

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

**EXECUTIVE OFFICER SUMMARY REPORT
August 10, 2022**

ITEM 4

SUBJECT

NPDES Permit Amendment: An Addendum proposing to amend Order No. R9-2017-0007, NPDES No. CA0107409, *Waste Discharge Requirements for the City of San Diego, E.W. Blom Point Loma Wastewater Treatment Plant Discharge to the Pacific Ocean, Through the Point Loma Ocean Outfall* (Tentative Order No. R9-2022-0078, Addendum No.1 to Order No. R9-2017-0007) (*Fisayo Osibodu and Keith Yaeger*)

STAFF RECOMMENDATION

Adoption of Tentative Order No. R9-2022-0078, Addendum No.1 to Order No. R9-2017-0007 is recommended (Tentative Order; **Supporting Document No. 1**).

KEY ISSUES

The Tentative Order proposes to amend Order No. R9-2017-0007 (NPDES Permit) to:

1. Modify completion dates specified in the NPDES Permit for implementation of the City of San Diego's (City or Discharger) Pure Water Program.
2. Incorporate a determination by the National Oceanic and Atmospheric Administration's (NOAA's) National Marine Fisheries Service (NMFS) that the E.W. Blom Point Loma Wastewater Treatment Plant (Facility) and ocean discharge are consistent with the federal Endangered Species Act of 1973, as amended (16 U.S.C. section 1531 et seq.) as required under Finding II.E of the NPDES Permit. The Tentative Order incorporates new monitoring requirements into the NPDES Permit implementing provisions as identified in the NMFS final biological opinion needed to support the required determination. These new provisions require the City to conduct monitoring for chemical constituents that have potential to cause adverse effects on federally listed threatened and endangered species in the receiving waters.

PRACTICAL VISION

The City plans to implement the Pure Water Program (also referred to as "Pure Water San Diego"), a comprehensive water reuse program to reduce the region's reliance on imported water and to provide at least one-third of San Diego's water supply locally by December 31, 2035. The Pure Water Program will implement advanced treatment of municipal wastewater to produce highly treated recycled water that will be used to augment drinking water reservoirs, thereby creating a local, sustainable source of potable water. Section VI.B.6 of the NPDES Permit contains a schedule with tasks and due dates for completion of Phase 1 of the Pure Water Program. Phase 1 of the Pure Water Program will produce 30 million gallons per day (mgd) of highly treated recycled water for potable reuse, and Phase 2 of the program will produce a total of 83 mgd of highly treated recycled water for potable reuse. The City is currently constructing treatment facilities that will be part of Phase 1 of the Pure Water Program. Implementation of the Pure Water Program will help create a resilient and sustainable local source of water which is

consistent with the goals of the *Strategize to Achieve a Resilient Local Water Supply* chapter of the Practical Vision. Implementation of the Pure Water Program will also systematically reduce Point Loma Ocean Outfall discharge flows and pollutant loading to the ocean.

The Tentative Order also requires the City to conduct nutrient monitoring of the Facility influent and effluent which will help assess the potential for the discharge to cause formation of algal blooms in the receiving ocean water, which is consistent with the objectives of the *Monitor and Assess* chapter of the Practical Vision. Additionally, the Tentative Order establishes monitoring requirements designed to answer specific questions which is consistent with the monitoring approach outlined in San Diego Water Board Resolution No. R9-2012-0069, *Resolution in Support of a Regional Monitoring Framework*.

DISCUSSION

The City owns and operates the E.W. Blom Point Loma Wastewater Treatment Plant (Facility) which serves as the terminal treatment facility for the City's Metropolitan Sewer System (Metro System) (see **Supporting Document No. 2**, map). The Metro System collects and treats wastewater from the City of San Diego and 12 participating cities/agencies within a 450-square mile service area throughout San Diego County. The Facility provides advanced primary treatment of municipal wastewater, which includes chemically assisted sedimentation and effluent disinfection using sodium hypochlorite. The Facility discharges advanced primary treated wastewater effluent to the Pacific Ocean through the Point Loma Ocean Outfall (PLOO), approximately 4.5 miles offshore, at a depth of about 300 feet.

The NPDES Permit establishes requirements for treatment of wastewater at the Facility and discharge of up to 240 mgd of treated wastewater to the Pacific Ocean on an average monthly basis. The NPDES Permit was jointly issued by the San Diego Water Board and the USEPA, and is based on a variance from federal secondary treatment standards for publicly owned treatment works pursuant to title 40 of the Code of Federal Regulations (40 CFR) part 133, as provided for under Clean Water Act section 301(h) and 40 CFR part 125, subpart G. The Tentative Order which proposes modifications to the NPDES Permit, if adopted, will be jointly issued by USEPA and the San Diego Water Board.

The Tentative Order proposes to extend the schedule for completing Pure Water Program tasks listed in Section VI.B.6 (Table 8) of the NPDES Permit. By letter dated February 7, 2022, the City requested schedule modifications needed to address unanticipated delays caused by a number of factors, including resolving unexpected legal challenges; resolving labor agreement rules and issues; adhering to COVID-19 guidance and restrictions and other delays related to the COVID-19 pandemic; and supply chain interruptions that have delayed availability of equipment and materials.

The NPDES Permit establishes a variance from federal secondary treatment standards for the Facility and the PLOO discharge, which is contingent upon a determination by NMFS that the Facility and PLOO discharge is consistent with the federal Endangered Species Act. As required by federal regulations and the federal Endangered Species Act, USEPA consulted with NMFS to obtain the required determination and NMFS issued a final biological opinion dated March 4, 2022. The final biological opinion provided specific

measures for the City to monitor and better understand the extent of discharge of constituents that could have adverse effects on federally listed threatened and endangered species. The Tentative Order proposes to amend the permit to add monitoring requirements based on the NMFS biological opinion which consist of the following:

1. Monitoring for organophosphate flame retardants to investigate the levels of these contaminants in the effluent, and loading of these contaminants in the receiving water.
2. Monitoring for nutrients in the Facility influent and effluent to quantify nutrient loading to the receiving ocean waters from the discharge and gather data needed to evaluate whether the discharge contributes to the formation of phytoplankton blooms in the receiving water.
3. Developing a Work Plan and conducting a special study to determine the euphotic depth of the receiving water and evaluate whether the discharge has the potential to contribute to formation of phytoplankton blooms in the receiving water.

The Tentative Order was noticed for a public hearing and released for public review and comment on May 20, 2022. The public comment period closed on June 20, 2022. The San Diego Water Board received only one comment letter from the City (**Supporting Document No. 3**). The Response to Comments Report (**Supporting Document No. 4**) contains USEPA's and the San Diego Water Board's responses to comments received from the City and when applicable describes actions taken to revise the Tentative Order in response to the comments. A copy of the Response to Comments Report and the Revised Tentative Order were provided to the City.

The Tentative Order requires the City to conduct a phytoplankton stimulation study (special study) which is intended to evaluate whether the Facility's discharge has the potential to stimulate phytoplankton blooms in the receiving water. The phytoplankton stimulation study is to be designed to answer two monitoring questions listed in section 4.2 of the Tentative Order. The City, in its comment letter, requested modifications to the two monitoring questions related to development of the phytoplankton stimulation study. The following is a summary of the City's comments and USEPA's and the San Diego Water Board's responses to those comments:

1. *The City requested the San Diego Water Board modify monitoring question 1 in section 4. 2 of the Tentative Order to improve alignment with the monitoring question and monitoring that will be conducted as part of the phytoplankton stimulation study.*

Monitoring question 1 in section 4.2 of the Tentative Order has been modified as requested by the City.

2. *The City requested the San Diego Water Board modify monitoring question 2 in section 4.2 of the Tentative Order to clarify that sources of nutrient loading data to the PLOO region of the receiving water other than discharge from the Facility may not be available to the City.*

Monitoring question 2 in section 4.2 of the Tentative Order has been modified to reflect that other sources of nutrient loading in the PLOO region may not be available to the City.

The Revised Tentative Order (**Supporting Document No. 1**) displays the changes made in response to comments received after the May 20, 2022 public release in red-underline for added text and ~~red-strikeout~~ for deleted text. The Revised Tentative Order also displays minor modifications made to correct non-substantive typographical errors.

PUBLIC NOTICE

On May 20, 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 Opportunity to Comment (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 to be held on August 10, 2022; availability of the Tentative Order for review; and provided instructions for submittal of written comments. A copy of the Notice is provided as **Supporting Document No. 5**. Notice of the public hearing on the Tentative Order was also provided in the Meeting Notice and Agenda for the August 10, 2022, San Diego Water Board meeting, which is posted on the San Diego Water Board website.

SUPPORTING DOCUMENTS

1. Revised Tentative Order
2. Map Showing Location of the City's Metro System Facilities
3. Comment Letter from the City, June 15, 2022
4. Response to Comments Report
5. Notice of Public Hearing