

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

TIME SCHEDULE ORDER R5-2024-0027

REQUIRING  
SHASTA COUNTY SERVICE AREA NO. 17  
COTTONWOOD WASTEWATER TREATMENT PLANT  
SHASTA COUNTY

TO COMPLY WITH WASTE DISCHARGE REQUIREMENTS PRESCRIBED IN  
ORDER R5-2024-0026  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
PERMIT CA0081507

**FINDINGS**

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

1. Shasta County Service Area No. 17 (Discharger), owns and operates the Cottonwood Wastewater Treatment Plant (Facility). The Facility discharges up to an average dry weather flow of 0.43 million gallons per day (mgd) of advanced secondary treated municipal wastewater to Cottonwood Creek, a water of the United States and a tributary of the Sacramento River.
2. On 19 April 2024, the Central Valley Water Board adopted Waste Discharge Requirements (WDR) Order R5-2024-0026, NPDES Permit CA0081507, which included final effluent limitations, in part for copper, zinc, and dichlorobromomethane (DCBM).
3. WDR Order R5-2024-0026 contains Final Effluent Limitations IV.A.1.a. for Discharge Point 001, in part, as follows:

**Table 4. Effluent Limitations**

<b>Parameters</b>	<b>Units</b>	<b>Average Monthly</b>	<b>Maximum Daily</b>
Copper, Total Recoverable	µg/L	14	25
Zinc, Total Recoverable	µg/L	37	68
Dichlorobromomethane	µg/L	8.8	22

**NEED FOR TIME SCHEDULE AND LEGAL BASIS**

4. On 21 December 2023, the Discharger submitted an infeasibility analysis requesting additional time to comply with the existing final effluent limitations for copper, zinc, and DCBM in WDR Order R5-2024-0026. For compliance with the final effluent limitations for copper, zinc, and DCBM, the Discharger has requested time to develop and implement pollution prevention practices, confirm the source(s) of copper, zinc, and DCBM, and evaluate alternative water sources and/or treatment options.

5. The Discharger cannot consistently comply with the copper, zinc, and DCBM effluent limitations in WDR Order R5-2024-0026 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:
  - 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 proposed that 5 years is necessary to complete upgrades sufficient to comply with the final effluent limits or conduct studies sufficient to justify alternate final effluent limits. Necessary activities include engineering feasibility and design studies, environmental documentation if required, permitting, and financing.
  - c. The final effluent limitations for copper, zinc, and DCBM are new, more stringent, or modified regulatory requirements that became applicable to the waste discharge after the effective date of Order R5-2024-0026 and after 1 July 2000. New or modified control measures are necessary in order to comply with the final effluent limitations for copper, zinc, and DCBM. 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 or Time Schedule Order may provide protection from MMPs for no more than five years.
9. Compliance with this Order exempts the Discharger from mandatory minimum penalties for violations of the final effluent limitations for copper, zinc, and DCBM found in WDR Order R5-2024-0026 from **1 June 2024** until **31 May 2029**. The Discharger has not previously been protected from mandatory minimum penalties for violations of the copper, zinc, and DCBM effluent limitations.
10. In accordance with CWC section 13385(j)(3)(C), the total length of protection from mandatory minimum penalties for the final effluent limitations for copper, zinc, and DCBM does not exceed five years.
11. This Order provides a time schedule for completing the actions necessary to ensure compliance with the final effluent limitations for copper, zinc, and DCBM contained in WDR Order R5-2024-0026. 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.
12. This Order includes new performance-based interim effluent limitations for copper, zinc, and DCBM. Interim effluent limitations consist of a maximum daily and average monthly effluent concentration derived using sample data provided by the Discharger demonstrating actual treatment plant performance. The method to set interim effluent limitations depends on the number of sample data.

With 10 or more sampling data points, sampling and laboratory variability is accounted for by establishing interim effluent limitations that are based on 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). Where actual sampling shows an exceedance of the proposed 3.3 standard deviation limit, the maximum effluent concentration (MEC) may be established as the interim limitation.

When there are less than 10 sampling data points available, the *Technical Support Document for Water Quality-Based Toxics Control* (EPA/505/2-90-001) (TSD) recommends a coefficient of variation of 0.6 be utilized as representative of wastewater effluent sampling. The TSD recognizes that a minimum of 10 data points is necessary to conduct a valid statistical analysis. The multipliers contained in Table 5-2 of the TSD are used to determine a daily limitation based on a long-term average objective. In this case, the long-term average objective is to maintain, at a minimum, the current plant performance level. Thus, when there are less than 10 sampling points for a constituent, interim limitations are based on 3.11 times the MEC to obtain the daily interim limitation (TSD, Table 5-2) and 2.13 times the MEC to obtain the average monthly interim limitation (assuming one sample per month). If

the statistically projected interim limitation is less than the MEC, the interim limitation may be established as the MEC.

Ten or more sampling data points for copper, zinc, and DCBM were available for analysis, therefore the interim average monthly effluent limitations (AMEL) for copper, zinc, and DCBM have been established in accordance with procedures for 10 or more sampling data points. For DCBM, sampling data shows an exceedance of the proposed 3.3 standard deviation limit, therefore, the maximum effluent concentration (MEC) has been established as the interim limitation. For copper, sampling data shows an exceedance of the proposed 3.3 standard deviation limit, however, the calculated limit is appropriate given facility performance.

The interim maximum daily effluent limitations (MDELs) were calculated using the MDEL/AMEL multipliers per Table 2 of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California. In calculating interim effluent limitations for zinc and DCBM, effluent data between May 2019 and May 2023 was used. In calculating interim effluent limitations for copper, the effluent data between January 2018 and May 2023 was used. The following table summarizes the calculation of the interim effluent limitations for copper, zinc, and DCBM:

**Table 1. Interim Effluent Limitations**

Parameter	Unit	MEC	Mean	SD	CV	MDEL/ AMEL Multiplier	Calculated Interim AMEL	Final Interim AMEL	Final Interim MDEL
Copper, Total	µg/L	43.7	6.5	5.3	0.81	2.3	24	24	55
Zinc, Total	µg/L	99.6	43	17.5	0.41	1.7	101	101	172
DCBM	µg/L	13.7	2.7	2.9	1.1	2.62	12	14	37

Table Notes:

SD: Standard Deviation, CV: Coefficient of Variation

Calculated Interim AMEL: 99.9<sup>th</sup> percentile.

Final Interim AMEL: 99.9<sup>th</sup> percentile or the MEC when calculated interim AMEL is less than the MEC.

Final Interim MDEL: MDEL/AMEL Multiplier x Final Interim AMEL.

13. 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.

14. 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 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**

15. 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.”

16. 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.”

17. The Discharger owns and operates the Cottonwood Wastewater Treatment Plant. The technical and monitoring reports required by this Order are necessary to determine compliance with the requirements in this Order, WDR Order R5-2024-0026, and subsequent WDRs.

18. 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.).

19. On 19 April 2024, in Fresno, 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 Time Schedule Order under Water Code section 13300 to establish a time schedule to achieve compliance with waste discharge requirements.

**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:

<b>Task</b>	<b>Compliance Date</b>
Submit Method of Compliance Workplan/Schedule	1 December 2024
Submit and implement a Pollution Prevention Plan (PPP) pursuant to CWC section 13263.3 for copper, zinc and dichlorobromomethane.	1 December 2024
Submit Progress Reports. The progress reports shall detail the steps taken to comply with this Order, including documentation, showing completion of tasks, construction progress and/or water quality study progress, evaluation of the effectiveness of the implemented measures, and assessment of whether additional measures are necessary to meet the compliance dates.	Semi-annually (January through June, due 1 August each year; July through December, due 1 February each year)
Submit Method of Compliance Project Report (e.g., Preliminary Engineering Report, Water Quality Study/Investigation)	1 December 2026
Achieve Full Compliance with final effluent limitations for copper, zinc, and DCBM and submit project completion report.	<b>31 May 2029</b>

2. The following interim effluent limitations for copper, zinc, and DCBM shall be effective **1 June 2024**. The Discharger shall comply with the following interim effluent limitations through 31 May 2029, or when the Discharger is able to come into compliance with the final effluent limitations, whichever is sooner.

### Interim Effluent Limitations

Parameter	Units	Interim AMEL	Interim MDEL
Copper, Total	µg/L	24	55
Zinc, Total	µg/L	101	172
DCBM	µg/L	14	37

- 3 Any person signing a document submitted under this TSO 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 [Water Quality Petitions Page](http://www.waterboards.ca.gov/public_notices/petitions/water_quality) ([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, 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 **19 April 2024**.

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**PATRICK PULUPA**, Executive Officer