# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

# TIME SCHEDULE ORDER R5-2021-0034

# REQUIRING DONNER SUMMIT PUBLIC UTILITY DISTRICT WASTEWATER TREATMENT PLANT NEVADA COUNTY

TO COMPLY WITH WASTE DISCHARGE REQUIREMENTS PRESCRIBED IN ORDER R5-2021-0023

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

PERMIT CA0081621

# **FINDINGS**

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

- 1. Donner Summit Public Utility District (Discharger) owns and operates the Wastewater Treatment Plant (Facility). The Facility discharges up to 0.52 million gallons per day (mgd) of disinfected tertiary treated municipal wastewater to the South Yuba River, a water of the United States.
- 2. On **22 April 2021**, the Central Valley Water Board adopted Waste Discharge Requirements (WDR) Order R5-2021-0023, NPDES Permit CA0081621, which includes final effluent limitations, in part, for copper, lead, nickel, silver, and zinc.
- 3. WDR Order R5-2021-0023 section IV.A.1.a, Table 4, includes Final Effluent Limitations at Discharge Point 001, as shown in part as follows:

**Table 4. Effluent Limitations** 

Parameter	Units	Average Monthly Effluent Limitations	Maximum Daily Effluent Limitations
Copper, Total Recoverable	micrograms per liter (µg/L)	6.0	18
Lead, Total Recoverable	µg/L	0.72	1.5
Nickel, Total Recoverable	μg/L	22	43
Silver, Total Recoverable	μg/L	0.23	0.45
Zinc, Total Recoverable	μg/L	30	60

# **NEED FOR TIME SCHEDULE AND LEGAL BASIS**

- 4. On 18 February 2021 the Discharger submitted an infeasibility analysis supporting the request for additional time to comply with the existing final effluent limitations for copper, lead, nickel, silver, and zinc in WDR Order R5-2021-0023. For compliance with the final effluent limitations for copper, lead, nickel, silver, and zinc, the Discharger has requested time to develop and implement pollution prevention practices, finish design, installation, and calibration of the new facilities, and complete the final compliance report.
- 5. The Discharger cannot consistently comply with the copper, lead, nickel, silver, and zinc final effluent limitations in WDR Order R5-2021-0023 and must implement additional actions to reach compliance. This Order contains a time schedule for compliance with final effluent limitations, sets interim limitations for certain constituents, and is intended to provide protection from mandatory minimum penalties (MMPs) for these constituents.

# MANDATORY MINIMUM PENALTIES

- 6. California Water Code (CWC) section 13385, subdivisions (h) and (i), requires the Central Valley Water Board to impose MMPs upon dischargers that violate certain effluent limitations. CWC section 13385(j)(3) exempts discharges from these MMPs:
  - ... 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:
  - 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 proposed that approximately two and a half years is necessary to complete necessary upgrades to the Facility. In 2014, the Discharger completed a major Facility upgrade which included a lime-feed system to increase alkalinity and improve ammonia removal. The lime-feed system continuously had operational issues with clogged feed lines and pumping equipment; therefore, the lime-feed system has been out of operation for periods of the time between 2014 and 2020. The Discharger abandoned the original unreliable lime-feed system in 2020 and began installation and pilot testing of a new lime-slurry feed system. The Discharger requested additional time to allow for design completion, procurement, and installation of the project, refining the operational parameters

of the system, and submittal of the final compliance report. The Discharger has been working toward compliance, but additional time is necessary to comply with the new final effluent limitations.

- c. The final effluent limitations for copper, lead, nickel, silver, and zinc are new, more stringent, or modified regulatory requirements that became applicable to the waste discharge after the effective date of Order R5-2021-0023 and after 1 July 2000. New or modified control measures are necessary in order to comply with the final effluent limitations for copper, lead, nickel, silver, and zinc. The new or modified control measures cannot be designed, installed, and put into operation within 30 calendar days.
- d. 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. By statute, a Cease and Desist Order (CDO) or Time Schedule Order (TSO) may provide protection from MMPs for up to five years. However, Water Code section 13385, subdivision (j)(3)(C)(ii)(II), authorizes the Central Valley Water Board to grant an additional five years if the Board finds, following a public hearing, that a Discharger is making diligent progress towards bringing the waste discharge into compliance and that the additional time is necessary to comply with the effluent limitations. The Central Valley Water Board finds that the Discharger has demonstrated due diligence and is making diligent progress to bring the waste discharge into compliance with final effluent limitations, as described in previous findings in this TSO.
- 9. Compliance with this Order exempts the Discharger from MMPs for violations of the final effluent limitations for copper, lead, nickel, silver, and zinc found in WDR Order R5-2021-0023 as follows:
  - a. **Copper.** The total protection provided for copper from MMPs from previous orders is 8 years and 228 days:
    - <u>24 April 2009 through 27 March 2014:</u> Previous Cease and Desist Order (CDO) R5-2009-0035 provided protection for copper from MMPs for violation of final effluent limitations contained in WDR Order R5-2009-0034 from 24 April 2009 through 23 April 2014.
    - 28 March 2014 through 7 December 2017: On 28 March 2014, previous CDO R5-2014-0044 rescinded CDO R5-2009-0035 and provided protection for copper from MMPs for violation of final effluent limitations contained in WDR Order R5-2009-0034 and subsequent WDR Order R5-2015-0068 from 28 March 2014 through 30 December 2017. On 8 December 2017, WDR Order R5-2015-0068 was amended to remove final effluent limitations for copper.

This TSO provides protection for copper from MMPs for violation of final effluent limitations contained in WDR Order R5-2021-0023, as allowed by Water Code section 13385(j)(3)(C)(ii)(II), from 1 June 2021 through 22 October 2022.

- b. **Lead.** This TSO provides protection for lead from MMPs for violation of final effluent limitations contained in WDR Order R5-2021-0023, which have not been previously provided, from 1 June 2021 through 30 October 2023.
- c. **Nickel.** This TSO provides protection for nickel from MMPs for violation of final effluent limitations contained in WDR Order R5-2021-0023, which have not been previously provided, from 1 June 2021 until 30 October 2023.
- d. **Silver.** The total protection provided for silver from MMPs from previous orders is 6 years and 343 days:
  - 24 April 2009 through 27 March 2014: Previous CDO R5-2009-0035 provided protection for silver from MMPs for violation of final effluent limitations contained in WDR Order R5-2009-0034 from 24 April 2009 through 23 April 2014.
  - <u>28 March 2014 through 31 March 2016</u>: On 28 March 2014, previous CDO R5-2014-0044 rescinded CDO R5-2009-0035 and provided protection for silver from MMPs for violation of final effluent limitations contained in WDR Order R5-2009-0034 and subsequent orders from 28 March 2014 through 31 March 2016. Effective on 1 August 2015, WDR Order R5-2015-0068 rescinded WDR Order R5-2009-0034 and did not include final effluent limitations for silver.

This TSO provides protection for silver from MMPs for violation of final effluent limitations contained in WDR Order R5-2021-0023, as allowed by Water Code section 13385(j)(3)(C)(ii)(II), from 1 June 2021 through 30 October 2023.

- e. **Zinc.** The total protection provided for zinc from MMPs from previous orders is 6 years and 343 days:
  - 24 April 2009 through 27 March 2014: Previous CDO R5-2009-0035 provided protection for zinc from MMPs for violation of final effluent limitations contained in WDR Order R5-2009-0034 from 24 April 2009 through 23 April 2014.
  - <u>28 March 2014 through 30 December 2017:</u> On 28 March 2014, previous CDO R5-2014-0044 rescinded CDO R5-2009-0035 and provided protection for zinc from MMPs for violation of final effluent limitations contained in WDR Order R5-2009-0034 and subsequent orders from 28 March 2014 through 30 December 2017. Effective on 1 August 2015, WDR Order R5-2015-0068 rescinded WDR Order R5-2009-0034 and did not include final effluent limitations for zinc.

This TSO provides protection for zinc from MMPs for violation of final effluent limitations contained in WDR Order R5-2021-0023, as allowed by Water Code section 13385(j)(3)(C)(ii)(II), from 1 June 2021 through 30 October 2023.

- 10. This Order provides a time schedule for completing the actions necessary to ensure compliance with the final effluent limitations for copper, lead, nickel, silver, and zinc contained in WDR Order R5-2021-0023. 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.
- 11. This Order includes performance-based interim effluent limitations for copper, lead, nickel, silver, and zinc. The calculated interim effluent limitations are based on the current treatment plant performance. In developing effluent limitations, U.S. EPA has developed a statistical approach in which the estimated maximum effluent concentration (MEC) is calculated as the upper bound of the log normal distribution of effluent concentrations at a high confidence level. Using Table 3-1 Reasonable Potential Multiplying Factors: 99% Confidence Level and 99% Probability Basis, in USEPA's Technical Support Document For Water Quality-Based Toxics Control, March 1991, (EPA/505/2-90-001) (TSD), the interim performance-based average monthly effluent limitations (AMELs) in this Order are established as the estimated MEC determined through the above-mentioned method. The interim performancebased maximum daily effluent limitation (MDEL) in this Order for copper, lead, nickel, silver, and zinc were established using the procedures described in Table 5-3 Multipliers for Calculating Maximum Daily Permit Limits From Average Monthly Permit Limits, in U.S. EPA's TSD by multiplying the interim AMELs by the respective MDEL/AMEL multipliers. In calculating interim effluent limitations for copper, lead, nickel, silver, and zinc, effluent data from January 2017 through December 2019 was used. The following table summarizes the interim effluent limitations for copper. lead, nickel, silver, and zinc, as calculated by the methods described above.

**Table 1. Interim Effluent Limitations** 

Parameter	Units	MEC	Mean	Standard Deviation	# of Samples	TSD Multiplier	Interim AMEL	Interim MDEL
Copper, Total Recoverable	μg/L	23.4	2.5	4.7	30	4.69	110	330
Lead, Total Recoverable	μg/L	1.8	0.48	0.50	14	2.63	4.7	9.5
Nickel, Total Recoverable	μg/L	9.6	2.3	3.4	7	3.54	34	68
Silver, Total Recoverable	μg/L	0.87	0.44	0.45	4	4.74	4.1	8.3
Zinc, Total Recoverable	μg/L	52.7	31	23	4	4.74	250	500

- 12. 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. However, the interim effluent limitations establish an enforceable ceiling concentration until compliance with the final effluent limitation can be achieved.
- 13. 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 13385(j)(3). It is the intent of the Board that a violation of an interim AMEL subjects the Discharger to only one MMP for that monthly averaging period. In addition, a violation of an interim MDEL subjects the Discharger to one MMP for the day in which the sample was collected.

#### OTHER REGULATORY REQUIREMENTS

# 14. CWC section 13300 states, in part:

"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."

# 15. CWC section 13383 states, in part:

"[A] regional board may establish monitoring, inspection, entry, reporting, and recordkeeping requirements . . . for any person who discharges, or proposes to discharge, to navigable waters, any person who introduces pollutants into a publicly owned treatment works, any person who owns or operates, or proposes to own or operate, a publicly owned treatment works or other treatment works treating domestic sewage, or any person who uses or disposes, or proposes to use or dispose, of sewage sludge."

- 16. The technical and monitoring reports required by this Order are necessary to determine compliance with the requirements in this Order, WDR Order R5-2021-0023.
- 17. 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. City Council of City of Riverside (1977) 73 Cal.App.3d 546, 555-556.).

18. On **22 April 2021**, 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 Order under Water Code section 13301 to establish a time schedule to achieve compliance with waste discharge requirements.

# **BOARD ACTION**

#### IT IS HEREBY ORDERED THAT:

1. Pursuant to California Water Code Sections 13300 and 13383, the Discharger shall comply with the following time schedule to submit reports and ensure completion of the compliance project described in Finding 7.b, above:

Task	Compliance Date
Submit Progress Reports. The progress reports shall	Quarterly, beginning 30 July
detail the steps taken to comply with this Order,	2021.
including tasks completed to date, next steps to be	
taken, and summary of progress and timetable for	
compliance.	
Submit final compliance report indicating the project is	30 October 2023
complete and working as designed.	
Comply with final effluent limitations for copper, lead,	30 October 2023
nickel, silver, and zinc.	

2. Discharge from Discharge Point 001 shall not exceed the following interim effluent limitations. The following interim effluent limitations for copper, lead, nickel, silver, and zinc shall be effective on 1 June 2021 (the effective date of WDR Order R5-2021-0023), and shall apply in lieu of the corresponding final effluent limitations in WDR Order R5-2021-0023 and any subsequent amendments to WDR Order R5-2021-0023. The Discharger shall comply with the following interim effluent limitations for copper through 22 October 2022 and shall comply with the following interim effluent limits for lead, nickel, silver, and zinc through 30 October 2023, or when the Discharger is able to come into compliance with the final effluent limitations contained in WDR Order R5-2021-0023 and shown in Finding 3 above, whichever is sooner.

#### Interim Effluent Limitations

Parameter	Units	Interim AMELs	Interim MDELs
Copper, Total Recoverable	μg/L	110	330
Lead, Total Recoverable	μg/L	4.7	9.5
Nickel, Total Recoverable	μg/L	34	68
Silver, Total Recoverable	μg/L	4.1	8.3
Zinc, Total Recoverable	μg/L	250	500

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."

4. 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 for, 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 WDR Order 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 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. Links to the laws and regulations applicable to filing

petitions may be found on the <u>Water Quality Petitions Page</u> (http://www.waterboards.ca.gov/public\_notices/petitions/water\_quality) or will be provided upon request.

I, Patrick Pulupa, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on **22 April 2021**.

PATRICK PULUPA, Executive Officer