

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

**EXECUTIVE OFFICER SUMMARY REPORT**

**March 9, 2022**

**ITEM NO. 9**

**SUBJECT**

NPDES Permit Reissuance: Waste Discharge Requirements for the South Orange County Wastewater Authority Discharge to the Pacific Ocean through the Aliso Creek Ocean Outfall (Tentative Order No. R9-2022-0006, NPDES No. CA0107611). (*Joann Lim and Keith Yaeger*)

**STAFF RECOMMENDATION**

Adoption of Tentative Order No. R9-2022-0006 (Tentative Order) is recommended.

**KEY ISSUES**

The Tentative Order (**Supporting Document No. 1**) includes a requirement to investigate alternatives for tracking the location and movement of the Aliso Creek Ocean Outfall (ACOO) wastewater plume and its potential encroachment on shoreline water contact recreational areas. The San Diego Water Board included similar plume tracking investigative requirements in the National Pollutant Discharge Elimination System (NPDES) permits for the Point Loma Ocean Outfall, South Bay Ocean Outfall, San Elijo Ocean Outfall, Encina Ocean Outfall, and Oceanside Ocean Outfall.

**PRACTICAL VISION**

Consistent with the mission of Chapter 1 of the Practical Vision<sup>1</sup>, *Strategize for Healthy Waters*, the Tentative Order integrates all applicable technology-based requirements, water quality-based effluent limitations, and receiving water quality standards to assure protection of the water quality and beneficial uses in the receiving waters of the Pacific Ocean. Additionally, the Tentative Order has provisions allowing for participation in regional monitoring and assessment programs in keeping with San Diego Water Board Resolution No. R9-2012-0069, *Resolution in Support of a Regional Monitoring Framework*.

**DISCUSSION**

The South Orange County Wastewater Authority (SOCWA) is a public joint powers authority established pursuant to California Government Code section 6500 *et seq.* and is responsible for the treatment of wastewater and the disposal of treated effluent in a 200-square mile service area in south Orange County. SOCWA is comprised of the following member agencies: the City of Laguna Beach, the City of San Clemente, the City of San Juan Capistrano, El Toro Water District (ETWD), Emerald Bay Service District, Irvine Ranch Water District (IRWD), Moulton Niguel Water District, Santa

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<sup>1</sup> [https://www.waterboards.ca.gov/sandiego/water\\_issues/programs/practical\\_vision/](https://www.waterboards.ca.gov/sandiego/water_issues/programs/practical_vision/)

Margarita Water District, South Coast Water District (SCWD), and Trabuco Canyon Water District.

SOCWA owns and operates the ACOO, which currently receives treated effluent from four publicly owned treatment works (POTWs), treated groundwater, and reverse osmosis brine from one groundwater desalination facility and one water reclamation facility. The Regional Treatment Plant and Coastal Treatment Plant (both owned and operated by SOCWA); the Los Alisos Water Reclamation Plant, Irvine Desalter Project Portable Water Treatment System, and Irvine Desalter Project Shallow Groundwater Unit (all three owned and operated by IRWD); the El Toro Water District Water Reclamation Plant (owned and operated by ETWD); and the Aliso Creek Water Reclamation Facility (owned and operated by SCWD) discharge wastewater, waste brine, or treated groundwater to the Pacific Ocean through the ACOO under the waste discharge requirements of Order No. R9-2012-0013, NPDES CA0107611 (Current Order). If adopted, the Tentative Order will supersede the Current Order. A description of these facilities is in Attachment F, section 2.1 of the Tentative Order. The locations of these facilities are in **Supporting Document No. 2**.

#### **Public Notification and Comments on Tentative Order**

The Tentative Order was noticed and released for public review and comment for a 30-day period on January 4, 2022. The comment period closed on February 3, 2022. The San Diego Water Board received 13 comment letters (**Supporting Document Nos. 3.i - 3.xiii**). The Response to Comments Report (**Supporting Document No. 4**) includes detailed responses to the comments received and evaluates the need to modify the Tentative Order in response to the comments. A copy of the Response to Comments Report was provided to the Discharger.

The following is a summary of the most significant comments and the responses to those comments:

1. *The ACOO discharges may affect the beneficial uses in the receiving waters and Marine Protected Areas (MPAs). (See Supporting Document No. 4, Comment Nos. 2.3, 2.6, 3.4, 3.7, and 3.15.)*

Response: The Tentative Order integrates all applicable technology-based requirements, water quality-based effluent limitations, and receiving water quality standards which are primarily derived from the *Water Quality Control Plan for Ocean Waters of California* (Ocean Plan). Compliance with the requirements of the Tentative Order, including Ocean Plan water quality standards, assures protection of the water quality and beneficial uses of the receiving marine waters of the Pacific Ocean, including marine habitat and MPAs. The Tentative Order also includes requirements to better understand the impact of the ACOO discharge, including receiving water monitoring; monitoring requirements and recommendations to evaluate the effects and contribution of the discharge on ocean acidification, hypoxia, and harmful algal blooms; and plume tracking.

2. *SOCWA and its member agencies should be recycling more wastewater to reduce the volume of wastewater and the amount of pollutants discharged to the ocean. (See Supporting Document No. 4, Comment Nos. 2.4, 2.5, 2.6, 3.1, 3.4, 3.6, 3.10, 3.11, 3.13, and 4.2.)*

Response: It has long been a policy of the San Diego Water Board to encourage and promote water recycling while taking into consideration the need to protect beneficial uses of the waters of the State of California (State) and protect the public health. Water recycling should be carefully considered by persons proposing to discharge once-used wastewater to the ocean whenever practical. SOCWA and its member agencies have an extensive history of collaborating to implement water recycling projects that are protective of water quality and help to ensure the sustainability of the water supply. Since the early 1990's, the use of recycled water has played a vital role in increasing the reliability and sustainability of the overall water supply within the SOCWA service area. SOCWA reports that its recycled water program regulated under the San Diego Water Board's Order No. 97-52 currently produces just under 20,000 acre feet per year (AFY) of recycled water for use within its service area, thereby saving approximately 6.5 billion gallons of domestic water each year that otherwise would be used for those purposes. Future projects are in the planning stages in the SOCWA service area to further maximize water reuse for greater resiliency and sustainability of future drinking water supplies. Examples of such projects include Moulton Niguel Water District's ongoing investigation of the beneficial reuse of recycled water for implementation in a Direct Potable Reuse Project and Santa Margarita Water District's proposed multi-phased San Juan Watershed Project to increase the capture and storage of urban runoff and stormwater, optimize recycled water use, and augment local groundwater supplies.

From a legal perspective, the San Diego Water Board is not required to reduce discharges of treated effluent from POTWs when reissuing an NPDES permit. Water Code section 13263, which is the San Diego Water Board's statutory authority to issue NPDES permits regulating discharges into waters of the State, identifies the issues the San Diego Water Board is to "take into consideration" before issuing those permits. (Water Code, section 13263, subdivision (a).) These include "the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Section 13241." (Ibid.) None of those considerations involve the volume of water discharged. (See also Water Code, sections 13370, 13389.) Further, the Discharger has the exclusive authority to decide whether to reuse or discharge wastewater produced by a POTW. (See *City of Santa Clara v. Von Rasefeld* (1970) 3 Cal.3d 239, 246; *Mefford v. City of Tulare* (1951) 102 Cal.App.2d 919, 924; see also Wat. Code, § 1210.) However, the San Diego Water Board may encourage dischargers to recycle water.

3. *The Tentative Order should be revised to address aging infrastructure deficiencies of the SOCWA Effluent Transmission Main sewer pipeline and the*

*Coastal Treatment Plant. (See Supporting Document No. 4, Comment Nos. 3.5, 3.7, 3.9, and 3.10.)*

Response: The Tentative Order requires the Dischargers to properly operate and maintain all facilities and to submit an Asset Management Plan. It should also be noted that the purpose of the Tentative Order's Asset Management Plan requirement, as well as SOCWA's Ten Year Capital Improvement Plan cited in the Response to Comments Report, is to identify capital improvement projects necessary for ensuring the rehabilitation or replacement of the Dischargers' POTW facilities. This planning will allow SOCWA and its member agencies to effectively plan and budget for the needed capital improvement projects.

A summary of SOCWA's proposed maintenance and improvement projects for the Coastal Treatment Plant and the Effluent Transmission Main including detailed project descriptions, summary of scope, need, key issues, timing and basis for construction costs is described in detail in the appendices of SOCWA's Ten Year Capital Improvement Plan.

The Revised Tentative Order (Supporting Document No. 1) displays the changes made after the January 4, 2022 public release in red-underline for added text and ~~red-strikeout~~ for deleted text. Changes were made to correct minor editorial errors.

### **SIGNIFICANT CHANGES**

The following are significant differences between the Tentative Order (Supporting Document No. 1) and the Current Order (Order No. R9-2012-0013):

1. The Tentative Order includes a new requirement to develop a Plume Tracking Study to determine if the plume is moving towards the shore or surfacing where it may encroach upon water recreation areas and to evaluate whether the monitoring methods and locations established in previous orders and reinstated in the Tentative Order are still appropriate and applicable.
2. The Tentative Order adds receiving water monitoring requirements to better understand the characteristics of the wastewater plume and to be consistent with the Ocean Plan.
3. To help offset the cost of additional monitoring requirements, the Tentative Order reduces the monitoring frequency at nearshore and offshore stations from monthly to quarterly.
4. The Tentative Order adds a requirement to develop and implement an Asset Management Plan. The Asset Management Plan will provide a framework for setting operational quality assurance procedures, identifying projects needed for the rehabilitation or replacement of Discharger infrastructure, and the required budget, and ensuring the Dischargers have sufficient financial and technical resources to continually maintain compliance with the Tentative Order.
5. The Tentative Order adds a requirement to prepare and submit a Climate Change Action Plan within three years of the effective date of the Order.

6. The Tentative Order requires the Dischargers to monitor the receiving water for human marker HF183 when the overall compliance rate for bacteria receiving water limitations specified in the Order is below 90 percent within a rolling one-year period at a single monitoring location, or when bacteria receiving water limitations are exceeded more than 50 percent of the time within a rolling quarterly period for kelp/nearshore monitoring locations.
7. The Tentative Order proposes new requirements to investigate repeated performance goal exceedances and submit a Performance Goal Exceedance Report that includes the results of the investigation. These proposed requirements are proactive measures to prevent the combined ACOO discharge from causing or contributing to an exceedance (i.e., violation) of the receiving water limitations and water quality objectives described in section 5 of the Tentative Order.

### **COMPLIANCE RECORD**

From January 2017 to December 2021, SOCWA reported four effluent violations, 11 deficient monitoring violations, three late report violations, and 13 plant spills. Details regarding these violations are included in the compliance summary provided in the Fact Sheet of the Tentative Order (Attachment F, section 2.4). To address these violations, the San Diego Water Board issued SOCWA four staff enforcement letters, one notice of violation, and one administrative civil liability (Settlement Offer No. R9-2016-0133 for \$3,000).

### **PUBLIC NOTICE**

On January 4, 2022, the San Diego Water Board provided public notice of the release of the Tentative Order for public review and comment and today's public hearing. The Notice of Public Hearing and Comment Period (Notice) and the Tentative Order were posted on the San Diego Water Board website for the duration of the 30-day comment period and sent to all interested parties. The Notice announced a public hearing would be held on March 9, 2022; the availability of the Tentative Order for review; and provided instructions for submittal of written comments. A copy of the Notice is included as **Supporting Document No. 5**. Notice of the public hearing regarding the Tentative Order was also provided in the Meeting Notice and Agenda for the March 9, 2022 San Diego Water Board meeting, which is posted on the Board website.

### **SUPPORTING DOCUMENTS**

1. Revised Tentative Order
2. Location Map
3. Comment Letters
  - i. South Orange County Wastewater Authority
  - ii. South Laguna Civic Association
  - iii. Laguna Bluebelt
  - iv. Penny Elia
  - v. Roger E. Bütow, Founder & Executive Director, Clean Water Now
  - vi. Los Angeles/Orange Counties Building and Construction Trades Council
  - vii. CalDesal

- viii. Dana Point Chamber of Commerce
  - ix. Kar W. Seckel, P.E., Municipal Water District of Orange County
  - x. Robert J. Hunter, Municipal Water District of Orange County
  - xi. Susan Hinman
  - xii. Mesa Water District
  - xiii. Local Union 652
- 4. Response to Comments Report
  - 5. Notice of Public Hearing and Comment Period