations shall be effective 28 March 2014 through 31 March 2016:

Parameter	Units	Average Monthly	Maximum Daily
Ammonia (as N)	mg/L	39	105
Cyanide	µg/L	103	208
Dichlorobromomethane	µg/L	5.7	12
Manganese	µg/L	275	553
Nitrate (as N)	mg/L	53	148
Silver	µg/L	0.81	1.7

3. The following interim effluent limitations shall be effective 28 March 2014 through 30 December 2017, or when the Discharger is able to come into compliance, whichever is sooner:

Parameter	Units	Average Monthly	Maximum Daily
Copper, Total Recoverable	µg/L	24	49
Zinc, Total Recoverable	µg/L	96	193
Aluminum	µg/L	1930	3880

4. 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.”

5. In accordance with California Business and Professions Code sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments shall be performed by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities. All technical reports specified herein that contain work plans, that describe the conduct of investigations and studies, or that contain technical conclusions and recommendations concerning engineering and geology shall be prepared by or under the direction of appropriately qualified professional(s), even if not explicitly stated. Each technical report submitted by the Discharger shall contain the professional's signature and/or stamp of the seal.

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 Water Code, 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 Water Code 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
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 adopted by the California Regional Water Quality Control Board, Central Valley Region, on 28 March 2014.

Original Signed By

PAMELA C. CREEDON, Executive Officer