

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SANTA ANA REGION**

DRAFT ORDER R8-2023-0063

AMENDMENT TO TIME SCHEDULE ORDER R8-2019-0050

**TO COMPLY WITH
THE REQUIREMENTS PRESCRIBED IN ORDER R8-2009-0030 AS AMENDED BY
ORDER R8-2010-0062 (NPDES PERMIT NUMBER CAS618030)**

FINDINGS

The Santa Ana Regional Water Quality Control Board (Santa Ana Water Board) hereby finds as follows:

1. On May 22, 2009, the Santa Ana Water Board adopted Waste Discharge Requirements and National Pollutant Discharge Elimination System (NPDES) Permit (Order R8-2009-0030) for owners or operators of municipal separate storm sewer systems (MS4s) within the County of Orange and incorporated cities therein (Orange County MS4 Permit). On October 29, 2010, the Orange County MS4 Permit was amended by Order R8-2010-0062. The Orange County MS4 Permit expired on May 22, 2014, but the permit was administratively extended and continues in effect until such time that a new permit is adopted by the Santa Ana Water Board. The total maximum daily loads (TMDLs) for Fecal Coliform in Newport Bay (Fecal Coliform TMDL) requirements were incorporated into the Orange County MS4 Permit.
2. On October 28, 2019, Permittees in the Newport Bay watershed submitted a written request for a Time Schedule Order to comply with the fecal coliform waste load allocations (WLAs) for Newport Bay.
3. On December 6, 2019, the Santa Ana Water Board adopted Time Schedule Order R8-2019-0050 (TSO) to comply with the fecal coliform WLAs in the Orange County MS4 Permit.
4. The TSO included a schedule of tasks with a submission timeline for the Permittees to bring the waste discharge into compliance with the WLAs for fecal coliform in the Orange County MS4 Permit by December 6, 2023. The Permittees have completed Tasks 1-4 as summarized in Attachment C to the TSO.
 - a. Permittees submitted a Source Identification Report in compliance with Task 3b of the TSO. However, additional information is necessary to further characterize

sources of fecal coliform in Newport Bay and associated watersheds. For example, the study did not include complete source identification and tracking for the San Diego Creek and its tributaries. This information can be gathered during the duration of an extension and amendment of the TSO, subject to improvements in the study design. Additional information can be obtained as part of the implementation of an improved Pollution Prevention Plan.

- b. The Permittees have installed several primarily dry weather structural controls that are summarized in Attachment C. These structural controls must be operated and maintained according to 40 CFR 122.41(e).
5. This TSO Amendment adds tasks 5 through 8 to the list of required tasks in Attachment C of the TSO. The status of the earlier TSO tasks in Attachment C and the additional tasks are outlined in a revised Attachment C to this Amendment.
- a. Task 5a requires submittal of a study design for evaluation of structural source control projects at five specified locations. The study must quantify reductions in fecal coliform bacteria densities achieved by those structural controls that are in operation in the Newport Bay watershed, including its freshwater tributaries, during the term of this Amendment. These structural controls include, but are not limited to:
 1. Santa Ana-Delhi Channel Diversion & Trash Capture System
 2. Peters Canyon Channel Water Capture and Reuse Pipeline
 3. IRWD San Joaquin Marsh and Wildlife Sanctuary
 4. Backbay Drive Drain Diversion
 5. Newport Dunes Catch Basin Plugs
 - b. Task 5b requires targeted source identification at specific locations during the term of the TSO.
 - c. Task 6 requires coordination with wastewater agencies to update spill emergency response plans and share maps and resources to reduce the volume of Sanitary Sewer Overflows (SSOs) reaching the receiving waters.
 - d. Task 7 requires revision of the Pollution Prevention Plan (PPP) to address Water Board staff's comments provided in its September 13, 2023 letter. Task 4 of Attachment C to the TSO required preparation of a PPP containing the elements listed in Water Code section 13263.3(d)(2) subject to the approval of the Executive Officer.
 - e. On August 7, 2023, the Permittees submitted a PPP for the Executive Officer's review and approval. On September 13, 2023, Water Board staff provided

comments on the PPP. The comment letter stated “*revisions to the PPP are necessary so that the PPP satisfies the requirements of Water Code section 13263.3(d)(2)(B), (C), (D), (E), (H), and (I).*” The PPP must also include initiation of a source identification study in the San Diego Creek sub-watershed and the initiation of an evaluation of the Big Canyon Habitat Restoration and Water Quality Improvement Project. The evaluation will assess the efficacy of structural source controls in the Big Canyon Wash for reducing fecal coliform and other fecal indicator bacteria. Implementation of these additional tasks is required upon approval by the Executive Officer of the Santa Ana Water Board. Task 8 requires coordination with Water Board staff to develop a schedule of technical staff meetings, and a list of participants (“Communication Plan”). These meetings will determine progress and facilitate the development and implementation of the tasks identified in Attachment C to this Amendment.

- f. Finding 8 of the TSO states, “Compliance with the WLAs specified in the Permit can be demonstrated by meeting the REC1 fecal coliform objectives at sampling locations within the San Diego Creek and Newport Bay.” Data submitted as part of the Newport Bay Fecal Coliform TMDL Annual Data and Progress Reports (TMDL Annual Report) for years 2020-2023 indicate exceedances of the fecal coliform objectives at the San Diego Creek monitoring station.
- g. This Amendment modifies Attachment B to the TSO to be consistent with Table 6-1h and Figure 6-1 of the Santa Ana River Basin Water Quality Control Plan (“Basin Plan”), which includes four additional freshwater monitoring locations:
 1. San Diego Creek at Campus Drive
 2. Santa Ana-Delhi Channel
 3. Big Canyon Wash, and
 4. Backbay Drive Drain
6. This Amendment to the TSO is being issued to enforce the Orange County MS4 Permit (a permit for existing MS4s). Therefore, issuance of this Amendment is exempt from the provisions of the California Environmental Quality Act (Public Resources Code section 21100 et seq.) pursuant to Water Code section 13389, and sections 15301 and 15321(a)(2) of Title 14 of the California Code of Regulations.
7. If the Permittees comply with the requirements of the TSO, as amended, it is not the Santa Ana Water Board’s intention to take any enforcement action for violations of the fecal coliform WLAs applicable to the Newport Bay as set forth in the Orange County MS4 Permit.
8. The Santa Ana Water Board may reopen the TSO at its discretion or at the request of any of the identified Permittees, if warranted. Lack of progress towards

compliance with the applicable WLAs addressed by the TSO shall be a reasonable cause for the Santa Ana Water Board to modify the terms and conditions of this TSO.

9. The Executive Officer has notified interested agencies and persons of their intent to approve this TSO Amendment and has provided them with an opportunity to submit their written comments.

REQUIREMENTS

IT IS HEREBY ORDERED, pursuant to Water Code sections 13300, 13383, and 13385, subdivision (j)(3), that Order R8-2019-0050 is amended as follows:

1. Provision 1 is replaced with the following:
The Permittees must demonstrate compliance with the Orange County MS4 Permit fecal coliform WLAs for REC1 as soon as possible but no later than December 6, 2024. The compliance determination shall be based on the method described in Provision 23 below.
2. Attachment B is amended to add fecal indicator monitoring locations at the San Diego Creek at Campus Drive, Santa Ana-Delhi Channel, Big Canyon Wash, and Backbay Drive Drain, as shown in Table 6-1h and in Figure 6-1 of the Basin Plan.
3. Attachment C of the TSO is amended in its entirety as shown in Attachment C to this Amendment.
4. The following provisions are added to the TSO:
 17. The Permittees must carry out tasks in accordance with a PPP that has been approved by the Executive Officer of the Santa Ana Water Board.
 18. Changes to any submittal that has been approved by the Executive Officer for this TSO is not allowed except for non-substantive grammatical or technical corrections. Any other changes must be approved by the Executive Officer.
 19. The Permittees must carry out the subtasks in Task 5 according to the following:
 - a. **Task 5a: Structural Control Evaluation:**
The Permittees must complete the technical/scientific study in accordance with a methodology that has been approved by the Executive Officer. The study must quantify reductions in fecal indicator bacteria densities, measured in colony-forming units per deciliter (CFU/100 mL), that may be achieved by the following structural controls: Santa Ana-Delhi Channel Diversion Project, Peters Canyon Pipeline Diversion, IRWD's San Joaquin Marsh, Backbay Drive Drain diversion, and the Newport Dunes catch basins drain plugs.

- i. The Permittees must submit a proposed quantification methodology no later than 60 days after the approval of Order No. R8-2023-0063. The methodology must include operations and maintenance plans for the structural controls¹.
- ii. Santa Ana Water Board staff will review the proposed quantification methodology and notify the Permittees if it is complete within 30 days of receipt.
- iii. If requested by the Executive Officer in writing, Permittees must provide additional information for the proposed methodology by the deadline specified in the request.
- iv. The Executive Officer may approve the methodology subject to conditions.
- v. The methodology must be implemented as approved by the Executive Officer.
- vi. The study must be completed, and a final report shall be submitted to the Executive Officer no later than 8 months after the approval of this Amendment.

b. Task 5b: Targeted Source Identification

The Permittees must carry out a program to identify and control sources of fecal indicator bacteria in the Newport Bay watershed pursuant to the Orange County MS4 Permit. Sources that are unauthorized non-stormwater discharges under 40 CFR section 122.26(b)(2) (e.g., illicit discharges) and under the Orange County MS4 Permit as re-issued or amended, will be effectively prohibited. Sources that are comprised of stormwater and authorized non-stormwater discharges will be controlled according to the conditions of the Orange County MS4 Permit, as revised or reissued, and as specified in this TSO.

- i. The Permittees must coordinate with local jurisdictions to improve their information on the storm drains and sanitary sewer systems and identify likely sources of pathogens in discharges from MS4s. The Permittees must submit a report on the results of their coordination effort within 90 days of the issuance of Order No. R8-2023-0063.

¹ These plans will be used to control variability in operations and maintenance that may affect the facilities' performance and affect the reliability of the conclusions from the study.

- ii. The Permittees must complete an investigation of sources of fecal indicator bacteria in the Backbay Drive Drain and lower Santa Ana-Delhi Channel (south of Warner Avenue) sub-watersheds.
- iii. The investigation must be carried out according to the methods in the approved Source Investigation Study under Task 3a of the TSO. The Study is subject to modifications under the direction of the Executive Officer, according to the process described below.
- iv. The Permittees must conduct a minimum of three stages of progressive source investigation monitoring. Within each stage, the Permittees must conduct at least three rounds of repeat sampling events at a minimum of three locations.
- v. Other investigative tools may be used to evaluate potential source(s). Alternative tools may be used following approval by the Executive Officer.
- vi. The investigation must be completed, and a final report shall be submitted to the Executive Officer within 8 months of the issuance of Order R8-2023-0063.
- vii. If the Executive Officer determines that the methods for the investigation are ineffective, the Executive Officer may direct the Permittees to revise the Source Investigation Study by a written notice. Subsequently, the Permittees must submit a revised Source Investigation Study plan that conforms with the directive and the deadline specified in the Executive Officer's notice.
 - a) The Executive Officer may approve the revised Source Investigation Study plan subject to any new or revised terms and conditions.
 - b) If requested by the Executive Officer in writing, Permittees must provide additional information for the revised Source Investigation Study plan by the deadline specified in the request.
 - c) The Permittees must implement the revised Source Investigation Study plan upon approval by the Executive Officer.

20. Task 6: Coordination with Wastewater Agencies

The Permittees must coordinate with wastewater agencies to update spill emergency response plans and share maps and resources with wastewater agencies to reduce the volume of sewage from SSOs reaching the receiving waters. The Permittees must submit a report on the accomplishments and effectiveness of the coordination efforts within 120 days of approval of this Amendment to the TSO.

21. Task 7: Pollution Prevention Plan (PPP)

The Permittees must submit a revised PPP that is responsive to Santa Ana Water Board staff's comments in the letter dated September 13, 2023, no later than 150 days after the approval of this Amendment to the TSO.

- a. The revised PPP must initiate investigations that identify sources of fecal indicator bacteria in the San Diego Creek sub-watershed using an improved source identification study design.
- b. The revised PPP must include a study that quantifies reductions in fecal indicator bacteria densities that may be achieved by the Big Canyon Habitat Restoration and Water Quality Improvement Project.
- c. If requested by the Executive Officer, Permittees must provide additional information for the revised PPP by the deadline specified in the request.
- d. The Executive Officer may approve the revised PPP subject to conditions.
- e. Permittees must fully implement their programs and projects to attain the fecal coliform WLAs for REC1 according to the approved PPP and the Executive Officer's conditions.
- f. The PPP must incorporate the Structural Control Evaluation (Task 5a) and Targeted Source Investigation (Task 5b).

22. Task 8: Communication Plan

The Permittees must develop a communication plan to coordinate work with Santa Ana Water Board staff on developing a revised TMDL for fecal indicator bacteria and associated pathogens in the Newport Bay, and to report progress on the Tasks required by the TSO. The communication plan must include a proposed schedule and participant list for technical meetings and must designate points of contact. The communication plan must be submitted to the Executive Officer no later than 30 days after approval of this Amendment to the TSO.

23. Compliance Determination

Compliance with the fecal coliform WLAs for REC1 must be demonstrated based on the locations prescribed in Table 6-1h of the Basin Plan² and calculated for each monitored location unless an alternative method is approved by the Executive Officer. Any sample results from additional monitoring performed by the Permittees beyond the requirements of this TSO must be included in the

² Pursuant to Monitoring and Reporting Plan R8-2009-0030, the Executive Officer may allow modifications to sampling locations.

calculations. An alternative method must be developed according to the following process.

- a. Any request for approval of an alternative method to demonstrate compliance must be submitted to the Executive Officer within 60 days of approval of this Amendment to the TSO.
- b. A request must include a justification for the alternative method, an assessment of the factors that may affect the reliability of the alternative method, and the measures that will be taken to mitigate the influence of those factors. Justification for the alternative method must be based on Substantial Evidence³ that it provides the same, or better, level of protection for the REC1 beneficial use as the WLA's methods.
- c. If requested by the Executive Officer, Permittees must provide additional information for the proposed alternative method by the deadline specified in the request.
- d. The Executive Officer will subject the request to 30 days of public review prior to approving the alternative method.

³ "Substantial Evidence" means facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts. Substantial evidence does not include argument, speculation, unsubstantiated opinion or narrative, evidence which is clearly inaccurate or erroneous, or evidence of social or economic impacts which do not contribute to, or are not caused by, physical impacts on the environment.

ADMINISTRATIVE REVIEW

Any person aggrieved by this action of the Santa Ana Water Board may petition the State Water Board for review in accordance with Water Code section 13320 and California Code of Regulations, title 23, section 2050 et seq. To be timely, the petition must be received by the State Water Board by 5:00 pm on the 30th day after the date of this Order; if the 30th day falls on a Saturday, Sunday or state holiday, the petition must be received by the State Water Board by 5:00 pm on the next business day. The law and regulations applicable to filing petitions are available on the [State Water Board website](http://www.waterboards.ca.gov/public_notices/petitions/water_quality) (http://www.waterboards.ca.gov/public_notices/petitions/water_quality). Copies will also be provided upon request.

This Order is issued under the authority delegated to the Executive Officer by the Santa Ana Water Board in Resolution No. R8-2019-0056 and is effective upon signature.

Jayne E. Joy, P.E.
Executive Officer

Date: _____

Attachment C

Summary of Tasks Required by TSO R8-2019-0050, as amended by Order R8-2023-0063, and status of all Tasks from the date of adoption of Order R8-2023-0063

Task	Description	Due Date(s)	<u>Status</u>
1	Complete ongoing and approved structural BMP projects		
1a	Hoag Drain and Arches diversion	15 months after TSO effective date	<u>Construction completed in March 2021. Operation is pending permit from the Orange County Sanitation District.</u>
1b	Newport Bay bilge pump installation	18 months after TSO effective date	<u>Completed in April 2021 and is operational.</u>
1c	Newport Dunes diversion revision	24 months after TSO effective date	<u>Completed in August 2021 and operating under a temporary permit from OCSD.</u>
2	Develop new structural BMP projects		
2a	East Costa Mesa Channel diversion	6 months after TSO effective date	<u>Completed on 6/5/2020</u>
2b	Santa Isabel Channel diversion	6 months after TSO effective date	<u>Completed on 6/5/2020 and submitted as part of draft PPP.</u>
2c	Additional BMP projects for Newport Dunes	6 months after TSO	<u>Completed on 6/5/2020 and</u>

Task	Description	Due Date(s)	Status
		effective date	<u>submitted as part of draft PPP</u>
3	Evaluate human sources of fecal contamination		<u>Submitted</u>
3a	Source investigation study design	4 months after TSO effective date	<u>Completed on 4/6/2020</u> <u>Last revised on 7/28/2021</u> <u>Approved on 3/3/2022</u>
3b	Source investigation final report	12 months after Santa Ana Water Board approval of study design	<u>Completed on 2/7/2023</u> <u>Revised on 8/7/2023</u>
4	Pollution Prevention Plan (PPP)		
	<p>A PPP shall include, at a minimum, all of the following:</p> <ul style="list-style-type: none"> a. An analysis of fecal coliform that the MS4 Permittees discharge into Upper and Lower Newport Bay, a description of sources of fecal coliform, and a comprehensive review of the activities known to the discharger that result in the generation and discharge of fecal coliform. b. An analysis of the potential for pollution prevention to reduce the discharge of fecal coliform, including the application of innovative and alternative technologies, and any adverse environmental impacts resulting from the use of those methods. c. A detailed description of the tasks and time schedules required to investigate and implement various elements of pollution 	18 months after Santa Ana Water Board's approval of Study Design	<u>PPP submitted for approval on 8/7/2023</u>

Task	Description	Due Date(s)	<u>Status</u>
	<p>prevention techniques.</p> <p>d. A statement of the discharger’s pollution prevention goals and strategies, including priorities for short-term and long-term action.</p> <p>e. A description of the discharger’s existing pollution prevention methods.</p> <p>f. An analysis, to the extent feasible, of the relative costs and benefits of the possible pollution prevention activities, including but not limited to Tasks 1 and 2 above. This includes estimates of numerical pollutant load reduction in receiving waters and defensible estimates of project costs.</p> <p>g. A specification of, and rationale for, the technically feasible and economically practicable pollution prevention measures selected by the discharger for implementation, including but not limited to Tasks 1 and 2 above.</p>		
<u>5</u>	<u>Short Term Study Modifications: Source Control Evaluations and Targeted Source Identifications</u>		
<u>5a</u>	<p><u>Evaluate Source Controls:</u> Quantify reductions in fecal coliform bacteria densities achieved by the following structural controls: <u>Santa Ana-Delhi Channel Diversion and Trash Capture System, Peters Canyon Channel Water Capture and Reuse Pipeline, IRWD San Joaquin Marsh and Wildlife Sanctuary, Backbay Drive Drain Diversion, and Newport Dunes Catch Basin Plugs.</u></p>	<p><u>Submit the quantification methodology within 60 days of approval of this Amendment to the TSO</u></p> <p><u>Complete the technical/scientific study and submit a final report no later than 8 months of approval of this</u></p>	

Task	Description	Due Date(s)	<u>Status</u>
		<u>Amendment to the TSO</u>	
5b	<p><u>Targeted Source Identifications:</u> Conduct targeted source identification in the Back Bay Drive Drain and lower Santa Ana – Delhi Channel (south of Warner Avenue) subwatersheds. Targeted source identifications must be conducted in accordance with the Task 3a study design and shall consist of the following activities as a minimum:</p> <ol style="list-style-type: none"> 1. <u>Coordination with local jurisdictions to confirm information on the storm drain and sanitary sewer systems.</u> 2. <u>Evaluate the Backbay Drive Drain and lower Santa Ana-Delhi Channel sub-watersheds, from downstream to upstream, to identify potential sources of fecal indicator bacteria.</u> 3. <u>Conduct a minimum of three stages of progressive source investigation monitoring. Within each stage, conduct at least three rounds of repeat sampling events at a minimum of 3 locations.</u> 4. <u>Other investigative tools may be used to assist in evaluating and identifying potential source(s).</u> 	<p><u>Report on confirmation effort within 90 days of approval of this Amendment to the TSO</u></p> <p><u>Complete evaluations and submit a report within 8 months of approval of this Amendment to the TSO.</u></p>	

Task	Description	Due Date(s)	<u>Status</u>
<u>6</u>	<u>Coordinate with wastewater agencies to update spill emergency response plans and share maps and resources with wastewater agencies to reduce the volume of sewage from SSOs reaching the receiving waters.</u>	<u>Submit a report within 120 days after approval of this Amendment to the TSO</u>	
<u>7</u>	<u>Submit for Santa Ana Water Board approval a revision of the PPP that was submitted on August 7, 2023, to address all comments in the Santa Ana Water Board letter dated September 13, 2023. The revised PPP must also include initiation of a source investigation study of the San Diego Creek sub-watershed and an evaluation of the efficacy of structural source controls in the Big Canyon Habitat Restoration and Water Quality Improvement Project.</u>	<u>Submit revised PPP within 150 days after approval of this Amendment to the TSO</u>	
<u>8</u>	<u>Communication Plan: In conjunction with Santa Ana Water Board staff, the Permittees will develop a schedule and participant list for technical staff meetings to help facilitate development and implementation of Tasks 1-7.</u>	<u>Within 30 days of approval of this Amendment to the TSO</u>	