

State of California
Regional Water Quality Control Board
San Diego Region

EXECUTIVE OFFICER SUMMARY REPORT
March 13, 2013

- ITEM: 5
- SUBJECT: Waste Discharge Requirements Addendum: Modification of Order No. 2000-10, Master Recycled Water Permit for the Production and Purveyance of Recycled Water for San Elijo Joint Powers Authority, San Dieguito Water District, Santa Fe Irrigation District, and City of Del Mar, San Diego County (Fisayo Osibodu).
- PURPOSE: To consider adopting Tentative Addendum No. 1 to Order No. 2000-10 (Supporting Document No. 1)
- RECOMMENDATION: Adoption of Tentative Addendum No. 1 to Order No. 2000-10 is recommended.
- KEY ISSUES:
1. Tentative Addendum No. 1 to Order No. 2000-10 (tentative Addendum) will allow the San Elijo Joint Powers Authority (SEJPA) to initiate discharge from its new reverse osmosis and micro filtration facilities at San Elijo Water Reclamation Facility (SEWRF), and increase the water reclamation capacity at the SEWRF from 2.48 million gallons per day (MGD) to 3.02 MGD.
 2. The tentative addendum requires SEJPA to implement monitoring of recycled water for priority pollutants as required by the State Water Board's Recycled Water Policy.
- DISCUSSION: The SEJPA owns and operates the SEWRF, which treats residential and domestic wastewater generated from the City of Encinitas, the City of Solana Beach, and the Rancho Santa Fe Community Services District (Supporting Document No. 2). The SEWRF is designed for a wastewater treatment capacity of 5.25 MGD and a water reclamation capacity of 2.48 MGD. The wastewater facilities include the treatment facility, nine wastewater lift stations, and the San Elijo Ocean Outfall. The water reclamation facilities consist of treatment facilities, 19 miles of recycled water distribution pipelines, and two recycled water reservoirs.

Order No. 2000-10 establishes requirements for the discharge of up to 2.48 million gallons per day (MGD) of tertiary treated recycled water from the SEWRF. Recycled water produced from the SEWRF is distributed by the SEJPA, San Dieguito Water District, Santa Fe Irrigation District, and the City of Del Mar within their service areas. SEJPA also plans to begin distributing recycled water to Olivenhain Municipal Water District upon adoption of the tentative Addendum.

The new advanced water treatment system will consist of microfiltration and reverse osmosis processes. A portion of the SEWRF effluent will be treated through the advanced water treatment systems and blended with tertiary treated effluent at the SEWRF's tertiary treatment facilities. This process will help improve the quality of recycled water and reduce the overall concentration of Total Dissolved Solids (TDS) in recycled water produced by the SEWRF. The advanced water treatment train would act as a side stream in parallel to existing tertiary treatment facilities when needed. The SEJPA also plans to add new recycled water storage and distribution facilities.

The tentative Addendum modifies Order No. 2000-10 by increasing the flow limit from 2.48 to 3.02 MGD; and allowing the SEJPA, and distributors of recycled water produced from the SEWRF, to distribute recycled water to additional reuse sites located within the Batiquitos (904.51) and San Elijo (904.61) Hydrologic Subareas, and the Solana Beach (905.10) Hydrologic Area. The addendum also includes the following requirements to ensure that the SEJPA complies with the State Water Board's Recycled Water Policy (2009):¹

1. Requires the SEJPA to submit an operations and management plan to ensure proper application of recycled water, runoff and leak prevention; and ensure that nutrient loading to use areas from application of recycled water and fertilizers will not exceed nutrient demands of landscape vegetation (recycled water must be applied at agronomic rates).² In lieu of submitting an

¹ State Water Board's Recycled Water Policy is available on-line at:
http://www.waterboards.ca.gov/water_issues/programs/water_recycling_policy/docs/recycledwaterpolicy_approved.pdf

² Agronomic rate refers to the rate of application of recycled water to plants that is necessary to satisfy the plants' watering and nutritional requirements, considering supplemental water (e.g., precipitation) and

operations and management plan, the SEJPA or applicable recycled water purveyors may add the requirements to their Recycled Water Rules and Regulations.

2. Requires the SEJPA to implement monitoring of recycled water for priority pollutants as frequently as specified in the Recycled Water Policy. The Recycled Water Policy was amended by the State Water Board on January 22, 2013. The amendment changed the monitoring frequency for priority pollutants for landscape irrigation projects from twice annually to once annually. The amendment, however, must be approved by the Office of Administrative (OAL) before it goes into effect. Thus, until the amendment is approved by the OAL, the SEJPA must monitor for priority pollutants twice annually.

Adoption of the tentative Addendum will allow for the increased uses of recycled water as the alternative to potable water and ensure compliance with the Recycled Water Policy. The tentative Addendum initially required the SEJPA to submit a schedule for developing a salt and nutrient management plan for the San Elijo groundwater basin. This requirement has been deleted from the tentative Addendum. Instead, the San Diego Water Board staff will work with the San Diego County Water Authority to incorporate salt and nutrient management plan elements for small coastal groundwater basins with poor water quality in the next version of the Region's Integrated Regional Water Management Plan.

The San Diego Water Board received written comments on the tentative Addendum from the SEJPA (Supporting Document No. 3), the San Diego County Water Authority (Supporting Document No. 4), and WateReuse California (Supporting Document No. 5). Written responses to these comments are included in the agenda package (Supporting Document No. 6). Changes made to the tentative Addendum as a result of comments received are shown in underline/strikeout format (Supporting Document No. 7). A clean copy of the tentative Addendum is included as Supporting Document No. 1.

supplemental nutrients (e.g., fertilizers), while preventing or strictly minimizing the amount of nutrients that pass beyond the plants' root zone. Also, see Recycled Water Policy section 7.c(2).

For further reference, a copy of Order No. 2000-10 can be found on-line at:

http://www.waterboards.ca.gov/sandiego/board_decisions/adopted_orders/2000/2000_0010.pdf

LEGAL CONCERNS:

None.

SUPPORTING DOCUMENTS:

1. Tentative Addendum No. 1 to Order No. 2000-10 (clean copy)
2. Map Showing San Elijo Joint Powers Authority Service Area
3. Comment Letter from San Elijo Joint Powers Authority
4. Comment Letter from the San Diego County Water Authority
5. Comment Letter from WaterReuse California
6. Response to Comments
7. Underline/strikeout Copy of Revised Tentative Addendum No. 1 to Order No. 2000-10
8. Notification Letters

SIGNIFICANT CHANGES:

1. Tentative Addendum No. 1 to Order No. 2000-10 (tentative Addendum) will allow the SEWRF to increase its capacity to produce recycled water from 2.48 to 3.02 MGD.
2. The tentative Addendum requires the SEJPA to submit an operations and management plan.
3. The tentative Addendum requires the SEJPA to monitor its recycled water for priority pollutants as required by the Recycled Water Policy, and annually report monitoring results to the San Diego Water Board.

COMPLIANCE RECORD:

Several chloride and TDS effluent violations were identified in monitoring reports submitted by the SEJPA in the past 4 years. The new microfiltration and reverse osmosis processes will address these violations and help improve overall quality of recycled water produced by the SEWRF.

PUBLIC NOTICE:

Notification of this action was sent to known interested parties by mail on October 26, 2012 and a revised version of the tentative Addendum was sent to the parties on November 16, 2012. The tentative Addendum was also posted on the San Diego Water Board website on October 28, 2012. These actions satisfy the public notification requirements of California Water Code, Division 7, section 13167.5 for a 30-day notice.