CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION

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ORDER NO. R9-2025-0001

AMENDING ORDER NO. R9-2022-0005, AS AMENDED BY ORDER NO. R9-2024-0005 NPDES NO. CA0107417

WASTE DISCHARGE REQUIREMENTS FOR THE SOUTH ORANGE COUNTY WASTEWATER AUTHORITY DISCHARGE TO THE PACIFIC OCEAN THROUGH THE SAN JUAN CREEK OCEAN OUTFALL

The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) finds:

1 BACKGROUND

- 1.1 South Orange County Wastewater Authority (SOCWA) is a public joint powers authority. Member agencies of SOCWA include Santa Margarita Water District (SMWD), Moulton Niguel Water District (MNWD), the City of San Clemente, and South Coast Water District. SOCWA and its members agencies are collectively referred to as the Dischargers. The Dischargers own and operate treatment facilities that discharge waste to the Pacific Ocean through the San Juan Creek Ocean Outfall (SJCOO).
- 1.2 The San Diego Water Board adopted Order No. R9-2022-0005, National Pollutant Discharge Elimination System (NPDES) No. CA0107417, Waste Discharge Requirements for the South Orange County Wastewater Authority Discharge to the Pacific Ocean through the San Juan Creek Outfall (2022 Order) on March 9, 2022, establishing waste discharge requirements for SOCWA and its member agencies for the discharge of secondary treated wastewater, waste brine, and treated urban runoff to the Pacific Ocean through the SJCOO.
- 1.3 The San Diego Water Board adopted Order No. R9-2024-0005, Amending Order No. R9-2022-0005, NPDES No. CA0107417, Waste Discharge Requirements and National Pollutant Discharge Elimination System Permit for the South Orange County Wastewater Authority Discharge to the Pacific Ocean through the San Juan Creek Outfall on February 14, 2024.
- 1.4 During the Compliance Evaluation Inspection for the Chiquita Water Reclamation Plant on March 26, 2024, SOCWA and SMWD stated that the address for the Chiquita Water Reclamation Plant changed from 28793 Ortega Highway, San Juan Capistrano, CA 92675 to 29960 Cow Camp Road, Rancho Mission Viejo, CA 92694. The physical location of the Chiquita Water Reclamation Plant did not change, only the address.

1.5 By email dated May 16, 2023, SOCWA and SMWD requested an amendment to the 2022 Order to add waste brine discharges from the proposed Ranch Water Filtration Plant to the San Juan Creek Ocean Outfall.

The proposed Ranch Water Filtration Plant will be located at 30180 Cow Camp Road, Rancho Mission Viejo, CA 92694, adjacent to the Chiquita Water Reclamation Plant. Once constructed and operational, this facility will treat groundwater to produce drinking water. Nine Rancho Mission Viejo Water wells will be the predominant source of water supplied to the proposed Ranch Water Filtration Plant. By 2040, up to 5000 acre-feet of water will be leased from the Rancho Mission Viejo Water Company.

In the letter dated October 27, 2023, SOCWA provided more information regarding the proposed Ranch Water Filtration Plant and waste brine discharge. SOCWA reviewed the water quality results for the nine wells over a period from 1966 through 2023 and stated, "There were non-detects for all volatile organic compounds, posing no risk of performance goal exceedances for the proposed 30% brine reject rate of the [Ranch Water Filtration Plant]. The influent stream is dominated by higher concentrations of iron and manganese which is proposed to be treated. Total dissolved solids averaged 730 mg/L for 161 sampling events." SOCWA also projected that the water quality of the waste brine from the proposed Ranch Water Filtration Plant will be like the water quality of the waste brine from the San Juan Capistrano Groundwater Treatment Plant. The San Juan Capistrano Groundwater Treatment Plant has been meeting its effluent limitation requirements since June 2012, except for two exceedances for oil and grease in March 2022.

The Ranch Water Filtration Plant treatment system will likely include pretreatment consisting of green sand filters, microfiltration, and Reverse Osmosis (RO) membranes. SOCWA/SMWD plans to discharge a maximum of 1.34 MGD of waste brine from the RO membranes to the Chiquita Land Outfall, which discharges to the SJCOO.

Although SOCWA and SMWD are requesting an additional facility and discharge be added to the 2022 Order, SOCWA and SMWD are not requesting any changes to the existing total permitted flow to the Pacific Ocean through the SJCOO.

1.6 By letter dated December 12, 2024, SOCWA and MNWD requested an update to the discharger/ownership of the 3A Water Reclamation Plant from SMWD and MNWD to only MNWD.

2 PURPOSE OF ORDER NO. R9-2025-0001 (ORDER)

This Order is the second amending order for the 2022 Order and updates the address for the Chiquita Water Reclamation Plant; adds discharge prohibition, effluent limitations, and monitoring requirements for the proposed Ranch Water Filtration Plant; updates the discharger/ownership of 3A Water Reclamation Plant; and corrects some typographical errors.

3 LEGAL AUTHORITIES

- 3.1 California Water Code (Water Code) section 13263(e) provides that the San Diego Water Board may, upon application by any affected person, or on its own motion, review, and revise waste discharge requirements.
- 3.2 The 2022 Order is not being reopened for any other purpose than the revisions contained herein. Except as contradicted or superseded by the findings and directives set forth in this Order, all the previous findings and directives of the 2022 Order shall remain in full force and effect.

4 CALIFORNIA ENVIRONMENTAL QUALITY ACT

This action is exempt from the requirement of preparation of environmental documents under the California Environmental Quality Act (Public Resources Code, division 13, chapter 3, section 21000 et seq.) in accordance with section 13389 of the Water Code.

5 PUBLIC PARTICIPATION

- 5.1 The San Diego Water Board notified the Dischargers and interested agencies and persons of its intent to adopt this Order and provided them with an opportunity to submit written comments.
- 5.2 The San Diego Water Board, in a public meeting, heard and considered all comments pertaining to the adoption of this Order.
- 5.3 Any person aggrieved by this action of the San Diego Water Board may petition the State Water Resources Control Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 et seq. The State Water Board must receive the petition by 5:00 p.m., 30 days after the adoption date of this Amending Order. Copies of the law and regulations applicable to filing petitions may be found on the Internet at: http://www.waterboards.ca.gov/public notices/petitions/water quality or will be provided upon request. For instructions on how to file a petition for review, see the State Water Board website at: https://www.waterboards.ca.gov/public notices/petitions/water quality/wapetit

https://www.waterboards.ca.gov/public_notices/petitions/water_quality/wqpetition_instr.shtml

THEREFORE, IT IS HEREBY ORDERED that, pursuant to Water Code section 13263 and title 40 of the Code of Federal Regulations section 122.62, Order No. R9-2022-0005, as amended by Order No. R9-2024-0005, NPDES No. CA0107417 is amended as follows:

This Order amends the 2022 Order as shown in the revised version included as Attachment 1 to this Order and summarized in Table 1 below. Added text to the 2022 Order is displayed in red-underline text and deleted text is displayed as red-strikeout text. The following sections of the 2022 Order as amended by Order No. R9-2024-0005 are modified by this Order:

Table 1. Tables/Sections of the 2022 Order Modified by This Order

Page Table as Section Number Medification		
Numbers	Table or Section Number	Modification
1	Table 1	Update Chiquita Water Reclamation Plant address
1	Table 1	Update owner of 3A Water Reclamation Plant
2	Table 1	Add Proposed Ranch Water Filtration Plant
2	Text before Signature Block	Add text for amending Orders
9	Section 3.2	Add Proposed Ranch Water Filtration Plant
16	New Section 4.1.1.10 and Table 12	Add Proposed Ranch Water Filtration Plant Effluent Limitations
16	Section 4.1.2	Change references to Table 12 to 13
17	Table 13	Change Table 12 to 13
21	Note for Table 13	Change reference to Table 11 to 13
29	Section 6.3.2.1.1	Add Proposed Ranch Water Filtration Plant
A-2	Definition for Facilities	Add Proposed Ranch Water Filtration Plant
A-10	Definition for Facilities	Add Proposed Ranch Water Filtration Plant
B-4	New Map 4	Add Proposed Ranch Water Filtration Plant Map
C-9	New Flow Schematic 9	Add Proposed Ranch Water Filtration Plant Flow Schematic
E-6	Table E-1	Add Proposed Ranch Water Filtration Plant Monitoring Location
E-14	Footnote 4	Add Proposed Ranch Water Filtration Plant to description of Facilities
E-22	Section 3.2.3	Add Proposed Ranch Water Filtration Plant Effluent Monitoring
E-22	Table E-5	Add Proposed Ranch Water Filtration Plant Effluent Monitoring
E-27	Section 3.3.8	Correct Maximum Daily Single Result
E-49	Section 6.2	Add Proposed Ranch Water Filtration Plant to Plume Tracking Study
E-57	Table E-11	Modify Larval Study Final Report Due Date
F-3	Footnote 1	Add Proposed Ranch Water Filtration Plant
F-4	Table F-1	Add Proposed Ranch Water Filtration Plant Discharger Information and Facility Permitted Flow

Page Numbers	Table or Section Number	Modification
F-4	Table F-1	Update Facility Contact and General Manager
F-5	Table F-1	Add Proposed Ranch Water Filtration Plant Facility Design Flow
F-5 through F-6	Section 1.1	Add Proposed Ranch Water Filtration Plant
F-12 through F-13	New Section 2.1.9	Add Proposed Ranch Water Filtration Plant Facility Description
F-13	Section 2.1.10	Renumbered Section 2.1.9 and add waste brine from Proposed Ranch Water Filtration Plant
F-14	Table F-2	Add Proposed Ranch Water Filtration Plant
F-27	Section 2.5	Add Proposed Ranch Water Filtration Plant
F-35	Section 4.2.2.2	Add Proposed Ranch Water Filtration Plant Monitoring Location
F-36	Section 4.2.2.3	Add Proposed Ranch Water Filtration Plant Monitoring Location and effluent flow limitation
F-85	Section 8.7	Remove staff name

- The amended version of the 2022 Order, included as Attachment 1 to this Order, shall become effective on March 12, 2025.
- 3 San Diego Water Board staff is directed to prepare a conformed copy of Order No. R9-2022-0005, as amended by Order No. R9-2024-0005, incorporating the revisions made by this Order and post it on the San Diego Water Board website.
- I, David W. Gibson, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the San Diego Water Board, on March 12, 2025.

David W. Gibson, Executive Officer