

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

**SUPPLEMENTAL 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 Revised Tentative Order No. R9-2023-0004 (Revised Tentative Order; **Supporting Document No. 6**) is recommended.

**DISCUSSION**

This Supplemental Executive Officer's Summary Report provides a discussion on written comments received on the Tentative Order. 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 (Discharger) and from Craig Carlisle. The Response to Comments Report (**Supporting Document No. 7**) contains the San Diego Water Board's responses to written comments received on the Tentative Order and when applicable describes actions taken to revise the Tentative Order in response to the comments. The Revised Tentative Order (**Supporting Document No. 6**) displays changes made in red-underline for added text and red strikeout for deleted text after public release of the Tentative Order.

Written comments received from the Discharger either consisted of corrections to typographical errors or minor modifications to sections of the Tentative Order. All corrections or modifications requested by the Discharger were made in the Revised Tentative Order. Responses to the Discharger's written comments are also shown in the Responses to Comments Report. More detailed comments were received from Craig Carlisle. The following is a summary of the summary of the most significant comments received from Craig Carlisle and responses to those comments:

1. *Discharges from the Scripps Institution of Oceanography (Facility) outfalls are exacerbating the effects of climate change by increasing erosion of beach sand. San Diego Water Board Resolution No. R9-2018-0051, (San Diego Water Board Climate Change Resolution)<sup>1</sup> identifies shoreline erosion as an impact from climate change and lists ensuring low-gradient beaches remain accessible for recreational users as one of its goals. The San Diego Water Board should demonstrate*

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<sup>1</sup> San Diego Water Board Resolution No. R9-2018- 0051, *Addressing Threats to Beneficial Uses from Climate Change* (San Diego Water Board Climate Change Resolution)

*commitment to Resolution No. R9-2018-0051 by eliminating or at least reducing the discharge's negative impacts.*

The San Diego Water Board acknowledges the discharges from the Facility outfalls displace sand or cause sand loss on the beach. However, the sand displacement or loss caused by the Facility outfalls is similar to sand displacement or loss caused by other permitted outfalls that discharge stormwater to beaches throughout the region.

Although the San Diego Water Board Climate Change Resolution identifies shoreline erosion as an impact from climate change and lists ensuring low-gradient beaches as one of its goals, sand displacement or loss caused by the Facility outfalls do not render the beach inaccessible for contact or non-contact recreational uses and this discharge is not a result of climate change. Nevertheless, the Tentative Order is consistent with the overarching goals of the San Diego Water Board Climate Change Resolution as it requires the Discharger to develop a climate change action plan evaluating impacts of climate change on the discharge and on the Facility (includes intake structures, storage and conveyance facilities treatment, and the outfalls); and identify steps taken to address these impacts.

Additional requirements to prevent sand displacement or loss are not required at this time because the discharge complies with permit requirements and water quality standards, and has not resulted in lower water quality than prescribed in the *Water Quality Control Plan Ocean Waters of California* (Ocean Plan). As an alternative to requiring the Discharger to terminate the discharge or relocate the Facility outfalls, State Water Board Resolution No. 2015-0025 requires the Discharger to implement provisions which were incorporated into the Tentative Order to protect beneficial uses of the Pacific Ocean and biological communities of the San Diego Scripps-ASBS (described in response to comment 2.1 in **Supporting Document No. 7**). State Water Board Resolution No. 2015-0025 does not require that the Discharger eliminate sand displacement or loss caused by the discharges.

- 2. The discharge impacts public enjoyment of the beach and restricts use of the beach. The discharge is also a nuisance as defined in the Water Code as people cannot access the beach past the outfall without passing through the discharge of waste seawater. Beach users that play or wade in the discharge may be exposed to contaminants via incidental ingestion.*

Discharges from the Facility occur via five outfalls (Outfalls 001, 002, 003, 004a, and 004b). Discharges from Outfall 001 comprise of seawater treated using filtration, ultraviolet disinfection, and/or ozonation; filtered stormwater drained from storage tanks; and stormwater (only during wet weather). Discharges from Outfall 002 comprise of treated stormwater. Discharges from Outfall 003, 004a, and 004b comprise of intermittent or low volume discharges of filtered seawater. The Discharger implements treatment controls and/or management measures as required by the Tentative Order to prevent adverse impacts to water quality and beneficial uses of the ocean from the discharges.

The term nuisance is defined in Water Code section 13050(m) to mean anything that (1) is injurious to health, indecent or offensive to the senses, or an obstruction to the free use of property so as to interfere with the comfortable enjoyment of life or property; (2) affects an entire community or considerable number of persons; and (3) occurs during, or as a result of, the treatment or disposal of wastes. The discharge does not constitute a nuisance under the Board's jurisdiction, as all three elements under Water Code section 13050(m) have not been satisfied. Element one is not satisfied because discharges from Facility outfalls that discharge treated or filtered seawater (Outfalls 001, 003, 004a, and 004b) are required to meet effluent limitations based on Ocean Plan water quality objectives established for protection of human health and marine life. These discharges also do not have any odor. In addition, discharges from Outfalls 003, 004a, and 004b are de minimis due to the low volume and intermittent nature of these discharges. Further, the discharges do not obstruct the free use of the beach because people can still use the beach while treated/filtered seawater flows across the beach, or walk through or around the flowing treated or filtered seawater.

Stormwater discharged from Outfall 002 is treated using a media filtration system prior to discharge. The Discharger also implements additional management measures as part of its Stormwater Management Plan which minimize impacts and potential for nuisance conditions from stormwater discharges (see response to comment 2.2 in **Supporting Document No. 7**). Management measures implemented either help reduce the loading of pollutants in stormwater runoff or reduce volume of stormwater discharged from the Facility.

Element two is not satisfied as only one public complaint has been received so the discharges cannot be said to be affecting an entire community or considerable number of persons. Element three is satisfied because the discharge is a result of treatment of waste seawater. However, a nuisance is not present in this instance because elements one and two are not satisfied and all elements must be satisfied in order to find a nuisance.

3. *The Tentative Order and the Ocean Plan exception allowing the Facility to discharge into an Area of Special Biological Significance (ASBS) should require the Discharger to move the discharge off the beach.*

The San Diego Water Board is not required to move the discharge off the beach and has determined that moving the discharge off the beach is infeasible at this time. The Discharger evaluated alternatives to discharging into the San Diego Scripps ASBS and all alternatives were determined to be infeasible due to factors such as lack of sewer capacity, cost, environmental impacts on the ASBS, and associated permits from other regulatory agencies. Installing an outfall at the end of the Scripps Pier is also infeasible due to density of underground utilities on the landside of the pier. Discharges from a new outfall could also compromise continuous ocean data being collected at the Pier to track temperature, salinity, pH/ocean acidification, and harmful algae blooms as well as continuous sampling of atmospheric gases.

State Water Board Resolution No. 2015-0025 recognizes the leading research and educational role served by the Facility. Maintaining an open intake seawater system is essential for the Facility to fulfil this role. As an alternative to relocating the discharge, State Water Board Resolution No. 2015-0025 grants an exception allowing the discharge to the San Diego Scripps-ASBS. State Water Board Resolution No. 2015-0025 establishes provisions which are incorporated into the Tentative Order to prevent the discharge from adversely affecting beneficial uses of ocean and to allow for protection of biological communities within the San Diego Scripps ASBS.

4. *Require posting at the discharge locations to inform the public of what constituents are in the discharge. Sensitive and immunocompromised persons who may want to use the beach and the ocean or the discharge can also use a portion of the beach due to the discharge.*

The Tentative Order has been modified to require the Discharger to post new notification signs at the Facility outfalls within 180 days of the effective date of the Order. The discharges from the outfalls do not render the beach inaccessible for contact or non-contact recreational uses. Impacts from incidental contact with the discharges are de minimis due to the quality of the discharges and treatment controls and management measures implemented as required State Water Board Resolution No. 2015-0025 and the Tentative Order. Discharges of treated/filtered seawater from the Facility are required to meet effluent limitations based on Ocean Plan water quality objectives established for protection of human health and marine life.

5. *Require the Discharger to quantify and study previous and ongoing sand loss.*

The San Diego Water Board does not deem it necessary to require the Discharger to study and quantify the amount of past and ongoing sand displacement or loss. State Water Board Resolution No. 2015-0025 grants an exception allowing the discharge to the San Diego Scripps-ASBS. The sand displacement or loss caused by the discharges is similar to that of other permitted stormwater outfalls that discharge onto beaches within the San Diego Water Board's jurisdiction. In addition, a significant amount of sand displacement or loss is replenished naturally by high tide. Sand displacement or loss occurring as a result of the discharges are not a violation of the Discharger's Current Order nor does State Water Board Resolution No. 2015-0025 prohibit sand displacement or loss.

## **SUPPORTING DOCUMENTS**

6. Revised Tentative Order
7. Response to Comments Report