

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN DIEGO REGION**

**EXECUTIVE OFFICER SUMMARY REPORT**

**October 9, 2024**

**ITEM NO. 3**

**SUBJECT**

Consideration of Tentative Order No. R9-2024-0035, Addendum No. 1 to Order No. R9-2020-0001, as Amended by Order No. R9-2020-0183, NPDES No. CA0109398, *Amending Waste Discharge Requirements and National Discharge Elimination System (NPDES) Permit for the City of San Diego North City Water Reclamation Plant and Pure Water Facility, Discharge to the Miramar Reservoir San Diego County* (Tentative Order No. R9-2024-0035) (*Fisayo Osibodu*).

**STAFF RECOMMENDATION**

Staff recommends adoption of Tentative Order No. R9-2024-0035 (**Supporting Document No. 1**).

**KEY ISSUES**

- The San Diego Water Board adopted Order No. R9-2020-0001 on May 13, 2020, establishing waste discharge requirements for the discharge of advanced treated recycled water to the Miramar Reservoir (Reservoir). The San Diego Water Board adopted Order No. R9-2020-0183 on August 12, 2020, which made minor modifications to Order No. R9-2020-0001. Order No. R9-2020-0001, as amended, is referred to as the “2020 Order”.
- The City of San Diego (Discharger) submitted a letter to the San Diego Water Board on December 4, 2023 (Letter), requesting a series of modifications to the 2020 Order. The Letter also provided the Discharger’s rationale in support of the recommended modifications.
- Tentative Order No. R9-2024-0035, if adopted, modifies certain sections of the 2020 Order to: 1) revise the Reservoir monitoring requirements, 2) correct language inconsistencies and clarify terms used in specific sections of the Order, 3) change due dates for submitting specific monitoring reports, and 4) adds monitoring required by section 60320.326 of title 22 California Code of Regulations (Calif. Code Regs).

**PRACTICAL VISION**

Chapter 6 - *Strategize to Achieve Resilient Local Water Supply* of the Practical Vision<sup>1</sup> calls for the San Diego Water Board to support a sufficient, diverse, and sustainable local water supply for the San Diego Region that combined with conservation and water reuse, minimizes dependence on imported water while maintaining and improving water quality.

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<sup>1</sup> The San Diego Water Board’s Practical Vision is available at:  
[https://www.waterboards.ca.gov/sandiego/water\\_issues/programs/practical\\_vision/](https://www.waterboards.ca.gov/sandiego/water_issues/programs/practical_vision/)

One of the San Diego Water Board's approaches to achieving this goal of a sustainable local water supply is through efficiently permitting indirect potable reuse (IPR) projects for surface water. As a result, adopting Tentative Order No. R9-2024-0035, which amends the NPDES permit for the City of San Diego North City Water Reclamation Plant and Pure Water Facility, is consistent with the Practical Vision.

## **DISCUSSION**

The purpose of this item is to provide the Board with information to assist in its consideration of Tentative Order No. R9-2024-0035. If adopted, Tentative Order No. R9-2024-0035 will amend the 2020 Order to:

1. Implement a phased approach to: a) remove the requirements for continuous monitoring of the temperature, dissolved oxygen, electrical conductivity, and pH in the Reservoir, using a moored sensor string; and b) increase in the frequency of continuous profile monitoring in the Reservoir to weekly. As part of this phased approach, the Discharger will analyze and compare the results from both the continuous monitoring and profile monitoring measurements and submit a final assessment report to San Diego Water Board staff for consideration. The San Diego Water Board Executive Officer may, based on staff recommendations, issue a letter approving discontinuation of the continuous sensor monitoring.

The Discharger identified in its Letter that the data obtained using the installed moored sensor string was consistently unreliable due to: 1) severe fouling of the sensors, caused by algae and quagga mussels, 2) bird damage, 3) sensor flooding/O-ring failure, 4) burial in lake sediments, and 5) errors in sensor configuration or calibration settings.

2. Correct instances of inconsistent language and terms used in specific sections of the 2020 Order.

The Discharger identified in its Letter specific changes to the abbreviations used, Discharger and NCWRP/NCPWF facility information tables, monitoring station descriptions, and measurement units of specific monitoring parameters.

3. Revise the due dates for submitting specific monitoring reports.
4. Add monitoring requirements for aluminum, turbidity, electrical conductivity, per- and poly fluoroalkyl substances (PFAS), and total coliform at several monitoring locations in the Reservoir, pursuant to section 60320.326 of title 22 Calif. Code Regs.

### **Background Summary – Phase 1 of the Discharger's Pure Water Project**

Phase 1 of the City of San Diego's (Discharger) Pure Water Project consists of the following components:

- Construction of a new Morena Pump Station and pipelines to convey additional wastewater to the North City Water Reclamation Plant (NCWRP) for treatment;

- Expansion of the NCWRP capacity;
- Construction of a new North City Pure Water Facility (NCPWF) that will produce advanced treated recycled water to meet drinking water standards; and
- Construction of a new North City Pure Water Pump Station and pipeline to convey advanced treated recycled water to the Miramar Reservoir (Reservoir).

Phase 1 of the Pure Water Project is estimated to become operational in 2027. The NCWRP and NCPWF are both located east of interstate 805 on Eastgate Mall, in San Diego, between the communities of University City and Miramar (**Supporting Document No. 2**).

The NCWRP produces tertiary treated recycled water and is being expanded from its current peak capacity of 32 million gallons per day (MGD) to 56.7 MGD. The NCWRP will treat wastewater from the City of San Diego communities of Mission Beach, Pacific Beach, La Jolla, Clairemont, Kearny Mesa, Mission Valley/Mission Gorge, East San Diego; and the service areas of the Padre Dam Municipal Water District, Alpine Sanitation District, and Winter Gardens Sanitation District. Tertiary treated recycled water from the NCWRP will serve as the source water for the NCPWF. The Discharger also distributes tertiary treated recycled water from the NCWRP to its non-potable customers through an extensive “purple pipe” distribution system.

Upon completion, the NCPWF will produce up to 30 MGD of advanced treated recycled water on an annual average basis. Treatment processes at the NCPWF will consist of ozone disinfection, biological activated carbon, ultrafiltration, reverse osmosis treatment, ultraviolet light/advanced oxidation using sodium hypochlorite as an oxidant, product-water conditioning, and chlorination. Advanced treated recycled water produced at the NCPWF will be dechlorinated prior to being discharged to the Reservoir.

### Public Comments Summary

San Diego Water Board staff released Tentative Order No. R9-2024-0035 for public review and comment on June 13, 2024. The San Diego Water Board received comment letters from the Discharger (**Supporting Document No. 3**) and from the State Water Resources Control Board Division of Drinking Water (DDW, **Supporting Document No. 4**). San Diego Water Board staff reviewed the comment letters and prepared a response to comments report (**Supporting Document No. 5**) which contains the San Diego Water Board’s responses to written comments received and describes any revisions to Tentative Order No. R9-2024-0035. The majority of comments provided by the Discharger and DDW consisted of requests to make additional minor modifications to Tentative Order No. R9-2024-0035 to correct typographical errors and table footnotes; and clarify abbreviations and terms used. DDW also requested Tentative Order No. R9-2024-0035 further amend the 2020 Order by 1) removing the requirement to apply the high-rate filtration only to the production of non-potable recycled water, and 2) adding a requirement for the Discharger to monitor additional locations in the Reservoir for specific parameters, based on section 60320.326 of title 22 of the Calif. Code Regs.

Revised Tentative Order No. R9-2024-0035 displays changes made as a result of written comments received in [blue-underline text](#) for added text and ~~blue-strikeout~~ text for deleted text (see Supporting Documents Nos. 1 and 5). Changes Tentative Order No. R9-2024-

0035 made to the 2020 Order prior to the public comment period are shown in red- text for added text and ~~red-strikeout~~ text for deleted text.

### **COMPLIANCE RECORD**

The Discharger is yet to begin discharging advanced treated recycled water to the Reservoir. As a result there are no effluent violations. The NCPWF is still under construction and is expected to be completed by 2027.

### **PUBLIC NOTICE**

Tentative Order No. R9-2024-0035 was released for public review and comment on June 13, 2024, with comments due on July 15, 2024. The Notice of Public Hearing and Comment Period was posted on the San Diego Water Board website for the duration of the comment period and sent to all known interested persons by email on June 13, 2024. A copy of the Notice is included as **Supporting Document No. 6**. A Meeting Notice and Agenda for the October 2024 Board meeting was also posted on the San Diego Water Board website.

### **SUPPORTING DOCUMENTS**

1. Revised Tentative Order No. R9-2024-0035
2. Location Map
3. City of San Diego Comment Letter
4. DDW Comment Letter
5. Response to Comments Report
6. Notice of Public Hearing and Comment Period