

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
 CENTRAL VALLEY REGION
 TIME SCHEDULE ORDER R5-2023-0900

REQUIRING
 SACRAMENTO REGIONAL COUNTY SANITATION DISTRICT
 SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT
 SACRAMENTO COUNTY

TO COMPLY WITH REQUIREMENTS PRESCRIBED IN ORDER R5-2021-0019-01
 (NPDES PERMIT CA0077682)

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

1. On 22 April 2021, the Central Valley Water Board adopted Waste Discharge Requirements (WDR) Order R5-2021-0019, NPDES Permit No. CA0077682, prescribing WDRs for the Sacramento Regional County Sanitation District (hereinafter Discharger) at the Sacramento Regional Wastewater Treatment Plant (Facility), Sacramento County.
2. On 14 October 2022, the Central Valley Water Board adopted Order R5-2022-0064, amending WDR Order R5-2021-0019 to include the production of recycled water by the EchoWater Project. The Facility operates under WDR Order R5-2021-0019-01.
3. WDR Order R5-2021-0019-01 section IV.A.1.a. includes, in part, the following final effluent limitations applicable to discharges from the Facility through Discharge Point No. 001:

Table 4. Effluent Limitations – Discharge Point No. 001

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Maximum Daily
Biochemical Oxygen Demand 5-day @ 20°Celsius (BOD ₅)	milligrams per liter (mg/L) (see table note 1. below)	10	15	--
Total Suspended Solids (TSS)	mg/L (see table note 1. below)	10	15	--

Table 4 Notes:

1. The final effluent limitations for BOD₅ and TSS become effective 9 May 2023. Effective upon completion of the tertiary filtration upgrades and written Executive Officer approval, compliance with final effluent limitations for BOD₅ and TSS shall be measured at Monitoring Location TER-001. Otherwise, compliance shall be measured at Monitoring Location EFF-001.
4. WDR Order R5-2021-0019-01 section IV.A.1.h. includes the following final effluent limitation applicable to discharges from the Facility through Discharge Point No. 001:

h. Total Coliform Organisms. Effective 9 May 2023, effluent total coliform organisms shall not exceed the following with compliance measured after chlorination and prior to dechlorination:

i. May through October:

- a) 2.2 most probable number per 100 milliliters (MPN/100 mL), as a 7-day median;
- b) 23 MPN/100 mL, more than once in any 30-day period;
- c) 240 MPN/100 mL, at any time.

ii. November through April:

- a) 2.2 MPN/100 mL, as a monthly median;
- b) 23 MPN/100 mL, as a weekly median;
- c) 240 MPN/100 mL, at any time.

5. WDR Order R5-2021-0019-01 section VI.C.4.a includes the following operating specifications for discharges to surface water:

a. Filtration System Operating Specifications. Effective 9 May 2023, when discharging to surface water, to ensure the filtration system is operating properly to provide adequate disinfection of the wastewater, per the conditionally accepted Title 22 Engineering Report the turbidity of the filter effluent measured at Monitoring Location FIL-001 shall not exceed the following:

- i. 1.5 NTU as a 24-hour average;
- ii. 2.5 NTU more than 5 percent of the time within a 24-hour period; and
- iii. 5 NTU at any time.

6. WDR Order Section R5-2021-0019-01 section VI.C.6.a includes the following special provision:

a. Seasonal Title 22, or Equivalent, Disinfection Requirements. Effective 9 May 2023, from 1 May to 31 October, when discharging to surface water, wastewater shall be oxidized, filtered, and adequately disinfected pursuant to the DDW reclamation criteria, CCR, Title 22, division 4, chapter 3, (Title 22) or equivalent consistent with the conditionally accepted Title 22 Engineering Report, in accordance with the compliance schedule in section VI.C.7.a.

7. On 15 February 2023, the Discharger submitted a report entitled *Infeasibility Analysis and Time Schedule Justifications for Total Coliform, Total Suspended Solids, and Biochemical Oxygen Demand in Order R5-2021-0019-01* (Infeasibility Report) to the Central Valley Water Board that contained the request and justification for extending compliance schedules for tertiary treatment components. The Discharger has requested a one-year extension of the compliance deadlines for BOD₅, TSS, total coliform organisms, the turbidity operating specifications, and the seasonal disinfection requirement for the duration of the construction of significant upgrades to the Facility and through start-up of the new treatment facilities as performance is optimized.
8. **Existing Facility.** The Discharger owns and operates the Facility, which is currently undergoing tertiary upgrades and implementing biological nutrient removal processes to remove nitrate and ammonia from the effluent. The Facility has an average dry weather flow (ADWF) design capacity of 181 million gallons per day (MGD). The current treatment plant is staffed and operated 24 hours per day and consists of a septage receiving station, a fats/oils/grease receiving station and storage tanks, influent pumps, mechanical bar screening, aerated grit handling, grit classifiers that wash and dewater grit, covered primary sedimentation tanks, air biological treatment by activated sludge, secondary sedimentation, nitrifying sidestream treatment for ammonia removal, disinfection with sodium hypochlorite, and dechlorination with sodium bisulfite. The Facility has constructed and is operating the Primary Effluent Pump Station (PEPS) and Biological Nutrient Removal facilities. Effluent can be diverted to lined emergency storage basins (ESB's), as needed, to meet effluent dilution, thermal, and disinfection requirements or divert excess flows. Odors are controlled through stripping towers and carbon treatment.
9. **Future Facility.** Staffing and operating hours of the future treatment plant will be unchanged, and the plant will maintain a 181 MGD ADWF design capacity. The future Facility and operation are as follows and differs seasonally. The design capacity of the future Facility will remain 181 MGD. Facility modification to date include replacement of the existing pure oxygen biological treatment facilities with biological nutrient removal (BNR) air activated treatment facilities capable of removing ammonia and nitrate nitrogen. Future addition include tertiary treatment in the form of filtration with granular media filters, and the increase in the storage capacity. The Facility will continue to be staffed and operated 24 hours per day and will consist of influent pumps, septage receiving station, anaerobically digested material reception and storage facility, mechanical bar screening, aerated grit handling, grit classifiers that wash and dewater grit, covered primary sedimentation tanks, primary effluent pumping station and peak-shaving storage facilities, BNR air activated sludge treatment, nitrifying sequencing batch reactor for treating high ammonia concentration waste streams from solids storage basins and biosolids reclamation facility, secondary sedimentation, secondary effluent screen, filter influent pumping station, granular media filtration, disinfection with chlorine liquid in a covered disinfection contact basin, and dechlorination with sodium bisulfite. Compliant effluent can be diverted to the lined ESB's, as needed, to meet effluent dilution and thermal limits before discharge to the Sacramento River. Non-compliant effluent, primary influent or effluent, and raw wastewater can be diverted to the lined ESB's for any reason, including process upsets, or diversions for excess flows, and returned to the Facility influent for additional treatment. Odors are to be controlled through

biological fixed media scrubbers, scrubbing tower, chemical oxidizing towers, and carbon treatment towers. The BNR activated sludge treatment facilities are designed to process up to 330 MGD. Flows in excess of 330 MGD will be stored in peak-shaving storage facilities (ESB's) and returned for processing through the BNR facilities when capacity is available. All wastewater will receive advanced secondary treatment through the BNR facilities. The tertiary filters will be designed to process flows up to 217 MGD, measured as a daily average. The Facility will operate according to the seasonal requirements in WDR Order 2022-0019-01.

10. One component of the Future Facility is the Tertiary Treatment Facilities (TTF) project, which will use tertiary filtration and disinfection to treat secondary effluent from the BNR facilities. The BNR portion of the project is complete. The TTF project is the last major component in the EchoWater Project to be completed. Construction was scheduled for completion in August 2022, followed by testing and optimization processes. Due to construction delays, the TTF project construction, testing, and optimization will not be complete until Spring of 2024.
11. The final effluent limitations for BOD₅ and TSS and Total Coliform Organisms, the filtration operating specifications for turbidity, and the seasonal Title 22, or equivalent, disinfection requirements in Order R5-2021-0019-01 become effective 9 May 2023. A time schedule order is needed to allow additional time to complete construction of the TTF project due to previously reported construction delays as well as the need to account for previous and possible future uncontrollable weather events and start-up related factors. As explained in the Infeasibility Report, until completion, testing, and optimization of the TTF project, it is infeasible for current facilities at the SRWTP to comply consistently with the final effluent limitations for BOD₅ and TSS and Total Coliform Organisms.

Mandatory Minimum Penalties

12. California Water Code sections 13385(h) and (i) require the Central Valley Water Board to impose mandatory minimum penalties (MMPs) upon dischargers that violate certain effluent limitations. California 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...*".
13. Per the requirements of California 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 to correct the violations that would otherwise be subject to California Water Code sections 13385(h) and (i).
 - b. The Discharger has stated that one additional year from the effective date of the final effluent limitations for BOD₅ and TSS and Total Coliform Organisms in Order R5-2021-0019-01 is necessary to complete necessary upgrades to the Facility to comply with final effluent limitations and conduct operational testing over various weather conditions to

assure that the new TTF is operating properly. As explained in the Infeasibility Report, until completion, testing, and optimization of the TTF project, it is infeasible for current facilities at the SRWTP to comply consistently with the final effluent limitations for BOD₅ and TSS and Total Coliform Organisms.

- c. 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.
14. By statute, a Cease-and-Desist Order or Time Schedule Order may provide protection from MMPs for no more than five years.
 - a. **BOD₅/TSS.** Compliance with this Order exempts the Discharger from mandatory minimum penalties for violations of the final effluent limitations for BOD₅ and TSS found in WDR Order R5-2021-0019-01 from 9 May 2023 until 8 May 2024. The Discharger has not previously been subject to a TSO to be protected from mandatory minimum penalties for violations of BOD₅ and TSS effluent limitations.
 - b. **Total Coliform Organisms.** Compliance with this Order exempts the Discharger from mandatory minimum penalties for violations of the final effluent limitations for total coliform organisms found in WDR Order R5-2021-0019-01 from 9 May 2023 until 8 May 2024. The Discharger has not previously been subject to a TSO to be protected from mandatory minimum penalties for violations of the total coliform organisms effluent limitation.
 15. In accordance with CWC section 13385(j)(3)(C), the total length of protection from mandatory minimum penalties for the final effluent limitations for BOD₅, TSS, and total coliform organisms does not exceed five years.
 16. This Order provides a time schedule for completing the actions necessary to ensure compliance with the final effluent limitations for BOD₅, TSS, and total coliform organisms contained in WDR Order R5-2021-0019-01. Although the time schedule for completion of actions necessary to bring the waste discharge into compliance does not exceed one year, this Order includes interim effluent limitations for BOD₅, TSS, and total coliform organisms.
 17. This Order includes performance-based interim effluent limitations for BOD₅, TSS, and total coliform organisms. Interim effluent limitations from Order R5-2021-0019-01 were incorporated into this Order based on the Discharger's current ability to comply with the existing interim effluent limitations.
 18. 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.

19. 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 Special Provisions

20. The Discharger has stated that one additional year from the effective date of the filtration system operating specifications for turbidity (Section VI.C.4.a) and the seasonal disinfection requirements (Section VI.C.6.a) is necessary to complete the TTF project to comply with the operating specifications for turbidity and the seasonal disinfection requirements.
21. The Discharger is not subject to MMPs for noncompliance with the filtration system operating specifications for turbidity (Section VI.C.4.a) and the seasonal disinfection requirements (Section VI.C.6.a). Given the time necessary to complete the TTF project, and the considerable effort and expense by the Discharger to construct the treatment facilities necessary to comply with WDR Order 2021-0019-01, the Central Valley Water Board grants the Discharger a time schedule under Water Code section 13300, which includes a time schedule of specific actions the discharger must take in order to comply with Special Provision VI.C.4.a (filtration system operation specifications for turbidity) and Special Provision VI.C.6.a (seasonal disinfection requirements) found in WDR Order R5-2021-0019-01.

Other Regulatory Requirements

22. California Water Code section 13300 states: "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."
23. California Water Code 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."

- 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 WDRs and with this Order.
- 25. Issuance of this Order is exempt from the provisions of the California Environmental Quality Act (Pub. Res. 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.). Issuance of this Order is also exempt from CEQA pursuant to California Code of Regulations, title 14, section 15321, subdivision (a)(2).
- 26. This Order is issued under authority delegated to the Executive Officer in accordance with Central Valley Water Board Resolution No. R5-2018-0057, and Water Code section 13223.
- 27. Central Valley Water Board staff provided a 30-day comment period for consideration of adopting this Order under section 13300 of the Water Code. (Wat. Code, § 13167.5.) The notice stated that any member of the public may request an oral hearing, and if no hearing is requested, the Executive Officer’s review of the administrative record, including any written comments received, shall constitute the public hearing.

IT IS HEREBY ORDERED that, pursuant to Water Code sections 13300 and 13383, the Discharger shall comply with the following provisions:

- 1. The Discharger shall comply with the following time schedule to submit reports and ensure completion of the compliance project described in Finding 10 above for BOD₅ and TSS:

Task	Compliance Date
Submit Final Report demonstrating compliance with the Final Effluent Limitations for BOD ₅ and TSS.	8 May 2024

- 2. The Discharger shall comply with the following time schedule to submit reports and ensure completion of the compliance project described in Finding 10 above for total coliform organisms:

Task	Compliance Date
Submit Final Report demonstrating compliance with the Final Effluent Limitations for total coliform organisms.	8 May 2024

- 3. Discharge from Discharge Point No. 001 shall not exceed the following interim effluent limitations for BOD₅ and TSS. These effluent limitations are effective upon adoption of this Order. The Discharger shall comply with the following interim effluent limitations through the dates indicated or whenever the Discharger is able to come into compliance with the final effluent limitations, whichever is sooner.

Parameter	Units	Interim Average Monthly Effluent Limit	Interim Average Weekly Effluent Limit	Effluent Limits Applicable Through
BOD ₅	mg/L	30	45	8 May 2024
BOD ₅	lbs/day	45,000	68,000	8 May 2024
TSS	µg/L	30	45	8 May 2024
TSS	lbs/day	45,000	68,000	8 May 2024

4. Discharge from Discharge Point No. 001 shall not exceed the following interim effluent limitation for total coliform organisms. Effective immediately upon adoption of this Order and through 8 May 2024 or whenever the Discharger can come into compliance with the final effluent limitations, whichever is sooner, effluent total coliform organisms shall not exceed the following with compliance measured after chlorination and prior to dechlorination.
 - i. 23 MPN/100 mL, as a weekly median; and
 - ii. 500 MPN/100mL, in any two consecutive days, as a daily maximum.

5. Effective 9 May 2024, when discharging to surface water, to ensure the filtration system is operating properly to provide adequate disinfection of the wastewater, per the conditionally accepted Title 22 Engineering Report, the turbidity of the filter effluent measured at Monitoring Location FIL-001 shall not exceed the following:
 - i. 1.5 NTU as a 24-hour average;
 - ii. 2.5 NTU more than 5 percent of the time within a 24-hour period;
 - iii. 5 NTU, at any time.

6. Effective 9 May 2024, the Discharger shall comply with the seasonal disinfection requirements in WDR Order R5-2021-0019-01 (section VI.C.6.a), final seasonal effluent limitations for total coliform organisms (section IV.A.1.h), final effluent limits for BOD₅ and TSS (section IV.A.1.a), and the filtration system operating specifications (section VI.C.4.a). The Discharger shall comply with the time schedule shown in the Technical Reports Table E-14 of WDR Order R5-2021-0019-01.

7. 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.”

8. 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 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 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) or will be provided upon request.

This Order is effective upon the date of signature.

PATRICK PULUPA, Executive Officer