RESPONSE TO COMMENTS
WEST BASIN MUNICIPAL WATER DISTRICT
JUANITA MILLENDER-MCDONALD CARSON REGIONAL WATER RECYCLING PLANT
TENTATIVE ORDER NO. R4-2024-XXXX
NPDES NO. CA0064246

Comment Letter dated January 17, 2024 from West Basin Municipal Water District

No.	Comment	Response	Action Taken
D1	**Chronic Marine Species and Test Methods (Attachment E, section 5.3, pg E-9):** West Basin states "A major change to this new permit requires the same concentrations of the Juanita Millender-McDonald Carson Regional Water Recycling Plant (Carson WRP) (Carson WRP) effluent to be tested with natural seawater (control water) as the dilution source, in addition to the current testing. In other words, the same in-waste stream concentration of 0.5988% Carson WRP effluent will be tested, with natural seawater as the dilution source, in addition to the dilution using the A.K. Warren Water Resources Facility (Warren Facility) effluent. Thus, two similar toxicity tests must be performed annually, rather than just one test." West Basin requests that chronic toxicity testing only include testing of the brine with the control water (natural seawater) instead of conducting two tests: 1) a test on the brine with only the control water and 2) a test on the brine with the A.K. Warren Water	To clarify the Discharger's comment regarding the additional Carson WRP brine replicates, these additional replicates are not intended to be a separate toxicity test but a separate sample manipulation within the toxicity test. The Carson WRP brine replicates must contain 0.59% Carson WRP brine multiplied by the 0.5988% in-stream waste concentration. For example, if the toxicity test includes 4 replicates per concentration, this requirement includes an additional 4 replicates in the test using only (0.0059)(0.5988%) = 0.0035% of the brine effluent and control water. The purpose of this requirement is to assess the toxic effects of the Carson WRP brine effluent without influence from the Warren Facility secondary effluent at the in-stream waste concentration only. The chronic toxicity testing in the Tentative Order focuses on the combined discharge (a manual composite of an aliquot of brine effluent collected from the Carson WRP and an aliquot of secondary effluent collected from the Warren Facility). The respective aliquot from each facility	Revisions were made to the Tentative Order.

	Resources Facility (Warren Facility) effluent. Although the Carson WRP contributes less than one percent of the discharge volume to the receiving water, toxicity testing using solely Carson WRP effluent and control water will provide the greatest insight into the potential toxicity of the Carson WRP effluent. Toxicity testing on Warren Facility effluent is currently required under Order No. R4-2023-0181.	is based on the critical flows of the brine and secondary effluent discharged through the ocean outfalls to the receiving water. This chronic toxicity test includes a series of concentrations of the combined effluent in control water and each concentration typically includes multiple replicates. As such, the chronic toxicity testing conducted at the Carson WRP has historically only assessed the toxic effects of the combined effluent, and the toxic effects from the brine effluent alone has not been assessed. As such, the additional replicates using Carson WRP brine and control water only is required to assess the impact of the Carson WRP brine on the receiving water without influence from the Warren Facility. Upon further review of the language in section 5.3 of Attachment E of the Tentative Order, staff has revised the section to clarify that only the instream waste concentration of the Discharge Point used at the time of sampling is required to be tested for toxicity.	
D2	**Chronic Marine Species and Test Methods (Attachment E, section 5.3, pg E-9):** West Basin requests that the Larval Shell Development Test Method be applied to both the purple sea urchin and sand dollar species. The 72-hour Larval Shell Development Test Method is a more conservative test than the 20-minute Fertilization Test Method 1008.0 that is listed	Table III-1 of Appendix III of the California Ocean Plan lists both percent normal development and percent fertilization as preferred Tier 1 chronic toxicity tests for both *Strongylocentrotus purpuratus* (purple sea urchin) and *Dendraster excentricus* (sand dollar). The Fertilization Test Method was specified to align with the test methods specified for other ocean dischargers, including the	Revisions were made to the Tentative Order.

	for both the purple sea urchin and sand dollar.	Warren Facility. However, since the Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) has previously approved the purple sea urchin development test as an alternate chronic toxicity test for the Carson WRP combined effluent in 2022 and 2023, the Tentative Order, Attachment E, section 5.3.b. has been revised to also include the larval development test.	
D3	**Discharge Points and Receiving Waters (Attachment F, section 2.2, pg F-9):** West Basin requests the option to seek permission to use the Dominguez Channel bypass in emergency situations after all other options have been exhausted and pending prior approval from the Los Angeles Water Board, Los Angeles County Sanitations Districts, and Los Angeles County Flood Control.	The Tentative Order is consistent with the current permit, Order No. R4-2018-0090, and prohibits the discharge of brine to the Dominguez Channel and any such discharge is subject to the bypass and reporting conditions in Attachment D (Standard Provisions). Since the Dominguez Channel was not included as a discharge point in the Report of Waste Discharge (ROWD), it was not considered as a discharge point in the development of the Tentative Order. In addition, since the Carson WRP only accepts water when needed for recycling and the wastewater is otherwise discharged to the ocean, it has the capability of stopping operations and halting discharge during an emergency. The Dominguez Channel is also an inland surface water and discharges to this water body are subject to the requirements in the Basin Plan, including Chapter 7-40: *Dominguez Channel and Greater Los Angeles and Long Beach Harbor Water Toxic Pollutants TMDL*. Many of the requirements related to discharges	None necessary.

		to the Dominguez Channel are more stringent than those required in the Ocean Plan. As such, the Los Angeles Water Board would need to conduct an extensive review of whether the discharge could comply with the requirements before allowing the discharge to occur. If the Discharger would like the option of discharging to an additional receiving water (e.g., the Dominguez Channel), the Discharger must submit an ROWD to the Los Angeles Water Board for consideration. Since the Los Angeles Water Board has not assessed the impact of a brine discharge to the Dominguez Channel and the discharge point was not included in the ROWD, the prohibition on brine discharges to the Dominguez Channel in the Tentative Order is appropriate.	
D4	**Storm Water Pollution Prevention Plan (Section 6.3.3.a, pg 18):** West Basin requests the inclusion of storm water requirements (e.g., stormwater BMPs and monitoring measures) in the Tentative Order instead of being subject to the Industrial General Permit since the Carson WRP is categorized as Standard Industrial Classification (SIC) 4941 (Water Supply), not wastewater. It does not treat any wastewater and instead applies advanced treatment of permitted and distributed recycled water for industrial uses. There are no wastewater treatment or storage facilities, no solids or filter basins. In fact, this facility can and does	The Los Angeles Water Board has determined that the Carson WRP is appropriately regulated under an individual permit to cover discharges of process wastewater and under the *General Permit for Stormwater Discharges Associated with Industrial Activity* (Industrial General Permit (IGP)) to cover its discharges of industrial stormwater. The IGP lists the industrial activities covered by the permit in Attachment A. Number 9 in Attachment A, includes “Sewage or Wastewater Treatment Works.” The definition in Attachment A is consistent with the definition of stormwater associated with industrial activity in 40 CFR section 122.26(b)(14)(ix) which, in relevant part,	None necessary.

	run potable water through the same systems when other water is unavailable, to produce purified water for industrial use in cooling towers and boiler feed. Per 40 CFR part 403, treatment works or the treatment of domestic sewage is defined in 40 CFR section 122.2 and means “a POTW or any other sewage sludge or wastewater treatment devices or systems, regardless of ownership (including federal facilities), used in the (1) storage, 2) treatment, (3) recycling, and (4) reclamation of municipal or domestic sewage, including land dedicated for the disposal of sewage sludge.”	includes : “treatment works treating domestic sewage or any other sewage sludge **or wastewater treatment device or system, used** in the storage, **treatment, recycling and reclamation of municipal or domestic sewage** including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, **with a design flow of 1 million gallons per day** (mgd) or more or required to have an approved pretreatment program under 40 CFR part 403.” (emphasis added.) As noted by the commenter, Treatment works is defined in 40 CFR section 122.2 includes recycling and reclamation of domestic sewage. Domestic sewage is defined in 40 CFR section 122.2 and includes waste and other wastewater from humans or household operations that are discharged to or otherwise enter a treatment works. Based on the above definitions and the fact that the Carson WRP includes wastewater treatment devices or systems that are used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, and has a design capacity of at least 1 mgd, the Carson WRP is appropriately required to enroll in the Industrial General Permit. While the Los Angeles Water Board has the legal authority to consolidate stormwater and process wastewater requirements into a single individual permit, typically this approach is taken when the treatment process at a facility results in commingling of the stormwater and process	

		wastewater waste streams or other special circumstances exist. To streamline oversight of POTWs and Treatment Works in the Los Angeles region and to ensure consistency Statewide, the Los Angeles Water Board has determined that these facilities should maintain enrollment in the IGP for the Carson WRP stormwater discharges. In addition, the Discharger did not include any stormwater discharge information with the ROWD; therefore, the Los Angeles Water Board staff did not consider stormwater discharges from the facility when developing the Tentative Order. The Discharger is required to submit all information relevant to all discharges that will be permitted in an NPDES permit during the application process to be fully considered by the Los Angeles Water Board staff.	

Comment Letter dated January 17, 2024, from Los Angeles Waterkeeper and Heal the Bay

No.	Comment	Response	Action Taken
LH1	Los Angeles Waterkeeper (LAW) and Heal the Bay (HTB) appreciate the requirements included in the Tentative Permit for water quality protection, particularly the limits set for DDT and PCBs given that the discharge location is within a short distance of a significant underwater DDT contamination site in the Santa Monica Bay.	The Los Angeles Water Board appreciates the supportive comments on the Tentative Order.	None necessary.
LH2	LAW and HTB support the Tentative Order's prohibition of brine discharge to the Dominguez Channel.	The Los Angeles Water Board appreciates the supportive comments on the Tentative Order.	None necessary.
LH3	LAW and HTB urge Los Angeles Water Board to require a special study to ensure dilution zone protection. The Tentative Permit lists two separate points of dilution for each outfall: 1) the point at which the effluent meets the Warren Facility secondary effluent within the pipe, and 2) the point of Initial Dilution at which the combined effluent meets the receiving ocean water as defined in Appendix I of the Ocean Plan. While the first dilution point is generally acceptable, we are concerned about the second dilution point, considering both impacts to marine life within the dilution zone as well as cumulative pollutant loading. Specifically, we are concerned that sufficient data is not available to demonstrate the impacts of Reverse	The last dilution study for the Warren Facility was conducted in 2016. Section III.C.4. of the Ocean Plan requires dilution estimates to be based on the lowest average initial dilution in a single month of the year and the assumption that no currents influence the initial dilution. The most conservative results in the 2016 dilution study indicated the dilution ratios for the outfalls were similar to the prior dilution study results in 1997 and updated calculations in 2005. The dilution factors for the Warren Facility in Order No. R4-2017-0180 were therefore carried over from the previous Order. The most recent NPDES permit for the Warren Facility (Order No. R4-2023-0181) indicates that there were no significant changes in the quality of the discharge and	None necessary.

	Osmosis brine discharge on the ocean dilution zone, as this condition is changed compared to the conditions present when the dilution study was conducted. To that end, we request that the Regional Board authorize a special study to evaluate the volume of brine that can be discharged without causing exceedances of the water quality standards detailed in the Tentative Permit, with special focus on impacts to the ocean dilution zone.	ambient conditions since the previous permit, so the dilution factors from Order No. R4-2017-0180 were carried over. Although the dilution factors used for the Warren Facility do not specifically incorporate reverse osmosis brine discharge from the Carson WRP, the 2016 study does project reduced secondary effluent flows and the addition of reverse osmosis brine with higher salinity than is discharged from the Carson WRP due to increased recycling and advanced wastewater treatment activities. The dilution factors for the projected scenarios in the dilution study with up to 26.5 mgd brine (compared to the 1.2 mgd brine design flow rate from the Carson WRP) were all higher than the most conservative scenario, which was based on 100% secondary effluent discharged at the design flow. The dilution study also suggests that flow rate controls the dilution more so than does the salinity, and that higher flow rates tend to produce lower dilution. The Tentative Order considers the critical flow condition to be the minimum effluent flow from the Warren Facility and the maximum design flow of the Carson WRP brine. The Warren Facility critical flow has decreased from 249 mgd to 202 mgd based on more recent flow data from October 2017 to March 2023. The results from the 2016 dilution study suggest that the reduced Warren Facility flow combined with the design brine flow from the Carson WRP of 1.2 mgd should result in more	

		dilution than is currently permitted. Therefore, the more conservative dilution factors used in the Warren Facility permit in the Tentative Order are more protective of beneficial uses. In addition, the Warren Facility is required to conduct receiving water monitoring and to report results in a biennial summary report where spatial and temporal trends are examined and compared, and the relationship of physical and chemical parameters are evaluated. The Los Angeles Water Board sent LAW and HTB the dilution study on January 29, 2024. Since the dilution factor is considered to be conservative and the Warren Facility permit has receiving water monitoring requirements around the outfall, an additional special study on the Carson WRP discharge is not warranted at this time.	
LH4	LAW and HTB urge the Los Angeles Water Board to include technology-based effluent limits (TBELs) and additional monitoring requirements for nitrogen. They request that technology-based effluent limits, set at 5 mg/L as N, be instated for Total Nitrogen, and that the Los Angeles Water Board provide justification as to why such limits are not already included in the Tentative Order.	The TBELs applied in this permit are based on the limits in Table 4 of the Ocean Plan. These limits apply to POTWs, like the Carson WRP, for which no specific effluent limitation guidelines have been developed pursuant to section 301, 302, 304, or 306 or the Clean Water Act. Table 4 in the Ocean Plan only lists specific effluent limits for grease and oil, suspended solids, settleable solids, turbidity, and pH. Water Quality Based Effluent Limitations (WQBELs) for other constituents in the Ocean Plan are included when there is reasonable potential to cause or contribute to exceedances of the water quality objectives in	Revisions were made to the Tentative Order.

		Table 3 of the Ocean Plan. While total nitrogen, nitrate nitrogen, nitrite nitrogen, and total organic nitrogen do not have water quality objectives in Table 3 of the Ocean Plan, Table 3 does include a water quality objective for ammonia as nitrogen. Quarterly monitoring for ammonia was required under the prior permit, Order R4-2018-0090. This monitoring data was used to assess whether the discharge has reasonable potential to exceed the water quality objective. The Carson WRP discharge did not show reasonable potential to exceed the water quality objectives for ammonia; therefore, effluent limits were not proposed in the Tentative Order. The quarterly monitoring requirements from Order R4-2018-0090 were carried over into the Tentative Order. Nevertheless, since nutrient loading to the receiving water is an increasing concern, the Los Angeles Water Board agrees to add monitoring for nitrogen species. This additional monitoring is consistent with the Ocean Plan, which includes a narrative requirement that “Nutrient materials shall not cause objectionable aquatic growths or degrade indigenous biota” (Ocean Plan II.D.6) as well as the monitoring required for the Warren Facility since both treatment works discharge effluent to the Pacific Ocean from the same outfall. Quarterly effluent monitoring requirements have been added to Table E-3 in the Tentative Order for nitrate nitrogen, nitrite	

		nitrogen, total organic nitrogen, and total nitrogen.	
LH5	The compliance summary in the Fact Sheet of the Tentative Permit states that there were no exceedances of effluent limitations during the permit term. However, there were two other violation types not reflected in the Fact Sheet (see screenshot below), for which no corrective action is listed. We request that Regional Board staff explain these violations in the Compliance Summary, even though these are not effluent violations. We additionally request that the Board exercises its authority to require the discharger to take the appropriate corrective actions regarding those non-effluent violations, which appear to originate under the Industrial General Permit.	The two violations to which LAW and HTB are referring (Violation ID S882506 and S882505) are not violations under the discharge regulated under the Tentative Order. These are violations under the *General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities* (Construction Stormwater General Permit) (Order WQ-2022-0057-DWQ), NPDES No. CAS000002. The Tentative Order does not regulate construction stormwater discharges. Therefore, the compliance summary section in the Tentative Order does not address these violations. This comment has been forwarded to the appropriate enforcement staff at the Los Angeles Water Board to review and to respond to as needed.	None necessary.