

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

**EXECUTIVE OFFICER SUMMARY REPORT
February 12, 2020**

ITEM 9

SUBJECT

NPDES Permit Reissuance: Waste Discharge Requirements for the Fallbrook Public Utility District, Fallbrook Water Reclamation Plant and Santa Margarita Groundwater Treatment Plant Discharge to the Pacific Ocean through the Oceanside Ocean Outfall (Tentative Order No. R9-2019-0169, NPDES No. CA0108031). (*Joann Lim and Keith Yaeger*)

STAFF RECOMMENDATION

Adoption of Tentative Order No. R9-2019-0169 (Tentative Order) is recommended (**Supporting Document No. 8**).¹

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, 10, 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 Fallbrook Public Utilities District (District) and the other dischargers (City of Oceanside (City); Marine Corps Base, Camp Pendleton (MCBCP); 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. 8**) includes provisions requiring the District to:

- 1) 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

¹ The supporting document numbers are assigned sequentially from the supporting document numbers used in the December 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 ocean receiving 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.² 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 the 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, evaluate the comingling of effluent plumes from different ocean outfalls, determine compliance with receiving water quality objectives outside the zone of initial dilution, and 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

The District is the owner and operator of the Fallbrook Water Reclamation Plant (WRP).

² The Tentative Order Fact Sheet in Attachment F, section VII.B.2 notes that 65 bacterial exceedances occurred at the offshore monitoring locations A1 through A5 the OOO. The bacterial exceedances occurred between the years 2011 and 2019.

The District will own, construct, and operate the Santa Margarita Groundwater Treatment Plant (GTP). The District discharges effluent to the OOO, along with the City, MCBCP, and Genentech. 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. 8**). The location of the Fallbrook WRP, Santa Margarita GTP, and the other facilities discharging to the OOO are shown in **Supporting Document No. 9**.

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. R9-2012-0004 (Current Order), a compliance history, a copy of the public notice, and references to other supporting documents. The December 2019 EOSR, including Supporting Documents 1 through 7, are incorporated into this EOSR by reference (**Supporting Document No. 10**).

The Tentative Order was noticed and released for public review and comment on September 27, 2019, with comments due October 28, 2019. The San Diego Water Board received comments from the District and the Southern California Alliance of Publicly Owned Treatment Works during the public comment period (**December 2019 EOSR, Supporting Document Nos. 3 and 4**). The December 2019 Response to Comments Report (**December 2019 EOSR, Supporting Document Nos. 5 and 7**) contains San Diego Water Board responses to the comments received during the public comment period and describes any actions taken to revise the Tentative Order in response to the comments.

In an email dated January 6, 2020, the District provided additional clarifying information regarding the cost estimates provided in its October 28, 2019, comment letter and provided additional comments (**Supporting Document No. 11**). On January 13, 2020, San Diego Water Board met with representatives from the City, the 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 February 12, 2020, Supplemental Response to Comments Report (**Supporting Document No. 12**) contains San Diego Water Board responses to Fallbrook's recent monitoring cost estimates and comments.

The revised Tentative Order (**Supporting Document No. 8**) displays the changes made after the September 27, 2019 public release in red-underline for added text and ~~red-strikeout~~ for deleted text. Revisions made after the December 2019 Board Meeting are in yellow highlight and red-underline for added text and yellow highlight and red-strikeout for deleted text. Some revisions have been made in response to the District's comments, while other revisions were made 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, 10, 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.
- 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.

SUPPORTING DOCUMENTS

8. Revised Tentative Order
9. Location Map
10. December 2019 Board Meeting Executive Officer Summary Report
11. January 6, 2020, Email from Fallbrook
12. February 2020 Response to Comment Document