State of California Regional Water Quality Control Board San Diego Region

EXECUTIVE OFFICER SUMMARY REPORT
April 11, 2018

ITEM:	8
SUBJECT:	NPDES Permit Reissuance: San Elijo Joint Powers Authority, San Elijo Water Reclamation Facility Discharge to the Pacific Ocean through the San Elijo Ocean Outfall (Tentative Order No. R9-2018-0003, NPDES No. CA0107999). (<i>Joann Lim</i>)
PURPOSE:	To receive public testimony and consider adoption of Tentative Order No. R9-2018-0003 (Tentative Order) (Supporting Document No. 1).
RECOMMENDATION:	Adoption of the Tentative Order with proposed revisions is recommended.
KEY ISSUES:	The Tentative Order includes a requirement to investigate alternatives for tracking the movement of the San Elijo Ocean Outfall (SEOO) wastewater plume and its potential encroachment on shoreline water contact recreation areas. The question of where the SEOO plume is going also has a regional component for determining when and where multiple plumes comingle. The San Diego Water Board plans to include a similar requirement in the upcoming reissuance of NPDES permits for the Encina Ocean Outfall and the Oceanside Ocean Outfall, with the ultimate goal of using the findings from these studies to develop a unified regional monitoring program for all three ocean outfalls.
PRACTICAL VISION:	Consistent with the mission of the <i>Strategy for Healthy</i> <i>Waters</i> chapter of the Practical Vision, the Tentative Order integrates all applicable technology-based requirements, water quality-based effluent limitations, and receiving water quality standards in order to optimize protection of water quality and beneficial uses in 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, <i>Resolution in Support of a Regional Monitoring Framework.</i>

DISCUSSION: The San Elijo Joint Powers Authority (SEJPA or Discharger) provides regional wastewater collection, treatment, reuse, and disposal services for the communities of Solana Beach, Rancho Santa Fe, Olivenhain, and Cardiff-by-the-Sea in San Diego County. SEJPA owns and operates the San Elijo Water Reclamation Facility (Facility), a publicly owned treatment works (POTW) located in the Cardiff-by-the-Sea area of Encinitas, California.

> The Facility provides secondary treatment to a design flow of 5.25 million gallons per day (MGD) and tertiary treatment to a design flow of 2.48 MGD. The tertiary-treated recycled water is used at reuse sites such as parks and golf courses. The production and use of tertiary-treated recycled water is regulated under separate waste discharge requirements (WDRs). The portion of the effluent not reused is discharged approximately 1.5 miles out into the Pacific Ocean through the SEOO. The 25.5-MGD capacity SEOO is co-owned with the City of Escondido. See **Supporting Document No. 2** for a map of the Facility.

> In addition to the Facility discharge, the effluent from the City of Escondido's Hale Avenue Resource Recovery Facility (HARRF) and proposed Membrane Filtration/Reverse Osmosis (MFRO) Facility, Stone Brewing Co., and Palomar Energy Center is also discharged through the SEOO to the Pacific Ocean. Each of these discharges are regulated by separate individual NPDES permits. The reissuance of the NPDES permit for the City of Escondido's HARRF and MFRO Facility discharge to the SEOO is also being considered by the San Diego Water Board at today's meeting under Agenda Item 9.¹

> Discharges from the Facility to the SEOO are currently regulated by Order No. R9-2010-0087 (NPDES Permit No. CA0107999). The Tentative Order will, if adopted, supersede Order No. R9-2010-0087 and reissue the NPDES Permit for the Facility discharge for a five-year term. The Tentative Order was developed based on information in the Discharger's reissuance application, self-monitoring reports, and other available sources (e.g. Facility inspection reports).

¹ San Diego Water Board, Item No. 9, Tentative Order No. R9-2018-0002, NPDES No. CA0107981, Waste Discharge Requirements for the City of Escondido, Hale Avenue Resource Recovery Facility and Membrane Filtration/Reverse Osmosis Facility Discharge to the Pacific Ocean through the San Elijo Ocean Outfall

The Tentative Order was noticed and released for public review and comment for a 30-day period on January 27, 2018. The public comment period closed on February 26, 2018. The California Department of Fish and Wildlife submitted a comment email dated February 5, 2018 (**Supporting Document No. 3**). The City of Escondido and the Discharger submitted a joint comment letter dated February 26, 2018 (**Supporting Document No. 4**). The Response to Comments Report (**Supporting Document No. 5**) includes detailed responses to the comments on the Tentative Order and any actions taken to modify the Tentative Order in response to comments.

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

1. The Discharger requested that the Tentative Order establish a performance goal rather than an effluent limitation for chronic toxicity.

Applicable USEPA regulations and the implementation provisions of the Water Quality Control Plan for Ocean Waters of California. California Ocean Plan (Ocean Plan) require that the Tentative Order include effluent limitations for all pollutants that are discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. The San Diego Water Board determined that reasonable potential is demonstrated for chronic toxicity levels in the Facility effluent given the possibility of synergistic or additive toxic effects of known and unknown pollutant mixtures in the effluent on the receiving waters. Accordingly, the San Diego Water Board has maintained the effluent limitations for chronic toxicity in the Tentative Order.

2. The Discharger requested that the Tentative Order be revised to acknowledge that the San Elijo Lagoon Restoration Project (Project) dredged material disposal operations may have a significant impact on receiving water quality and sediments in the vicinity of the SEOO.

The San Diego Water Board revised the Fact Sheet of the Tentative Order in Attachment F section VII.B.3

to reflect the significance of the dredged material disposal operations. The deposition of dredged material from the Project dredging operations have a limited potential to produce degraded benthic community conditions that are not related to pollutants discharged from the SEOO. To further reduce the potential for physical stressors to the benthic community from the dredging operations, the Tentative Order allows the Discharger to conduct receiving water sediment monitoring anytime within the permit term, with the results due at least 180 days before the permit expires. The Discharger may also propose to temporarily redirect sediment monitoring efforts during dredged material disposal operations to participate in other regional monitoring efforts pursuant to Attachment E section V.B of the Tentative Order.

3. The Discharger requested some modifications to the Plume Tracking Study requirement of the Tentative Order.

The San Diego Water Board revised the Plume Tracking Study requirement in Attachment E section VI.C of the Tentative Order to address some of the requested modifications such as modifying some terms (e.g. replacing "map" with "assess"), adding more details (e.g. "such as storm water and outflows from the San Elijo Lagoon"), and adding more questions to be addressed by the study (e.g. What parameters are most useful for assessing the presence of a wastewater plume?). The San Diego Water Board disagreed with other requested modifications such as using terms inconsistent with the Tentative Order (e.g. modifying "monitoring locations" to "receiving water station locations") and limiting the scope of the questions (e.g. limiting the plume tracking program to surf zone recreational areas).

The Revised Tentative Order (**Supporting Document No.** 1) displays the changes made after the January 27, 2018 public release in <u>red-underline</u> for added text and red <u>strikeout</u> for deleted text.

LEGAL CONCERNS: None

SUPPORTING DOCUMENTS:	 Revised Tentative Order Location Map Comment email from the California Department of Fish and Wildlife, dated February 5, 2018 Comment letter from the City of Escondido and San Elijo Joint Powers Authority, dated February 26, 2018 Response to Comments Report
COMPLIANCE RECORD	According to the Discharger's self-monitoring reports, there were seven noncompliance incidents during the term of the previous Order, Order No. R9-2010-0087, between November 2010 and November 2017. These noncompliance incidents are generally classified as follows:
	 1 late monitoring report in April 2015, 1 effluent violation for total suspended solids in January 2017, and 5 effluent violations for settleable solids in January 2017.
	Staff enforcement letters were sent to the Discharger requiring that steps be taken to correct and prevent the reoccurrence of such violations. A mandatory minimum penalty in the amount of \$3,000 was imposed for the January 2017 plant upset (single operational upset) that led to the six effluent violations noted above.
PUBLIC NOTICE:	The Tentative Order was noticed and released for public review and comment on January 27, 2018, with comments due February 26, 2018. The San Diego Water Board published a Notice of Public Hearing in the San Diego Union Tribune newspaper on January 27, 2018, which announced the April 11, 2018 public hearing and availability of the Tentative Order, and provided instructions on submittal of comments on the Tentative Order. Notice of the April public hearing on the Tentative Order was also provided in the Meeting Notice and Agenda for the April 11, 2018 San Diego Water Board meeting, which was posted on the San Diego Water Board website. Notice of the availability of the Tentative Order for public review and comment was also sent to all known interested parties by email on January 26, 2018 and posted on the San Diego Water Board website.