RESPONSE TO COMMENTS ON THE TENTATIVE NPDES PERMIT
Joint Outfall System
White Point Outfall Manifold Construction Dewatering Project
NPDES Permit No. CA0064661

This Table describes all significant comments received from interested parties with regard to the above-mentioned tentative permit. Comments were received from the Joint Outfall System and Heal the Bay on April 18, 2019. Each comment has a corresponding response and action taken.

No	Comment	Response	Action Taken
Comments received from the Joint Outfall System (JOS) on April 18, 2019			
1	**Incorporate Two Mixing Events into Calculation of the Dilution Factor** The Sanitation Districts request consistency with the NPDES permit for the Juanita Millender- McDonald Carson Regional Water Recycling Plant (Carson Plant, Order No. R4-2018-0090), which also discharges to the Joint Water Pollution Control Plant (JWPCP) outfalls. Section IV.C.5 of the Fact Sheet of the Carson Plant permit clearly states that there are two mixing events (with dilution ratios for each event shown in Table F-2): "Brine from the Facility undergoes two mixing events before it is discharged to the Pacific Ocean. The first mixing event occurs when the effluent from the Facility combines with effluent from Joint Water Pollution Control Plant (JWPCP). The second mixing event occurs during the actual discharge to the Pacific Ocean through the diffuser on the ocean outfall. Because the effluent from the Facility undergoes two mixing events during its discharge, both mixing events must be considered when determining reasonable potential and developing an effluent limitation." The Dewatering Project Tentative Permit considers only the second mixing event. However, both the Dewatering Project groundwater flow and brine from the Carson Plant are added to the JWPCP effluent prior to discharge from the outfalls and undergo the same two mixing events;	In this case, it is not appropriate to provide the proposed discharge with dilution credit in addition to that currently included in the proposed permit. 40 Code of Regulation (C.F.R.) section 125.121(c) defines mixing zone for ocean discharges as the "zone extending from the sea's surface to seabed and extending laterally to a distance of 100 meters in all directions from the discharge point(s) or to the boundary of the zone of initial dilution as calculated by a plume model approved by the director, whichever is greater, unless the director determines that the more restrictive mixing zone or another definition of the mixing zone is more appropriate for a specific discharge." "Director" is defined in 40 C.F.R. section 122.2 as the "Regional Administrator or the State Director, as the context requires, or an authorized representative." As such, the Regional Water Board has the authority to limit the size of the mixing zone (and thereby the minimum probable initial dilution ratio to be applied at the initial discharge point to account for the dilution that will take place in the receiving water), where appropriate, to less than the maximum mixing zone/dilution credit available. Also in accordance to the *Water Quality Control Plan for the Los Angeles Region* (Basin Plan), a mixing zone and a dilution factor for a discharge shall be determined by the Regional Water Board "on a case-by-case basis"; therefore, it is not appropriate for the Regional Water Board to prescribe a dilution credit purely based on consistency with another permit.	None necessary.

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<tr><th>No</th><th>Comment</th><th>Response</th><th>Action Taken</th></tr>
<tr><td></td><td>therefore, it would be appropriate for the Dewatering Project Tentative Permit to apply the same dilution calculation methods, and to use similar language. Specifically, the Sanitation Districts request revision of the dilution value throughout the permit, including its use in the determination of the IWC in toxicity testing and in the RPA calculations. The table below highlights several sections of the Dewatering Project Tentative Permit that would need to be amended:
<table>
<tr><th>Pg.</th><th>Tentative Draft Statement</th></tr>
<tr><td>15</td><td>"Chronic toxicity for the discharge is evaluated at the IWC (0.60% effluent for Discharge Points 001 and 002)…"</td></tr>
<tr><td>E-8</td><td>"The chronic toxicity IWC for Discharge Points…is 0.60 percent effluent."</td></tr>
<tr><td>F-18</td><td>"this order applies the same minimum probable initial dilution of 166:1 for discharges..."</td></tr>
<tr><td>F-19</td><td>“As discussed in section IV.C.2 of the Fact Sheet, this Order is incorporating a minimum probable initial dilution (D_m) of 166:1 for discharges through Discharge Points 001 and 002, consistent with the NPDES permit Order No. R4-2017-0180 for JWPCP. This D_m value for Discharge Points 001 and 002 is applied to the RPA and WQBELs established herein.”</td></tr>
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The Sanitation Districts also request two additions to the Fact Sheet:
Section IV.C.4: Add relevant text from IV.C.5 of the Fact Sheet of the Carson Plant permit (“Brine from the Facility undergoes two mixing events…”).</td><td>The Regional Water Board considered the following factors in determining the minimum probable initial dilution ratio of 166:1 for the proposed discharge. The proposed White Point Manifold Construction Dewatering Project discharges through the same ocean outfalls (Discharge Points 001 and 002) as the Joint Water Pollution Control Plant (JWPCP) effluent, which is separately regulated by JWPCP’s National Pollutant Discharge Elimination System (NPDES) permit, Order No. R4-2017-0180, adopted by the Regional Water Board on September 7, 2017. Order No. R4-2017-0180 included a minimum probable initial dilution ratio of 166:1 for discharges through Discharge Points 001 and 002 based on dilution studies conducted using mixing zone modelling software and representative receiving water data. As such, the proposed permit includes a minimum probable initial dilution ratio of 166:1 for the proposed discharge at Discharge Points 001 and 002 based on the same minimum probable initial dilution ratio that was prescribed in JWPCP’s NPDES permit at Discharge Points 001 and 002.

The Regional Water Board recognizes that there may be additional dilution resulting from internal mixing of the JWPCP secondary treated effluent, the Juanita Millender-McDonald Carson Regional Water Recycling Plant brine effluent, and the proposed construction dewatering groundwater discharge. However, the Regional Water Board does not agree that it is appropriate to grant a dilution value in excess of the current value included in the proposed permit, given no additional modelling data or receiving water data were provided to support the request for the additional dilution. Existing groundwater data collected at the White Point Outfall Manifold site suggest that the proposed discharge, without treatment, will be able to comply with the water quality criteria included in the *Water Quality Control Plan for Ocean Waters of California* (Ocean Plan) (effective on March 22, 2019), after applying the current minimum probable initial dilution ratio of 166:1. There is no other evidence available to suggest the need for a higher or additional dilution credit for the proposed discharge. The State Water Resources Control Board</td><td></td></tr>
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<tr><td></td><td>
Section I: Add a section on dilution credits, similar to Section I.F of the Carson Plant permit. Dilution ratios and groundwater percentages for the Dewatering Project are shown in the table below, assuming an estimated maximum Dewatering Project flow of 1.44 million gallons per day (MGD) and the combined flows from the JWPCP and the Carson Plant.
<table>
<tr><th>Flow</th><th>Parameter</th><th>Dilution Ratio*</th><th>Percentage Groundwater in Mixture</th></tr>
<tr><td rowspan="2">JWPCP Average design dry weather flow in 1997 (385 MGD) + Carson Plant design flow (1.2 MGD)</td><td>First Dilution: Dewatering flow combines with JWPCP secondary effluent + Carson Plant flow</td><td>1.44 MGD : 386.2 MGD
(Total = 387.64 MGD)</td><td>0.37%</td></tr>
<tr><td>Second Dilution: Combined outfall flow enters Pacific Ocean</td><td>1.44 MGD : [387.64 x (166+1)] = 1 : 45,000</td><td>0.0022%</td></tr>
<tr><td rowspan="2">JWPCP Minimum flow, 2014-2018 (239 MGD) + Carson Plant design flow (1.2 MGD)</td><td>First Dilution: Dewatering flow combines with JWPCP secondary effluent + Carson Plant flow</td><td>1.44 MGD : 240.2 MGD
(Total = 241.64 MGD)</td><td>0.60%</td></tr>
<tr><td>Second Dilution: Combined outfall flow enters Pacific Ocean</td><td>1.44 MGD : [241.64 x (166+1)] = 1 : 28,000</td><td>0.0036%</td></tr>
</table>
*Dilution ratio of 166:1 used in the second dilution calculation is consistent with the JWPCP permit and applies to Outfalls 001 and 002.
</td><td>(State Water Board) established California's antidegradation policy in Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 states "it is the policy of the State that the granting of permits and licenses for unappropriated water and the disposal of wastes into the waters of the State shall be so regulated as to achieve highest water quality consistent with maximum benefit to the people of the State and shall be controlled so as to promote the peace, health, safety and welfare of the people of the State". It is inconsistent with the State's antidegradation policy to grant the additional dilution credit (due to internal mixing of the three waste streams discharging to the same ocean outfalls) to the proposed discharge, as current information (i.e. groundwater monitoring data) did not demonstrate the need for this additional dilution credit. Therefore, to ensure that the proposed discharge is regulated to "achieve highest water quality", the proposed permit only includes the minimum probable initial dilution ratio of 166:1, which has been established through dilution studies and approved for discharges through the same ocean outfall structures. The Discharger has demonstrated, through groundwater monitoring data, that the proposed discharge will be able to comply with the Ocean Plan water quality criteria using the 166:1 minimum probable initial dilution ratio.

The proposed Order does not include any effluent limitations where the minimum probable initial dilution ratio applies. The additional dilution credit requested by this comment may only affect the instream waste concentration (IWC) at which routine chronic toxicity testing for the proposed discharge will be conducted. The Regional Water Board determined that the IWC currently included in the proposed permit, calculated using the minimum probable initial dilution ratio of 166:1, is appropriate. There are no appropriate ways to directly apply additional dilution credits to the IWC resulting from the internal mixing of the three waste streams discharging to the same ocean outfalls, as the blending of the three waste streams can</td><td></td></tr>
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No	Comment	Response	Action Taken
		produce either synergistic, antagonistic, or additive effects on aquatic species due to the mixture of potential pollutants that may be present in the three waste streams. Based on existing groundwater monitoring data collected at the White Point Outfall Manifold site, it is also unlikely the proposed discharge will produce toxic results for chronic toxicity testing, either on its own or in combination with the other waste streams discharging to the same ocean outfalls, with the minimum probable initial dilution ratio of 166:1. An IWC based on the minimum probable dilution ratio of 166:1 (associated with the actual discharge to the Pacific Ocean through the diffuser on the ocean outfall) is stringent enough to ensure that chronic toxicity in the receiving water due to the proposed discharge can be detected. After considering the above factors, the Regional Water Board determined that the minimum probable initial dilution ratio of 166:1 currently included in the proposed permit is appropriate, and it is as stringent as necessary to provide dilution credit to the proposed discharge while limiting the potential impacts to the receiving water body. If future effluent data suggest the need for a higher dilution credit for the proposed discharge, and the Discharger submits a mixing zone study to support a higher dilution credit, the Regional Water Board may reconsider applying a higher dilution credit at that time.	
2	**Allow Use of the JWPCP Most Sensitive Species for Toxicity Testing** The Tentative Permit specifies that a three species sensitivity screening for toxicity be conducted once every five years, to determine the most sensitive species, i.e., the species used for routine toxicity testing. The Sanitation Districts request the ability to use the species determined to be most sensitive under the JWPCP permit through their biennial species sensitivity screening, rather than conducting a separate screening test that includes the dewatering discharge. The dewatering discharge consists of groundwater and is relatively clean, as evidenced by the water quality analysis: the results met all California Ocean Plan Objectives, as well as the general permit limitations for all	Given that the groundwater discharge represents a low percentage (0.6%) of the in-stream waste concentration (IWC) at which chronic toxicity testing will be conducted, and given the anticipated groundwater quality based on existing groundwater monitoring data collected at the White Point Outfall Manifold site, the potential difference between the percent effects for each of the screening species is expected to be negligible or non-existent. Given the purpose of the sensitive species screening toxicity testing is to test the toxicity of the effluent in the receiving water after mixing, and the volume of the groundwater from the construction dewatering in the effluent from the ocean outfalls is low (maximum permitted flow of 1.44 million gallons per day) compared with the volume of JWPCP	Removed sensitive species screening requirement in section V of the Monitoring and Reporting Program (Attachment E). Additional language provided in

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	parameters except cyanide, which exceeded the objective of 1 µg/L in one of five groundwater samples (with concentrations of 1.1 , 0.89, and 0.5 µg/L, and two non-detect results). In addition, as shown in the table above, the contribution of the dewatering flow to the outfall discharge is quite small (at most 0.0036% after both dilution events). In a 1,000 mL toxicity test, 0.036 mL of groundwater would be used; it seems highly unlikely that this very small amount of clean water would affect the results of the toxicity screening. Consequently, the Sanitation Districts request that the Dewatering Project permit specify use of the same species as the JWPCP for toxicity testing; conducting separate screening tests that include the dewatering water is unlikely to add significant value relative to the substantial cost of the screen (approximately $18,000).	effluent being discharged to the same ocean outfalls (maximum permitted flow of 400 million gallons per day), the request to use the same species from the JWPCP effluent sensitive species screening testing is acceptable. The following text is added to the end of section V.A.3 of the Monitoring and Reporting Program (MRP, Attachment E) of the revised tentative. "*The Discharger may use the same species that was determined to be the most sensitive species for the Joint Water Pollution Control Plant (JWPCP) effluent under NPDES No. CA0053813 for routine chronic toxicity monitoring of this discharge. Given the purpose of the chronic toxicity testing is to test the toxicity of the effluent in the receiving water after mixing, and the volume of groundwater from the construction dewatering in the effluent from the ocean outfalls is low (maximum permitted flow of 1.44 million gallons per day) compared with the volume of JWPCP effluent being discharged to the same ocean outfalls (maximum permitted flow of 400 million gallons per day), the use of the same species from the JWPCP effluent sensitive species screening testing is acceptable.* "	section V.A.3 of the MRP to allow using the same species as the JWPCP effluent for chronic toxicity testing.
Comments received from Heal the Bay on April 18, 2019			
1	**If dilution credits apply to the chronic toxicity testing at Discharge Points 001 and 002, the Regional Board should require acute toxicity testing under the monitoring and reporting program.** The Tentative Permit states that dilution credits are applied at Discharge Points 001 and 002. If these dilution credits apply to the chronic toxicity testing it would be possible for acute toxicity testing to show toxicity in situations where chronic toxicity is not demonstrated. If the permittee is allowed to apply dilution credits to chronic toxicity testing, there should be requirements for acute testing without these credits applied. Dilution credits should never be applied to acute toxicity because the toxicological effect of morbidity is too severe. We request that the Regional Board require acute toxicity testing under the monitoring and reporting program.	The in-stream waste concentration (IWC) included for chronic toxicity testing of the discharge is calculated based on the minimum initial dilution factor of 166:1 applied at Discharge Points 001 and 002; therefore, the commenter is correct that the dilution credit based on the minimum initial dilution factor applies to the chronic toxicity testing. However, the Regional Water Board determined that acute toxicity testing is not required for the proposed discharge. The latest amendment of the *Water Quality Control Plan for Ocean Waters of California* (Ocean Plan), effective on March 22, 2019, addresses the application of chronic and acute toxicity requirements based on the minimum initial dilution factor of the discharge. Specifically, section III.C.4.c of the Ocean Plan provided procedures	None necessary.

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		to determine whether acute and/or chronic toxicity testing shall be required. Section III.C.4.c.3 states that "Dischargers shall conduct chronic toxicity testing for ocean waste discharges with minimum initial dilution factors ranging from 100:1 to 350:1. The Regional Water Board may require that acute toxicity testing be conducted in addition to chronic as necessary for the protection of beneficial uses of ocean waters". In accordance with the Ocean Plan, a chronic toxicity testing requirement is included in the proposed permit as the minimum initial dilution factor applicable to the discharge is 166:1. It is then up to the Regional Water Board's discretion whether acute toxicity testing is necessary in addition to the chronic toxicity testing for an ocean waste discharge on a case-by-base basis. For the proposed discharge, the Regional Water Board determined that acute toxicity testing is not required since chronic toxicity is a more stringent requirement than acute toxicity, and it evaluates the mortality endpoint as does the acute toxicity testing. Also, based on existing monitoring data for the groundwater quality at the White Point Outfall Manifold site, there is no evidence to suggest that the discharge may pose a risk of producing acute toxic effects within the zone of initial dilution. Monitoring results for the Ocean Plan Table 1 parameters were primarily non-detect; none of the results exceeded the applicable Ocean Plan water quality objectives after accounting for the dilution credit assigned to the discharge. As such, the Regional Water Board did not find a justification to require acute toxicity testing for the proposed discharge.	

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2	**Beneficial reuse of groundwater generated from construction dewatering should be considered under the JWPCP Program.** The permittee "anticipates the discharge of groundwater generated from construction dewatering to be continuous during the construction period from February 2024 through July 2026." At a design capacity of 1.44 million gallons per day (MGD), this project has the potential to generate a significant amount of discharge. The California Constitution requires the state's water resources be put to beneficial use and that the waste or unreasonable use of water be prevented. Therefore, we encourage the permittee to consider beneficial reuse of groundwater from construction dewatering under the JWPCP Program. The proximity of the project location to the ocean will likely cause the groundwater generated from construction dewatering to have high salinity values, limiting the potential for beneficial reuse. However, we encourage the permittee to investigate any feasible options for beneficial use of the groundwater to avoid the waste or unreasonable use of the state's water resources. We recommend that the Regional Board require assessment of water quality to determine if beneficial reuse is feasible.	Thank you for your comment. The Regional Water Board is not obligated to conduct, or require, the assessment of water quality suggested by the commenter. Nevertheless, the Joint Outfall System (the Discharger) examined the possibility of reusing the groundwater from construction dewatering generated at the White Point Outfall Manifold site. However, due to the significant difference in ground elevation between the construction site (located at sea level on the Palos Verdes Peninsula) and location where the wastewater can potentially be reused, the Discharger determined that reuse was impractical due to the pumping that would be required.	None necessary.
3	**The reuse of recycled water should remain the priority for JWPCP to increase local resilience through smart water practices.** JWPCP is currently pursuing a pilot project to expand their facility and divert up to 150 MGD of treated wastewater to spreading grounds for groundwater recharge. The construction project specifically associated with this Tentative Permit is in place to upgrade the piping used for ocean discharge to comply with the seismic design requirements, in order to secure a reliable conveyance system for the remaining 110 MGD of expected flow, which includes the brine discharge. As stated above, The California Constitution requires the state's water resources be put to beneficial use and that the waste or unreasonable use of water be prevented. Additionally, the California State Water Resources Control Board made a statewide goal to recycle 1.5 million acre-feet (MAF) of wastewater by 2020, and 2.5 MAF by 2030; and, in	See response to Comment 2, above. To the extent that the comment is recommending that the groundwater from the construction dewatering should be diverted to the spreading grounds as part of the Regional Recycled Water Program being conducted by the Metropolitan Water District in partnership with the Discharger, the groundwater from the construction project is a short-term source and will only last until 2026. The full-scale Regional Recycled Water Program will not be completed until at least 2030. With respect to the comment for the Discharger to scale back the current JWPCP program to construct the tunnel to account for future	None necessary.

No	Comment	Response	Action Taken
	December of 2018, the State Board adopted its revised Recycled Water Policy with the goal to recycle all dry-weather ocean wastewater discharges statewide. Locally, Mayor Garcetti announced his goal for Los Angeles to recycle 100% of its wastewater by 2035 to increase to the amount of water we source locally. Therefore, the reuse of recycled water should remain the priority for JWPCP to increase local resilience through smart water practices. We support the efforts made towards recycled water reuse at the JWPCP facility. As such, we encourage the permittee to either increase the proposed amount of water to be diverted to the spreading ground or to explore other reuse options to maximize the beneficial reuse of JWPCP treated wastewater, and to potentially scale back the current JWPCP Program to account for future reduction in ocean discharge amounts.	reduction in ocean discharge amounts, that comment is outside the scope of the proposed permit and will not be addressed here.	