

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

**EXECUTIVE OFFICER SUMMARY REPORT
DECEMBER 13, 2023**

ITEM NO. 7

SUBJECT

Consideration of Tentative Order No. R9-2023-0131, *Waste Discharge Requirements for the City of Escondido, Membrane Filtration and Reverse Osmosis Facility, San Diego County* (Tentative Order No. R9-2023-0131). (Brandon Bushnell)

STAFF RECOMMENDATION

Staff recommends adoption of Tentative Order No. R9-2023-0131 (**Supporting Document 1**).

KEY ISSUES

1. Tentative Order No. R9-2023-0131 establishes waste discharge requirements (WDRs) for the City of Escondido's (Discharger) Membrane Filtration and Reverse Osmosis Facility (Facility), which will provide 3.1 million gallons per day (MGD) of demineralized recycled water to irrigate salt-sensitive crops at commercial agricultural operations within the Escondido Hydrologic Subarea (HSA) (904.62), the Las Lomas Muertas HSA (905.32), and the Bear HSA (905.24).
2. Tentative Order No. R9-2023-0131 requires the Discharger to comply with the water reclamation requirements (WRRs) contained in Order No. R9-2010-0032, *Waste Discharge Requirements and Master Reclamation Permit for the City of Escondido, Hale Avenue Resource Recovery Facility* as amended by Addendum No. 1 to Order No. R9-2010-0032, *An Addendum Updating the Requirements for Ultraviolet Disinfection for the City of Escondido, Hale Avenue Resource Recovery Facility* (Order No. R9-2010-0032), for the production and purveyance of demineralized recycled water from the Facility. The WRRs in Order No. R9-2010-0032 are consistent with recommendations in the State Water Board's Division of Drinking Water's (DDW) *Conditional Acceptance of Title 22 Engineering Report Amendment Membrane Filtration / Reverse Osmosis Project City of Escondido* dated July 21, 2021.
3. Tentative Order No. R9-2023-0131 furthers Governor Newsom's *California's Water Supply Strategy, Adapting to a Hotter, Drier Future*, (California Water Strategy) which focuses on supporting local efforts to conserve, capture, recycle, and de-salt enough water to allow California communities to prosper in a hotter and drier climate. Treating wastewater for irrigation reuse, such as the project permitted by Tentative Order No. R9-2023-0131, increases local water supply, reduces the volume of wastewater discharged to the ocean, and is an important part of a

sustainable resilient water portfolio.

PRACTICAL VISION

Adoption of Tentative Order No. R9-2023-0131 is consistent with the goals of the *Strategize to Achieve Resilient Local Water Supply* chapter of the *San Diego Water Board Practical Vision* (Practical Vision)¹ on protecting, restoring, and regulating water quality in a manner that contributes to sustainable local water supply and is consistent with the protection of other beneficial uses for current and future generations. The use of sustainable water supply sources helps reduce the San Diego Region's dependence on imported water and increases the reliability of local water supplies. Tentative Order No. R9-2023-0131 is also consistent with the *Strategize for Healthy Waters* chapter of the Practical Vision as Tentative Order No. R9-2023-0131 integrates all applicable public health and water quality requirements to optimize protection of water quality and beneficial uses of the Escondido, Las Lomas Muertas, and the Bear HSAs.

DISCUSSION

The purpose of this item is to provide the San Diego Water Board with information to assist in its consideration of Tentative Order No. R9-2023-0131. Adoption of Tentative Order No. R9-2023-0131 supports the Discharger in providing an alternative, high quality water source, to support local agricultural, and diminishing the demand for imported water. The Facility will increase recycled water use in the region by creating a demineralized recycled water supply that farmers can use to irrigate salt-sensitive crops at commercial agricultural operations. The Facility will also be the first in the region to produce demineralized recycled water for the specific purpose of irrigating salt sensitive crops. Tentative Order No. R9-2023-0131 includes discharge specifications and effluent limitations based on water quality objectives established in the San Diego Water Board's *Water Quality Control Plan for the San Diego Basin (9)* (Basin Plan)² for the protection of municipal beneficial use.

The Discharger is responsible for providing potable water treatment and delivery services, and wastewater collection and treatment for the Discharger's domestic, commercial, and irrigation customers. The Discharger operates the Hale Avenue Resource Recovery Facility (HARRF) for wastewater treatment and recycled water production. The Facility will further treat the recycled water through membrane filtration (MF), reverse osmosis (RO) demineralization, posttreatment stabilization, chemical storage and feed systems, a blended product water storage tank and pump station, and ancillary facilities. The Facility will produce approximately 2 MGD of demineralized RO product water which the Discharger will blend with approximately 1.1 MGD of recycled

¹ Practical Vision:

https://www.waterboards.ca.gov/sandiego/water_issues/programs/practical_vision/

² Basin Plan:

https://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/docs/R9_Basin_Plan.pdf

water from HARRF to create 3.1 MGD of blended demineralized recycled water for agricultural use.

The Discharger will send the Facility's waste residuals such as MF backwash and membrane cleaning wastes to the sanitary sewer for treatment at HARRF. The Discharger will send the Facility's RO concentrate to a brine pipeline for direct conveyance to the San Elijo Ocean Outfall as allowed by and in accordance with Order No. R9-2018-0002, *National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements (WDR) for the City of Escondido, Discharge from the Hale Avenue Resource Recovery Facility and Membrane Filtration/Reverse Osmosis Facility to the Pacific Ocean through the San Elijo Ocean Outfall*.

PUBLIC NOTICE

Board staff sent notification of this action to the Discharger and known interested parties on September 20, 2023. Additionally, Board staff posted Tentative Order No. R9-2023-0131, the transmittal letter (**Supporting Document 3**), and Notice of Public Hearing and Comment Period (**Supporting Document 4**) on the San Diego Water Board website on September 21, 2023. These actions satisfy the 30-day public notification and comment requirements of Water Code section 13167.5. Board staff did not receive any comments during the public comment period.

SUPPORTING DOCUMENTS

1. Tentative Order No. R9-2023-0131
2. Vicinity and Facility Map
3. Transmittal Letter
4. Notice of Public Hearing and Comment Period