State of California Regional Water Quality Control Board San Diego Region

EXECUTIVE OFFICER SUMMARY REPORT April 11, 2012

ITEM: 8

SUBJECT: NPDES Permit Reissuance: South Orange County

Wastewater Authority, Discharges to the Pacific Ocean via the Aliso Creek Ocean Outfall, Orange County (Tentative Order No. R9-2012-0013, NPDES No. CA0107611) (Joann

Lim)

PURPOSE: To reissue NPDES Permit No. CA0107611 with the

adoption of Tentative Order No. R9-2012-0013.

RECOMMENDATION: Adoption of Tentative Order No. R9-2012-0013 is

recommended.

KEY ISSUES:

1. The compliance point for technology-based effluent limits must be established for each facility's discharge as required by federal regulations. (Supporting Document No. 2, Attachment F, last paragraph of Section IV.B.2, page

F-21.)

2. The Tentative Order contains appropriate and reasonable monitoring and reporting requirements, which could be reopened in the future to accommodate the Discharger's requested changes and to prescribe the specific requirements for the Discharger's participation in a regional monitoring and assessment program. (Supporting Document No. 2, Attachment E, Section IX.B, page E-16 and Attachment F, Section VI.E.2, page F-46.)

- The Tentative Order appropriately applies repeat bacteriological and toxicity sampling. (Supporting Document No. 2, Attachment E, Sections V and VIII.A.1, pages E-10-12.)
- 4. The Tentative Order contains appropriate effluent limits and performance goals that are consistent with the antidegradation policy and anti-backsliding requirements. (Supporting Document No. 2, Attachment F, Sections IV.D.1 and IV.D.2, pages F-35-37.)

DISCUSSION:

South Orange County Wastewater Authority (SOCWA) is a joint powers authority, comprised of 10 member agencies including the Cities of Laguna Beach, San Clemente, and San Juan Capistrano, El Toro Water District, Emerald Bay Service District, Irvine Ranch Water District, Moulton Niguel Water District (MNWD), Santa Margarita Water District (SMWD), South Coast Water District (SCWD), and Trabuco Canyon Water District.

SOCWA operates the Aliso Creek Ocean Outfall (ACOO), which receives secondary treated effluent from four wastewater treatment plants, brine from a groundwater desalination facility, and treated groundwater from a contaminated site at Marine Corps Air Station El Toro. In addition, SOCWA proposes to discharge brine through the outfall from an urban runoff treatment plant in the future. (The descriptions of each facility can be found in Supporting Document No. 2, Attachment F, Section II.A, page F-6. The locations of each facility are shown in the map as Supporting Document No. 1.)

Discharges to the ACOO are currently regulated under Order No. R9-2006-0055. As required by the Order, SOCWA submitted an application for permit reissuance on March 31, 2011. The Order, which has an expiration date of October 1, 2011, was administratively extended in accordance with the Code of Federal Regulations (Title 40, Section 122.6).

The Tentative Order has been developed based on the information submitted as part of the reissuance application, through monitoring and reporting programs, and other available information. The Tentative Order implements the requirements in the Clean Water Act, Code of Federal Regulations, and California Water Code. If adopted, the Tentative Order would supersede Order No. R9-2006-0055, updating the waste discharge requirements for the discharge from the ACOO.

Comments were received from SOCWA and three nongovernment organizations (NGOs). The responses to all the comments, and any errata will be included in the Supplemental Executive Officer Summary Report.

LEGAL CONCERNS: None

SUPPORTING DOCUMENTS:

- 1. Location Map
- 2. Tentative Order No. R9-2012-0013
- 3. Compliance Record
- 4. Comments

SIGNIFICANT CHANGES:

The Tentative Order includes the following significant changes to Order No. R9-2006-0055:

- The number of parameters to be monitored for the discharge from the Irvine Desalter Project has been reduced from 27 to 7 parameters. The parameters have been non-detect for the past five years and are also monitored in the combined discharge. (Supporting Document No. 2, Attachment E, Section IV.C, page E-9.)
- 2. The repeat monitoring for chronic toxicity has been updated to be consistent with ocean discharge permits in the San Diego Region. The current order requires six additional toxicity tests over a 6-month period when the effluent limit for chronic toxicity is exceeded, while the Tentative Order requires six additional tests over a 12week period. (Supporting Document No. 2, Attachment E, Sections V, pages E-10-11.)
- 3. The repeat monitoring for the receiving waters has been updated to be consistent with the provision of the California Ocean Plan. The current order does not require additional monitoring when a single sample exceeds any of the single sample bacterial standards, while the Tentative Order requires repeat sampling to determine the extent and persistence of the exceedance. (Supporting Document No. 2, Attachment E, Sections VIII.A.1, page E-12.)
- 4. The Tentative Order establishes water-quality based effluent limitations (WQBELs) for total chlorine residual and heptachlor. (Supporting Document No. 2, Attachment F, Section IV.C.3, pages F-24-29.)
- 5. The total flow limit was increased from 32.86 million gallons per day (MGD) to 34.37 MGD (4.6% increase). With an increase in the flow limit, the initial dilution used to calculate effluent limits decreased, resulting in the effluent limits and performance goals becoming more stringent (decreased). (Supporting Document No. 2, Attachment F, Section IV.D.2.b, page F-36.)

6. Sampling frequency for toxic metals, cyanide, phenolics, endosulfan, endrin, hexachlorocyclohexane (HCH), and radioactivity, which were determined to have no reasonable potential to exceed Ocean Plan objectives, were reduced from quarterly to semiannually. (Supporting Document No. 2, Attachment F, last paragraph of Section VI.B, page F-45.)

COMPLIANCE RECORD:

During the term of Order No. R9-2006-0055, according to SOCWA's reports, there were 43 deficient monitoring violations and three effluent limitation violations. (A summary of the violations and enforcement actions taken is provided as Supporting Document No. 3.)

PUBLIC NOTICE:

On February 10, 2012, copies of the Tentative Order were mailed (via email) to SOCWA and to all known interested persons and posted on the San Diego Water Board's website. A public notice was published in the Orange County Register.