

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

EXECUTIVE OFFICER SUMMARY REPORT

March 8, 2022

ITEM 8

SUBJECT

NPDES Permit Reissuance: Waste Discharge Requirements for the University of California, San Diego, Scripps Institution of Oceanography Discharge to the Pacific Ocean (Tentative Order No. R9-2023-0004, NPDES No. CA0107239). (*Fisayo Osibodu*)

STAFF RECOMMENDATION

Adoption of Tentative Order No. R9-2023-0004 (Tentative Order; **Supporting Document No. 1**) is recommended.

KEY ISSUES

1. The Tentative Order incorporates provisions from State Water Board Resolution No. 2015-0025¹ to protect the beneficial uses of the Pacific Ocean and the biological communities in the San Diego-Scripps Scripps Area of Special Biological Significance (ASBS).
2. Significant changes between the Tentative Order and Order No. R9-2015-0070 (Current Order), are summarized in the Significant Changes section of this Executive Officer Summary Report.

PRACTICAL VISION

Consistent with the mission of the *Strategize for Healthy Waters* chapter of the Practical Vision, the Tentative Order integrates all applicable technology-based requirements, water quality-based effluent limitations, and receiving water quality standards for the optimal 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, *Resolution in Support of a Regional Monitoring Framework*.

DISCUSSION

The University of California, San Diego (Discharger) owns and operates the Facility. The Facility is a research and teaching institution located immediately adjacent to the San Diego-Scripps ASBS, a portion of the Pacific Ocean off the coast of La Jolla, San Diego County. (See page 1 of **Supporting Document No. 2.**)

The Facility utilizes a seawater intake system to pump approximately 0.50 to 1 million gallons per day (MGD) of seawater to support the Discharger's research and aquaria activities. The seawater pumped from the ocean is treated using settling tanks, sand filters, and storage tanks before being conveyed to laboratories and aquaria within the

¹ State Water Board Resolution No. 2015-0025, *Approving an Exception to the California Ocean Plan for the University of California San Diego Scripps Institution of Oceanography and Adopting an Addendum to the Initial Study/Mitigated Negative Declaration*.

Facility. Up to 1.25 MGD of seawater from aquaria and tanks, filter backwash, filtered seawater from storage tanks, and unfiltered raw seawater is discharged from the Facility back to the Pacific Ocean shoreline via Outfalls 001, 003, 004a, and 004b (See page 2 of **Supporting Document No. 2**). Outfall 001 also discharges stormwater during wet weather.

Some of the buildings within the Facility (such as Hubbs Hall, the Birch Aquarium, and the Marine Conservation Technology Facility) utilize treatment systems which consist of filtration, ultraviolet disinfection, and/or ozonation with protein skimming to treat waste seawater from aquaria and tanks housing non-indigenous or genetically modified aquatic species. The treated waste seawater is discharged to Outfall 001. The Facility also maintains two urban runoff media filter treatment systems which treat stormwater runoff and discharge stormwater to Outfall 002.

All five outfalls discharge to the San Diego-Scripps ASBS under terms and conditions of the Facility's Current Order. Waste discharges to ASBS are typically prohibited by the *Water Quality Control Plan Ocean Waters of California* (Ocean Plan). However, State Water Board Resolution No. 2004-0052 granted a limited five-year exception to the Ocean Plan prohibition allowing the discharge from the Facility into the San Diego-Scripps ASBS. On April 21, 2015, the State Water Board adopted Resolution No. 2015-0025 granting the Discharger an exception to the Ocean Plan prohibition of discharges without an expiration date. The Tentative Order incorporates provisions from State Water Board Resolution No. 2015-0025 to protect beneficial uses of the ocean and biological communities in the San Diego-Scripps ASBS. The current permit includes similar provisions, which the Discharger has complied with to date.

The Tentative Order, if adopted, will supersede the Current Order and reissue the NPDES permit for the Facility's discharge to the Pacific Ocean for a five-year term. The Tentative Order was developed based on information in the Discharger's permit reissuance application, self-monitoring reports, and other available sources (e.g. inspection reports, meetings, and emails with the Discharger).

The Tentative Order was noticed for a public hearing and released for public review and comment on January 20, 2023. The public comment period closed on February 21, 2023. The San Diego Water Board received comment letters regarding the Tentative Order during the comment period from the University of California San Diego (**Supporting Document No. 3**) and Craig Carlisle (**Supporting Document No. 4**). A Response to Comments Report which contains the San Diego Water Board's responses to all comments received and a revised Tentative Order showing any changes made to the Tentative Order after January 20, 2023 will be provided in a supplemental agenda package. A copy of the Response to Comments Report and the Revised Tentative Order will be provided to the Discharger and Craig Carlisle.

SIGNIFICANT CHANGES

The following are the significant differences between the Tentative Order and the Current Order:

1. The Tentative Order establishes new effluent limitations for ammonia and cyanide and discontinues the effluent limitations for copper, lead, and for chronic toxicity (at Outfalls 003 and 004a) based on results of a reasonable potential analysis.
2. The Tentative Order establishes effluent limitations for chronic toxicity (only at Outfall 004b) using the approach specified in the Ocean Plan and based on Ocean Plan water quality objectives for chronic toxicity.
3. The Tentative Order requires the Discharger to prepare and submit a climate change action plan within three years of the effective date of the Order.
4. The Tentative Order requires the Discharger to submit a Performance Goal Investigation Work Plan outlining steps being taken to address performance goal exceedances in the event there are three successive exceedances of a performance goal.

COMPLIANCE RECORD

From January 1, 2017 through September 1, 2022, the Discharger reported one deficient monitoring violation and several violations for non-stormwater discharges (from irrigation runoff or potable main leaks) to Outfall 002. Details of these violations are included in the compliance summary information provided in Supporting Document No.1, Attachment F, section 2.4. All reported violations have been corrected by the Discharger.

PUBLIC NOTICE

The Tentative Order was noticed and released for public review and comment on January 20, 2023, with comments due by February 21, 2023. The Notice of Public Hearing and Comment Period was posted on the San Diego Water Board website for the duration of the comment period and sent to all interested parties. The Notice announced a public hearing to be held on March 8, 2023, 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 March 8, 2023, San Diego Water Board meeting, which is posted on the San Diego Water Board website.

SUPPORTING DOCUMENTS

1. Tentative Order
2. Facility Maps
3. Comment Letter from University of California San Diego, February 21, 2023
4. Comment Letter from Craig Carlisle, February 6, 2023
5. Notice of Public Hearing