### REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION

### EXECUTIVE OFFICER SUMMARY REPORT February 12, 2020

## **ITEM 10**

## SUBJECT

NPDES Permit Reissuance: Waste Discharge Requirements for the Marine Corps Base, Camp Pendleton, Southern Regional Tertiary Treatment Plant and Advanced Water Treatment Plant at Haybarn Canyon Discharge to the Pacific Ocean through the Oceanside Ocean Outfall (Tentative Order No. R9-2019-0167, NPDES No. CA0109347). (Joann Lim and Keith Yaeger)

# STAFF RECOMMENDATION

Adoption of Tentative Order No. R9-2019-0167 (Tentative Order) is recommended (**Supporting Document No. 4**).<sup>1</sup>

# **KEY ISSUE**

The San Diego Water Board will resume the public hearing that was opened at the December 11, 2019, Board Meeting to consider adoption of the Tentative Order along with other Tentative Orders (see Item Nos. 8, 9 and 11 of today's agenda), all of which pertain to the reissuance of National Pollutant Discharge Elimination System (NPDES) permits for discharges of waste to the Pacific Ocean through the Oceanside Ocean Outfall (OOO). The Board heard staff testimony regarding all of the Tentative Orders. The Board continued the matter to today's meeting to allow staff time to meet with the Marine Corps Base, Camp Pendleton (MCBCP) and the other dischargers (City of Oceanside (City); Fallbrook Public Utilities District; and Genentech, Inc. (Genentech)) to review the costs associated with the proposed monitoring requirements and to further consider other concerns regarding the provisions of the Tentative Orders.

### **PRACTICAL VISION**

The Tentative Order (**Supporting Document No. 4**) includes provisions requiring MCBCP to:

- Implement a Plume Tracking Monitoring Program (PTMP) to determine if the ocean outfall wastewater discharge plume is affecting beneficial uses and to evaluate whether the current receiving water monitoring methods and locations are still appropriate and applicable; and
- 2) Analyze receiving water samples for the human-associated fecal source marker HF183 to confirm the presence of human fecal material (i.e., sewage) and thus help identify the source(s) of bacterial exceedances in the receiving water. The sampling for HF183 is only required if the receiving water sample for fecal coliform exceeds the

<sup>&</sup>lt;sup>1</sup> The supporting document numbers are assigned sequentially from the supporting document numbers used in the December 11, 2019, Board Meeting Executive Officer Summary Report.

applicable Tentative Order receiving water limitation for bacterial characteristics.

The OOO is designed to quickly mix and diffuse wastewater discharges with the ocean receiving waters. Receiving water quality monitoring is required under the Tentative Order in part to assess if the discharge plume has been sufficiently mixed to maintain protection of the ecosystem in the receiving ocean waters. The extent and location of the discharge plume is an important consideration in designing a monitoring station grid to determine if applicable water quality standards are being met outside of the zone of initial dilution and that the ecosystem is being protected. The PTMP will directly address this water quality issue. Moreover, identifying the offshore location and movement of the outfall plume, the possible encroachment of the plume into inshore recreational areas, and determining the source(s) of the large number of bacterial exceedances that are occurring in the receiving waters addresses human health protection issues.<sup>2</sup> Advancing the receiving water monitoring program to answer new questions about plume location and movement and human fecal material sources is an important step forward in protecting two key beneficial uses (water contact recreation and fish & shellfish consumption) within a key area - the Pacific Ocean. Protecting key beneficial uses in key areas is consistent with the San Diego Water Board's Practical Vision, Strategizing for Healthy Waters chapter and Resolution No. R9-2017-0030, Resolution Supporting Use of the Key Beneficial Uses/Key Areas Concept to Help the San Diego Water Board Focus on What is Most Important.

Advancing the receiving water monitoring program of the Tentative Order also helps ensure that the San Diego Water Board is provided with meaningful and reliable information that will be used to strategically and effectively carry out the Board's mission of protecting and restoring the health of waters in the San Diego Region. This is consistent with the Practical Vision, *Monitoring and Assessment* chapter which points out, "[The] desired outcome of the Porter-Cologne Water Quality Control Act and Clean Water Act is about conditions in water bodies (e.g., chemical, physical and biological integrity); thus, meaningful and reliable information about conditions in water bodies is essential."

The San Diego Water Board has previously included PTMP requirements in NPDES permits for the Point Loma Ocean Outfall, South Bay Ocean Outfall, San Elijo Ocean Outfall, and Encina Ocean Outfall. One goal of the PTMP is to develop a unified regional monitoring program for the three ocean outfalls in northern San Diego County (San Elijo, Encina, and Oceanside). The results of the plume tracking studies will be used to improve the NPDES permit receiving water monitoring programs with respect to the location and extent of required monitoring stations, evaluation of comingling effluent plumes from different ocean outfalls, determining compliance with receiving water quality objectives outside the zone of initial dilution, and to assist with the development of a regional monitoring program approach. Development of a unified regional monitoring approach is consistent with San Diego Water Board Resolution No. R9-2012-0069, *Resolution in Support of a Regional Monitoring Framework*.

### DISCUSSION

MCBCP is the owner and operator of the Southern Regional Tertiary Treatment Plant

<sup>&</sup>lt;sup>2</sup> The Tentative Order Fact Sheet in Attachment F, section VII.B.2 notes that 65 bacterial exceedances occurred at the offshore monitoring locations A1through A5 the OOO. The bacterial exceedances occurred between the years 2011 and 2019.

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(SRTTP) and Advanced Water Treatment (AWT) Plant at Haybarn Canyon. The SRTTP and AWT Plant currently discharge secondary-treated wastewater and waste brine, respectively, to the Pacific Ocean through the OOO, which is owned and operated by the City. The City, Fallbrook Public Utility District, and Genentech also discharge comingled secondary-treated wastewater and waste brine to the OOO. A description of each of these facilities can be found in the fact sheet of the Tentative Order in Attachment F, section II.A (**Supporting Document No. 4**). The locations of the SRTTP, AWT Plant, and the other facilities discharging to the OOO are shown in **Supporting Document No. 5**.

The Executive Officer Summary Report (EOSR) from the December 2019 Board Meeting (December 2019 EOSR) contains background information including a history of the permitting actions to date, a list of the significant differences between the Tentative Order and the current Order No. R9-2013-0112 (Current Order), a compliance history, a copy of the public notice, and references to other supporting documents. The December 2019 EOSR, including the Supporting Documents 1 through 3 thereto, are incorporated into this EOSR by reference (**See Supporting Document No. 6**).

The Tentative Order was noticed and released for public review and comment on September 27, 2019, with comments due October 28, 2019. MCBCP did not submit any comments on the Tentative Order during the public comment period.

In an email dated January 9, 2020, MCBCP provided a late comment letter on the Tentative Order. The San Diego Water Board Chair has declined to accept this late comment letter submittal into the record for this matter at his discretion. On January 13, 2020, San Diego Water Board met with representatives from the City, Fallbrook Public Utility District, MCBCP, and Genentech to further discuss concerns regarding the various provisions of the Tentative Orders, including the requirements and cost of the receiving water monitoring program.

The revised Tentative Order (**Supporting Document No. 4**) displays the changes made after the September 27, 2019, public release in <u>red-underline</u> for added text and <del>red-strikeout</del> for deleted text. Revisions made after the December 2019 Board Meeting are in <u>vellow highlight and red-underline</u> for added text and <del>vellow highlight and red strikeout</del> for deleted text. Revisions were made to the Tentative Order to be consistent with the three other OOO Tentative Orders being considered by the San Diego Water Board at today's meeting under Agenda Item Nos. 8, 9, and 11. Revisions to the Tentative Order that will reduce monitoring costs include the following:

- The revised Tentative Order removes the mid-depth nitrogen and phosphorus samples from the nearshore stations.
- The revised Tentative Order provides the option to conduct profile monitoring or collect a grab sample for temperature, dissolved oxygen, light transmittance, pH, and salinity at the nearshore stations.
- The revised Tentative Order 1) reduces the minimum sampling frequency for total coliform at the surf zone stations from five times per month to three times per month and 2) removes the mid-depth fecal coliform and enterococci samples from the nearshore stations.

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- The revised Tentative Order removes the requirement to monitor for human marker HF183 at the nearshore stations and adds laboratory methods for human marker HF183 that may reduce costs for analysis. Human marker HF183 is only required to be monitored at the offshore stations if the fecal coliform sample exceeds the receiving water limitations.
- The revised Tentative Order allows for a reduction to the minimum sampling frequency for chronic toxicity, upon request, if ten consecutive routine monitoring events are in compliance with the chronic toxicity effluent limitations.

# SUPPORTING DOCUMENTS

- 4. Revised Tentative Order
- 5. Location Map
- 6. December 11, 2019 Public Hearing Executive Officer Summary Report