

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER R5-2023-0030

AMENDING WASTE DISCHARGE REQUIREMENTS ORDER R5-2018-0070
FOR
CITY OF PATTERSON
CITY OF PATTERSON WATER QUALITY CONTROL FACILITY
STANISLAUS COUNTY

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

Waste Discharge Requirements Order R5-2018-0070

1. On 5 October 2018, the Central Valley Water Board adopted Waste Discharge Requirements (WDRs) Order R5-2018-0070, prescribing requirements for the City of Patterson Water Quality Control Facility (WQCF) in Stanislaus County. The City of Patterson (hereafter Discharger) owns and operates the facility.
2. The facility consists of three separate treatment systems including the north activated sludge treatment system (NASTS), an advanced integrated pond system (AIPS), and the south activated sludge treatment system (SASTS). Undisinfected secondary effluent from each of three treatment systems is discharged to a series of 15 percolation ponds for disposal.
3. Flow Limitations B.1 of WDRs Order R5-2018-0070 limits the monthly average influent flow rate to each of the three treatment systems and to the total treatment system (as the sum of the flow rates to each of the treatment systems). Flow Limitation B.2 of WDRs Order R5-2018-0070 describes specific revised influent flow rate limits to each of the three treatment systems and to the total treatment system following two specific planned upgrades and expansions. The revised influent flow rates depend on Executive Officer approval of each successive *Wastewater Treatment Facility Phase Completion Report* (per Provision G.1.a of WDRs Order R5-2018-0070).
4. Finding 9 of WDRs Order R5-2018-0070 describes the NASTS capacity derating from its initial design capacity of 1.0 million gallons per day (MGD) to 0.8 MGD in this way:
“The NASTS contains an aeration oxidation ditch and two clarifiers for solids separation. Waste sludge produced by this system is metered and pumped to SASTS Aerobic Digesters 1, 2 and 3 for stabilization and dewatering. The system has an initial design capacity of 1.0 MGD. However, the NASTS was de-rated by the Discharger from 1.0 MGD to 0.80 MGD to allow the system to operate as a Simultaneous Nitrification Denitrification process to meet an effluent nitrogen limit in WDRs Order R5-2007-0147.”

5. Finding 20 of WDRs Order R5-2018-0070 describes “two projects to increase the WQCF’s capacity”. Finding 20.(a) states, “**NASTS Upgrades** - The City plans to construct a 200,000-gallon concrete tank to add an anoxic zone to the existing oxidation ditch. This will improve the reliability and consistency of nitrogen removal from the wastewater and will allow the capacity to be restored from 0.8 MGD to 1.0 MGD. The project is anticipated to begin in 2018 and construction will be completed in 2019.”
6. Finding 44 of WDRs Order R5-2018-0070 states, “The stakeholder-led Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) initiative has been coordinating efforts to implement the new salt and nitrate management strategies. The Board expects dischargers that may be affected by new salt and nitrate management policies to coordinate with the CV-SALTS initiative.”
7. Flow Limitations B.1 through B.2 of WDRs Order R5-2018-0070:

1. Effective immediately, monthly average influent flow to the wastewater treatment plant (WQCF) shall not exceed the following:

Influent Flow Limits

Treatment System	NASTS	SASTS	AIPS	Total
Flow limits (MGD)	0.8	1.25	0.2	2.25

2. Effective upon Executive Officer approval of each successive *Wastewater Treatment Facility Phase Completion Report* (per Provision G.1.a), monthly average influent flows to the wastewater treatment plant (WQCF) systems shall not exceed the following:

Influent Flow Limits

Treatment System	NASTS	SASTS	AIPS	Total
After Completion of NASTS Upgrades (MGD)	1.0	1.25	0.2	2.45
After Completion of Phase III Expansion (MGD)	1.0	2.5	0.2	3.7

8. Effluent Limitations C, table note 3 of WDRs Order R5-2018-0070:
 - 3 After completion of Phase III Expansion. Effective on the date of approval of flow limit increase to 3.7 MGD by the Executive Officer
9. Provision G.1.a of WDRs Order R5-2018-0070:
 - a. At least **60 days** prior to a planned flow limit increase, the Discharger shall submit a **Wastewater System Improvements and Expansion Report**

documenting the construction of new treatment systems. The report shall certify that the structures are fully functional and ready to receive wastewater in compliance with the requirements of this Order. The report shall include as-built drawings and capacities of the new treatment systems.

The report shall be approved by the Executive Officer before the Discharger increases the influent flow limits.

10. Provision G.6 of WDRs Order R5-2018-0070:
 6. The Discharger shall submit the technical reports and work plans required by this Order for consideration by the Executive Officer, and incorporate comments the Executive Officer may have in a timely manner, as appropriate. Unless expressly stated otherwise in this Order, the Discharger shall proceed with all work required by the foregoing provisions by the due dates specified.

Proposed Amendment

11. On 5 August 2022, the Discharger submitted the *NASTS Capacity Increase Report*, which meets the requirements of Provision G.1.a. At the request of Central Valley Water Board staff, on 7 February 2023 the Discharger submitted a formal request for WDRs Order R5-2018-0070 to be amended with the NASTS influent flow rate capacity increase change from 0.8 MGD to the planned 1.0 MGD, which would make the total influent flow rate capacity 2.45 MGD. This Order authorizes these influent flow rate limitation increases.
12. This Order adds the following text to the end of Finding 9 of WDRs Order R5-2018-0070: "In 2022 the City constructed a 200,000-gallon concrete tank to add an anoxic zone to the existing oxidation ditch. This will improve the reliability and consistency of nitrogen removal from the wastewater and allows the capacity to be restored from 0.8 MGD to 1.0 MGD."
13. The Discharger has completed the proposed NASTS Upgrades described in Finding 20 (a), so this Order revises the first sentence of Finding 20 from "... proposes two projects" to "proposes a project", and replaces the paragraph in Finding 20 (a) with "Completed in 2022 as reported in the 20 July 2022 *NASTS Capacity Increase Report* submitted by the discharger on 5 August 2022."
14. The CV-SALTS Nitrate and Salt Control Programs have evolved since 2018. This Order replaces the last sentence of Finding 44 with updated text as shown here, including Sub-findings 44.a through 44.d:
 44. On 31 May 2018, the Central Valley Water Board adopted Basin Plan amendments incorporating the Salt Control Program (SCP) and Nitrate Control Program (NCP). The Basin Plan amendments were conditionally

approved by the State Water Board on 16 October 2019 (State Water Board Resolution 2019-0057) and by the Office of Administrative Law (OAL) on 15 January 2020 (OAL Matter No. 2019-1203-03). For those components subject to United States Environmental Protection Agency (USEPA) approval, the effective date was 2 November 2020. On 10 December 2020, the Central Valley Water Board adopted revisions to the Basin Plan amendments (Resolution R5-2020-0057). The State Water Board conditionally approved these revisions on 1 June 2021 (State Water Board Resolution 2021-0019). The effective date of the revisions to the Basin Plan amendments was 10 November 2021, the Notice of Decision filing date following approval by the OAL (OAL Matter No. 2021-0929-05S).

- a. For the Nitrate Control Program, the WQCF falls within Groundwater Basin 5-022.07 (San Joaquin Valley – Delta-Mendota Sub-basin), a Priority 2 Basin. Notices to Comply for Priority 2 Basins will be issued to dischargers by 2025. No action with respect to the Nitrate Control Program is required of the Discharger at this time. Once the Notice to Comply letter is issued, dischargers that are unable to comply with conservative nitrate requirements will be required to take on alternate compliance approaches that involve providing replacement drinking water to persons whose drinking water is affected by nitrates. Dischargers may comply with the nitrate control program either individually or collectively with other dischargers.
- b. For the Salt Control Program, dischargers that are unable to comply with conservative salinity requirements will instead need to meet performance-based requirements and participate in a basin-wide effort to develop a long-term salinity strategy for the Central Valley. Dischargers received a Notice to Comply with instructions and obligations for the Salt Control Program within one year of 17 January 2020, the effective date of the amendments. The Discharger is participating in the Prioritization and Optimization (P&O) Study.
- c. The Discharger has been assigned CV-SALTS ID 2358.
- d. As these salt and nitrate control strategies are implemented, the Central Valley Water Board may find it necessary to modify the requirements of these WDRs to ensure the goals of the Salt and Nitrate Control Programs are met. This Order may be amended or modified to incorporate newly applicable requirements. More information regarding this regulatory planning process can be found on the [Central Valley Water Board's CV-SALTS website](https://www.waterboards.ca.gov/centralvalley/water_issues/salinity) (https://www.waterboards.ca.gov/centralvalley/water_issues/salinity).

15. Flow Limitations B. should be updated as follows:

1. Replace “Effective immediately” with “Monthly”.
In the table, update the NASTS influent flow limit to 1.0 and the Total flow limit to 2.45 as shown here:

Influent Flow Limits, in MGD

Treatment System	NASTS	SASTS	AIPS	Total
Flow limits	1.0	1.25	0.2	2.45

2. Delete the phrase “Executive Officer” from B.2.
Add “Future” to the current B.2. “Influent Flow Limits” table caption.
Delete the first row of the B.2. table so the table is as shown here:

Future Influent Flow Limits, in MGD

Treatment System	NASTS	SASTS	AIPS	Total
After Completion of Phase III Expansion	1.0	2.5	0.2	3.7

16. Effluent Limitations C., table note 3 should be updated to delete the superfluous text “to 3.7 MGD by the Executive Officer” so that it reads as follows:

- 3 After completion of Phase III Expansion. Effective on the date of approval of flow limit increase.

17. Other Provisions G.1.a shall have its last sentence updated to replace “the Executive Officer” with “Central Valley Water Board”, and “limits” shall be replaced with “rate” so that the sentence reads as follows:

The report shall be approved by the Central Valley Water Board before the Discharger increases the influent flow rate.

18. Provision G.6. shall be modified to delete “Executive Officer” and associated Executive Officer action so that the first sentence reads as follows:

The Discharger shall submit the technical reports and work plans required by this Order in a timely manner.

19. In addition to the specific revisions listed above, minor document formatting modifications were made to comply with the Web Content Accessibility Guidelines (WCAG) 2.1 Conformance Level AA standard. Such modifications allow the Amended Order to be accessible to people with disabilities per the requirements of the Americans with Disabilities Act (ADA).

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

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and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m. within 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 on the [Petitions/Water Quality webpage](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 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 22 June 2023.



Date: 2023.07.11

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PATRICK PULUPA, Executive Officer