RESPONSE TO COMMENTS
CITY OF AVALON
AVALON WASTEWATER TREATMENT FACILITY
TENTATIVE ORDER NO. R4-2024-XXXX
NPDES NO. CA0054372

Comment Email dated April 16, 2024, from City of Avalon (Discharger)

No.	Comment	Response	Action Taken
A1	**Permit Table 4. Effluent Limitations and Performance Goals at Discharge Point 001, Fact Sheet Table F-12, and Fact Sheet Table F-13.** Permit Table 4 sets forth enforceable effluent limitations and non-enforceable performance goals. The Tentative Order sets new effluent limitations for Aldrin and Endosulfan. Monitoring data collected under Order No. R4-2019-0023 shows no detection of Aldrin in the last five years. Likewise, outside one sample collected on January 18, 2019, monitoring data for Endosulfan shows no detections or levels below the performance goal of 0.05 µg/L (Monthly Average). Given the abnormally high level detected in the January 18, 2019 sample, the City and Operator suspect the result was due to a reporting or lab error. Accordingly, the City and Operator request that the Regional Board remove effluent limitations and set a performance goal (PG)	Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) staff used the effluent data reported between April 1, 2019 and July 31, 2023 to conduct the Reasonable Potential Analysis (RPA) for aldrin. In response to this comment, Los Angeles Water Board staff reexamined the data reported between April 1, 2019 and July 31, 2023 and confirmed that all aldrin effluent sample results were not detected. Los Angeles Water Board staff reran the RPA with the data set and determined that the discharge does not have reasonable potential to exceed the water quality objectives for aldrin. Therefore, the aldrin effluent limitations from Table 4 were removed from the Tentative Order and performance goals for aldrin were added to the Tentative Order. To be consistent with this change, Table F-13 of the Tentative Order has also been revised to identify how the performance goal was calculated for aldrin, and section 3.3.5, 4.3.4, and 4.3.5, and Table F-11 of the Fact Sheet was modified accordingly. The effluent monitoring frequency was also modified to semiannually since the effluent does not have reasonable potential to exceed the water quality objectives for aldrin.	Revisions were made to the permit.

No.	Comment	Response	Action Taken
	of 0.0013 µg/L for Aldrin and 0.05 µg/L for Endosulfan. In addition, the Operator notes that the Regional Board imposed an effluent limitation and a performance goal for Chlorine Residual. The Operator believes this is an error.	Table E-5 of the MRP and Table F-14 of the Fact Sheet were revised accordingly. Consistent with the data range used to calculate the effluent limitations for aldrin and all other pollutants, Los Angeles Water Board staff used the endosulfan effluent data reported between April 1, 2019 and July 31, 2023 to conduct the RPA. However, the endosulfan dataset actually used in the RPA included an additional data point for a sample collected on January 8, 2019 (Los Angeles Water Board staff confirmed with Avalon WWTF staff that January 18, 2019 was the analysis date for endosulfan, but the sample was collected on January 8, 2019) because the result was not used in the RPA for the Order No. R4-2019-0023 permit renewal. Although the sample result for endosulfan on January 8, 2019, was higher than usual, the Discharger has not provided the Los Angeles Water Board with any documentation from the laboratory that conducted the analysis or from their operations indicating there was an issue with how the sample was handled or with the analysis. Absent any documentation indicating the sample is not representative of the discharge, this sample must be treated as a valid result. Los Angeles Water Board staff reconducted the RPA for endosulfan, and it showed reasonable potential for the effluent to exceed endosulfan's water quality objectives in the Ocean Plan. Therefore, the endosulfan effluent limitations in Table 4 are appropriate.	

No.	Comment	Response	Action Taken
		The total residual chlorine concentrations in effluent sampled between April 1, 2019 and July 31, 2023 ranged between 5 µg/L to 300 µg/L. The highest total residual chlorine concentration of 300 µg/L was reported on December 26, 2020 and triggered reasonable potential for the effluent to exceed the total chlorine residual water quality objective in the Ocean Plan. A performance goal for total chlorine residual is included in the Tentative Order because it is more stringent than the effluent limitations. The purpose of the performance goal is to ensure that the treatment efficiency is maintained at the Avalon WWTF. Including a performance goal in addition to an effluent limitation in the Order will also ensure any increases in total residual chlorine concentrations are followed by an investigation into the source of the elevated total residual chlorine before it causes an issue with the discharge meeting the effluent limitations. This protects the beneficial uses of the receiving water by minimizing residual chlorine loading and ensuring the highest water quality is maintained as required by the antidegradation policy. In addition, section 5.1.4. of Attachment F states that performance goals are not prescribed for constituents with effluent limits only if it is equal to or higher than the effluent limitation.	
A2	**Permit 4.3.1. Recycled Water Feasibility Investigation, Fact Sheet 3.3.9. Water Recycling, MRP 10.4.11., and Fact Sheet 4.7.1. Recycled Water Feasibility Investigation**	The Los Angeles Water Board strongly encourages water recycling, water conservation, and use of stormwater and dry-weather urban runoff, consistent with the Water Quality Control Policy for Recycled Water (Recycled Water Policy), State	Revision on a typographic error was made to the permit.

No.	Comment	Response	Action Taken
	Permit Section 4.3.1., Fact Sheet Section 3.3.9., and Fact Sheet 4.7.1. Recycled Water Feasibility Investigation all relate to a mandated Recycled Water Feasibility Investigation. Fact Sheet 4.7. illustrates the City's difficulties in implementing a recycled water project that utilizes the Treatment Facility's secondary-treated effluent. It states: ". . . City of Avalon residents use ocean water to flush toilets, resulting in an effluent salinity from the Avalon WWTF between 12 and 27 parts per thousand, based on the 2023 Avalon WWTF effluent data. Due to this high salinity, the effluent would need to receive additional treatment before it can be used for title 22 recycled water applications." The City has limited potable water resources and recognizes the value recycled water can provide in strengthening its water resilience. The City has explored recycled water in the past. Despite serious impediments presented by a dual water system, it will continue to consider it as a broader part of its future water portfolio. However, the City believes the Recycled Water Feasibility Investigation should not be a permit requirement and requests that the Regional Board remove it from this Tentative Order. The City will be conducting	Water Board Resolution No. 2017-0012 and Los Angeles Water Board Resolution No. R18-004 concerning water recycling and climate change that the Water Boards have adopted . Section X.D.3. of the MRP of Order No. R4-2019-0023 requires the Discharger to include a summary of any actions taken regarding the use or production of recycled water in the annual summary report. The Tentative Order builds on this previous requirement in section 4.3. by requiring the City of Avalon to submit a feasibility investigation report as part of the submittal of the Report of Waste Discharge (ROWD) for the next permit renewal cycle. The purpose of the feasibility investigation requirement is to encourage all dischargers to investigate the feasibility of recycling more water and to determine strategies to use water more efficiently. The feasibility investigation is a way for the Discharger to continue investigating potential uses of its wastewater, to reduce the amount of wastewater discharged into the water bodies, to promote conservation, and to take advantage of alternative sources of water that may be available for capture and reuse. The Los Angeles Water Board acknowledges the challenges associated with recycling the wastewater from the Avalon WWTF that are described in the comment. Section 4.3 of the Tentative Order states that there is currently no recycled water program applicable to the City of	

No.	Comment	Response	Action Taken
	an assessment of the Treatment Facility and will be considering possible upgrades to the system. After completing this process, the City would be in a much better position to reconsider the feasibility of recycled water during the next permit cycle. While the City remains committed to considering this option, doing so at this time is unlikely to result in valuable information. **Modification:** • Delete Permit 4.3.1. Recycled Water Feasibility Investigation and Fact Sheet 4.7.1. Recycled Water Feasibility Investigation • Modify Fact Sheet 3.3.9. Water Recycling: ~~This permit also requires the Permittee to investigate the feasibility of recycling, conservation, and/or alternative disposal methods for wastewater (such as groundwater injection), and/or capture and treatment of dry-weather urban runoff and stormwater. This requirement is described in section 4.7.2. of this Fact Sheet.~~ If the Regional Board rejects the City's proposed modification, the City requests that the Regional Board fix the typo within the pertinent language, i.e., it	Avalon due to the high salinity in the treated effluent generated at the Avalon WWTF. Due to this high salinity, the effluent would need to receive additional treatment before it can be used for title 22 recycled water applications. Since there are clear challenges to reusing the wastewater form the Avalon WWTF, the Discharger may describe these challenges in the feasibility investigation report in addition to describing how the Discharger is addressing conservation and reusing other sources of water such as stormwater and dry weather urban runoff. Los Angeles Water Board staff has fixed the typographic error in section 3.3.9. of the Fact Sheet described in the comment.	

No.	Comment	Response	Action Taken
	should cite Section 4.7.1. rather than 4.7.2.		
A3	**Permit 5.1.3.i. Chemical Characteristics for Pesticides** This section addresses the chemical characteristics of pesticides in waste discharged from the Treatment Facility. Pesticides have not been present in the influent or effluent at the Treatment Facility. The effluent, therefore, does not exhibit a reasonable potential to exceed water quality objectives for pesticides. The City notes the Regional Board removed the exact requirement in Order No. R4-2019-0023 at the City's request. For these reasons, the City requests the following modification: **Modification:** Delete Permit 5.1.3.i.	The narrative receiving water limitation in Section 5.1.3.i. was included in the Order to protect the receiving water from the toxic effect of pesticides that are not individually monitored in the final effluent. Since there is a final effluent limitation and a receiving water limitation for toxicity, a narrative receiving water limitation for pesticides is unnecessary to protect the receiving water from the toxic effects of pesticides in the final effluent. The Los Angeles Water Board agrees to remove section 5.1.3.i. from the Tentative Order.	Revision was made to the permit.
A4	**Permit 6.3.4.b. Climate Change Effects Vulnerability Assessment and Mitigation Plan and Fact Sheet 3.5.1. Climate Change Adaptation and Mitigation** The City is acutely aware of the threat climate change poses to its infrastructure. Understanding the potential impacts of increased extreme weather events and rising sea levels on our resources is paramount in enhancing the City's resilience against climate change. Fortunately, given its elevation, the	Climate change is an urgent issue because it is already impacting facilities throughout California from more frequent atmospheric river events that can cause severe flooding and landslides, more frequent and more intense wildfires, and water quality issues related to these events. The Avalon WWTF is located in an area with potential for landslides and is surrounded by open space covered in dry brush, so there are immediate risks to the wastewater treatment plant that need to be addressed as soon as possible.	None necessary.

No.	Comment	Response	Action Taken
	Treatment Facility is safe from direct impacts, i.e., flooding, of a sea level rising of six (6) feet and 100-year storm conditions. However, the Assessment is not a comprehensive study of all climate change impacts on the Treatment Facility's operations, infrastructure, influent, effluent, and receiving waters. The City is conducting a condition assessment of the Treatment Facility, which it expects to complete next year. At this point, the City will seek grant funding and preliminary engineering for any necessary upgrades or repairs. The City believes it will be better suited to address the Climate Change Effects Vulnerability Assessment and Mitigation Plan ("Climate Change Plan') once it completes this process. Accordingly, the City asks the Regional Board to give the City an additional 24 months to complete the Climate Change Plan. **Modification:** Modify the last sentence in Permit 6.3.4.b.: The Climate Change Plan is due ~~12~~ 36 months after effective date of this Order.	The 12-month time frame to develop a Climate Change Plan is also standard in all municipal NPDES permits issued in the Los Angeles region. Other dischargers have been able to prepare and submit the Climate Change Plan within the 12-month period, so the Los Angeles Water Board finds this is a reasonable amount of time to develop a plan. The Discharger may also update the Climate Change Plan after the condition assessment is completed to describe any changes related to findings from the assessment.	
A5	**MRP 1.18 Central Bight Water Quality Cooperative Program** The MRP requires the City to participate in the Central Bight Water Quality Cooperative Program if Santa Catalina Island is added.	Los Angeles Water Board staff understand the Discharger is a small jurisdiction with limited funding. The Central Bight Water Quality Cooperative Program is an important program that focuses on region-wide issues that are not being addressed through the routine monitoring required	Revision was made to the permit.

No.	Comment	Response	Action Taken
	The need for and value of these studies relative to the costs of such studies are unclear. The City is a small jurisdiction with limited means, and it must prioritize its resources for projects that would help it meet water quality objectives. For this reason, the City requests the following modifications: **Modification MRP:** 1.18. . . . Currently, the Central Bight Water Quality Cooperative Program does not include monitoring around Santa Catalina Island. If such a component is added to the regional monitoring program, the City of Avalon shall consider joining the program after conducting a cost analysis to determine whether joining the program would interfere with the City of Avalon's ability to meet water quality objectives. If the City of Avalon decides to join the program, it will work cooperatively with other participants to conduct integrated water quality monitoring.	under the NPDES permit. Section 1.18 of the MRP of the Tentative Order also provides the Discharger with the option of requesting temporary changes to the receiving water monitoring to accomplish the goals of the regional monitoring program. If the Central Bight Water Quality Cooperative Program is expanded to encompass the receiving water around Santa Catalina Island, the City shall participate in discussions with the participants of the Central Bight Water Quality Cooperative Program to determine what monitoring may be needed. The Discharger shall then determine if funding is available for additional monitoring or if there is an opportunity to temporarily conduct monitoring in support of the regional program in exchange for some of the receiving water monitoring conducted in compliance with the Order. The Los Angeles Water Board agrees to modify the language in this section as follows: "Currently, the Central Bight Water Quality Cooperative Program does not include monitoring around Santa Catalina Island. If such a component is added to the regional monitoring program, the City of Avalon shall participate in discussions with the program participants to determine the extent of the planned monitoring program. The Discharger shall then consider any potential funding available for the effort and shall consider requesting a reduction in routine receiving water monitoring in exchange for conducting monitoring in support of the regional program. If the Discharger determines funding or	

No.	Comment	Response	Action Taken
		resource allocations are available to support the objectives of the program, the City of Avalon shall join the program and work cooperatively with other participants to conduct integrated water quality monitoring."	
A6	**Influent Monitoring Requirements and Table E-4. Influent Monitoring** The City believes the increased influent monitoring frequency for new and existing parameters is unwarranted. The increase is not reasonably calculated to protect the receiving water while adding significant monitoring costs across the permit's lifespan. The City would prefer to allocate its limited resources towards projects to help the Treatment Facility meet water quality objectives, such as upgrades and repairs identified in its pending condition assessment. However, the City and Operator recognize a past exceedance of effluent limits on TCDD Equivalents warrants increased monitoring. As such, the City requests that the Regional Board reduce influent monitoring frequency for the parameters indicated below to annually. In addition, the Operator notes that Table E-4 indicates that the sample type for Dichlorobenzenes is grab. Order No. R4-2019-0023 called for a 24-hr composite. The Operator seeks confirmation that the change is intentional.	The influent monitoring was increased from annually to semiannually in the Tentative Order because the annual influent monitoring required in Order R4-2019-0023 is insufficient for the following reasons: 1. The Avalon WWTF is a major ocean discharger since it has a design capacity greater than 1 MGD, and is described as a major discharger in section 1 of the Fact Sheet of the Tentative Order. 2. The Avalon WWTF outfall is approximately 2 miles away from an Area of Special Biological Significance. 3. Semiannual monitoring is the minimum amount of monitoring required for Ocean Plan pollutants because it is more representative of water quality throughout an entire year (collected during winter vs. summer), and the data is needed to assess treatment plant performance. 4. The method detection limits achieved for several pollutants were not sufficiently sensitive in previous monitoring reports and additional data are needed. 5. The semiannual minimum influent monitoring frequency for most pollutants without reasonable potential is consistent with the monitoring	Revision was made to the permit.

No.	Comment	Response	Action Taken
		requirements for other ocean dischargers in the Los Angeles region. Clarifying language was added to section 8.1 of the Fact Sheet of the Tentative Order. Dichlorobenzenes include 1,2-dichlorobenzene and 1,4- dichlorobenzene, which are both volatile organic compounds. Since these pollutants are not stable in solution, the most appropriate sampling method for these compounds is a grab instead of a 24-hour composite.	
A7	**Effluent Monitoring Requirements and Table E-5 and Fact Sheet 8.2. Effluent Monitoring and Table F-14. Monitoring Frequency Comparison** The City shares the Regional Board's goal of protecting the Pacific Ocean. However, increased effluent monitoring for certain parameters will yield limited benefit while significantly burdening the City and Operator across the permit's lifespan. The City and Operator anticipate the increased effluent monitoring to quadruple laboratory and courier costs alone. But, the burden isn't limited to solely laboratory and courier costs. Coordinating testing on the island requires a disproportionate amount of staff time compared to mainland treatment facilities. Per Criterion 2 in Fact Sheet Section 8.2., quarterly monitoring is appropriate when	Los Angeles Water Board Staff reviewed the data for the pollutants mentioned in the Discharger's comment, reevaluated the effluent monitoring frequencies, and have the following responses: **Aldrin, Chromium VI, Nitrobenzene, and Thallium** Since aldrin, chromium (VI), nitrobenzene, and thallium were not detected in the effluent between April 2019 and July 2023. The monitoring frequency of these parameters has been revised from quarterly to semiannually. **Dimethyl phthalate, PAHs, and 2,4,6-Trichlorophenol** Based on the Ocean Plan, non-quantifiable levels are defined as "Detected, but Not Quantified", or DNQ. This means the result was below the minimum level (ML), but greater than the method detection limit (MDL) and there is a degree of uncertainty with the result. Los Angeles Water	Revisions were made to the permit.

No.	Comment	Response	Action Taken
	"historical effluent monitoring data detected the pollutants, but without reasonable potential to exceed water quality objectives." However, the Tentative Order imposes quarterly sampling for several parameters in which monitoring data shows no detectable quantity: Aldrin, Chromium (VI), Nitrobenzene, and Thallium. The City and Operator request that the Regional Board reduce the monitoring frequency for these parameters to semiannually. The City and Operator believe increased monitoring for other parameters is also unwarranted, given the frequency and detection levels under Order No. R4-2019-0023. Dimethyl phthalate, PAHs, and 2,4,6-Trichlorophenol were consistently non-detected except in a few instances when the parameters were detected at non-quantifiable levels. In addition, Diethyl phthalate, Toluene, Benzene, Chloroform, and Halomethanes were rarely detected, and when those parameters were detected, results showed levels well below water quality objectives. The City and Operator request that the Regional Board reduce the monitoring frequency for these parameters to semiannually. As for Endosulfan, monitoring showed detection above a performance goal on one occasion. Again, the City and Operator	Board staff typically treat DNQ values as detected when determining monitoring frequencies. However, since most of the effluent data for dimethyl phthalate, PAHs, and 2,4,6-trichlorophenol were reported as non-detect (one DNQ and 19 non-detected results for dimethyl phthalate, one DNQ and 19 non-detected results for PAHs, and 3 DNQ and 17 non-detected results for 2,4,6-trichlorophenol), the monitoring frequency for these parameters has been revised from quarterly to semiannually. **<u>Diethyl phthalate, Toluene, Benzene, Chloroform, and Halomethanes</u>** Per Criterion 2 in Fact Sheet Section 8.2., quarterly monitoring is appropriate when historical effluent monitoring data detected the pollutants, but without reasonable potential to exceed water quality objectives. The following pollutants were detected above the minimum level during the Order No. R4-2019-0023 permit cycle: toluene on 01/27/2023, benzene on 01/26/2021, chloroform on 01/31/2022 and 07/19/2022, halomethanes on 07/31/2019, 01/22/2020, 01/31/2022, and 01/27/2023, diethyl phthalate on 8/17/2022. Since these were all valid detections of each of these pollutants above the minimum level, the Los Angeles Water Board finds it appropriate to increase monitoring for these pollutants to quarterly to ensure the concentrations of these pollutants are not increasing in the effluent.	

No.	Comment	Response	Action Taken
	believe the result to be an error. On all other occasions, monitoring showed no detection or detections below the performance goal of 0.05 µg/L. As such, the City and Operator ask the Regional Board to reduce monitoring to quarterly. PFAS is a new monitoring parameter. The type, composition, and intensity of the island's agricultural, industrial, and commercial activities present a slight risk for the parameter's presence in the Treatment Facility's effluent. The City and Operator ask the Regional Board to reduce monitoring frequency to semiannually. If monitoring indicates that PFAS is regularly present in the Treatment Facility's effluent, the City and Operator are willing to increase monitoring accordingly. Lastly, the sample type for Chloroform is denoted as 24-hour composite when it was grab previously. The Operator seeks clarity on whether this is change is intentional. Therefore, the City and Operator ask the Regional Board to revise Table E-5 and Table F-14.	**Endosulfan** A final effluent limit for endosulfan is established in the Tentative Order, as described in response to Comment #A1. Therefore. monthly effluent monitoring of endosulfan is appropriate to determine compliance with the limit and no changes were made in response to this comment. **PFAS** On December 5, 2022, EPA released a memorandum titled "Addressing PFAS Discharges in NPDES Permits and Through the Pretreatment Program and Monitoring Programs." Section A.2 of this PFAS memorandum states: "… EPA also recommends that monitoring include each of the 40 PFAS parameters detectable by draft method 1633 and be conducted **at least quarterly** to ensure that there are adequate data to assess the presence and concentration of PFAS in discharges…" Consistent with this memorandum, quarterly monitoring for PFAS was included in the Tentative Order. This data will also be used to determine the prevalence of PFAS in the effluent to help inform future regulatory actions. No changes were made in response to this comment. **Chloroform** The Tentative Order requires grab samples for chloroform because chloroform is a volatile organic compound and is unstable in solution. No changes were made in response to this comment.	

Comment Letter dated April 18, 2022, from Heal the Bay

No.	Comment	Response	Action Taken
H1	**Action must be taken to address the ongoing impacts of TSS and TCDD violations in Facility effluent.** We recognize that the permittee and the Regional Board reached a settlement agreement for $3000 in mandatory minimum penalties (MMPs) to address the three TSS violations in 2021, and an additional $3000 in MMPs for the TCDD violation. We appreciate the enforcement action taken in response to these 2021 violations, as well as the payments made by the permittee. Considering that similar violations occurred in 2023 (4 TSS violations and 1 TCDD violation), we are concerned that any problems have not been corrected and the potential for ongoing contamination exists. Therefore, we request an explanation of activities planned to address TSS and TCDD at this facility, beyond payment of MMPs.	The Los Angeles Water Board understands the commenter's concern and has been taking enforcement actions and discussing issues with the Discharger to address violations. **TSS Violations –** The Avalon WWTF had several exceedances of the effluent limits for total suspended solids (TSS) in the current permit cycle. The City of Avalon is evaluating whether to install disc filters between the secondary clarifiers and the chlorine contact basin to remove additional TSS. Disc filters are expected to eliminate the need for polymers in addition to reducing TSS. If the City council approves the proposal, the disc filters are expected to be installed and operational around March 2025. **TCDD Violation –** The Avalon WWTF had 2 exceedances of the effluent limits for TCDD during the last permit cycle. The first exceedance occurred on November 30, 2021. Looking at the violation report submitted at the time, City of Avalon staff explained that TCDD equivalents had always been low to non-detect and this lab result appeared to be an abnormality. The City of Avalon indicated that the TCDD violation was possibly caused by a sampling or lab error, but no documentation was provided by the lab to support this claim, so the Los Angeles Water Board treated this result as valid. City of Avalon staff investigated the facility's logbook for 2021 and found that the day before sample collection, a local pumper truck	None necessary.

		dumped approximately 2,000 gallons of porta-potty waste at our Pebbly Beach Lift Station. Discharger staff investigated whether the porta-potty waste had any direct connection to TCDD concentrations in the effluent, but the Discharger found no concrete evidence that TCDD originated from this source. With no other information available, City of Avalon staff have not determined any other cause for this exceedance. The second TCDD equivalents exceedance occurred on April 6, 2023. The Avalon WWTF experienced rainy events leading up to April. Rain continued to make the biosolids in the drying bed wet enough to where it could not meet the 50% moisture content requirement to be hauled off, therefore biosolids continued to build up in the drying bed. On March 15th, the Avalon WWTF experienced a storm that produced 3 inches of rain in a day. Storm runoff from the nearby road flowed into the drying bed. The biosolids became wet enough where they began seeping into the drying bed drains, therefore clogging them up. This caused the drying bed to flood within. These extra, processed solids made their way back through the plant's system. City of Avalon staff believed that these extra solids had the potential to contain TCDD. There were no other unusual circumstances that occurred around this time that Avalon WWTF staff had observed. After experiencing these heavy storms, installations of barricades and straw wattles helped contain solids in the drying bed. The Discharger	

		put in extra effort to dry and haul out bins of biosolids as soon as they're ready to prevent any accumulation of solids buildup in the drying bed. When rain is expected, biosolids are pushed up against the wall away from the drains to prevent any solids from escaping into the plant process. The Avalon WWTF will use sandbags to create a barrier between the drying bed and the road nearby when storms are predicted.	
H2	**The Regional Board must clearly define monitoring and reporting requirements to apply for spills, overflows, and bypasses.** The Regional Board must enforce the sewage spill reporting requirements (both internal and external) within the Proposed Permit, and the Board must also enhance those reporting requirements where necessary to ensure timely and adequate public notice of spills. We briefly offer a few non-exhaustive examples of how spill reporting requirements can and should be improved within the Proposed Permit: ● The Regional Board should require preparation to ensure adequate protection of the Facility, as a provision of the Proposed Permit and as a consideration within Climate Change Effects Vulnerability Assessment and Mitigation Plans, including routine maintenance and operational testing of both non-	Section 6.3.6. of the Tentative Order includes monitoring and reporting requirements for spills, bypasses, and overflows, as described below: • **Spill Reporting** The Los Angeles Water Board agrees that the public needs to be notified as soon as possible following the release of reportable amounts of hazardous substances or sewage for the protection of public health. As such, individuals of the general public have the option of requesting spill notification from the Discharger to be included in the email list of interested persons. In addition, Section 6.3.6.a.ii of the Tentative Order already requires the Discharger to include public outreach in its emergency communications protocols, which may include media updates, social media postings, and community notices. In addition, Section 6.3.6.c.ii of the Tentative Order requires the Discharger to submit (1) a written preliminary report 5 business days after disclosure of the incident and (2) the final written report to the Los Angeles Water Board within 30 days after submitting the preliminary report. The	None necessary.

	emergency infrastructure as well as emergency infrastructure. ● The Regional Board should require within the Proposed Permit language that permittees provide a detailed and updated spill reporting protocol to the Board within 6 months of permit approval to include a spill volume that will trigger additional action by the permittee. ● In the event of a spill, the Regional Board should require immediate implementation of accelerated monitoring for spills of a certain size, without the need for Regional Board instruction. Monitoring should commence promptly, ideally within 2 hours of the event, and if a sample cannot be obtained due to safety concerns, daily monitoring should be conducted until the bacteria levels reflect public safety. This entails employing rapid fecal indicator bacteria testing, conducting modeling and current measurements to forecast plume trajectory, and implementing supplementary ambient monitoring in areas affected by sewage release. ● The Proposed Permit should include the general public under the list of interested persons to be notified in the event of a spill (via temporary sign posting, social media, push-notifications, e-mail list servers, notices in newspapers and/or any other outreach tools that the	final written report shall document the information required in section 6.3.6.d of the Tentative Order, monitoring results and any other information required in provisions of the Standard Provisions document including corrective measures implemented or proposed to be implemented to prevent/minimize future occurrences. • **Spill Monitoring** Section 6.3.6.b of the Tentative Order already includes requirements for the Discharger to take actions to define the geographical extent of the spill's impact and to conduct immediate additional monitoring for *all* volumes of spills, overflows, and bypasses that reach waters of the State. These actions may be initiated immediately and do not require Los Angeles Water Board instruction. The Discharger is also required to analyze the samples for total coliform, fecal coliform, *E. coli* (if fecal coliform tests positive), *Enterococcus*, and relevant pollutants of concern, upstream and downstream of the point of entry of the spill (if feasible, accessible, and safe). Rapid fecal monitoring is also identified as the preferred method of monitoring, but only if an ELAP-certified lab is available to conduct the analyses to ensure quality of the results. This daily monitoring is required to be conducted from the time the spill is known until the results of two consecutive sets of bacteriological monitoring indicate the return to the background level or the County Department of Public Health authorizes cessation of monitoring.	

	permittee prefers), and notification of all interested persons must occur as soon as possible, but not later than two hours after becoming aware of the release. This initial report should describe the location of the event, the suspected cause of the event, estimated time and date of the incident, an estimate of the volume of the overflow, whether the event is still recurring and any procedures that are planned to mitigate the impacts. Following the posting of a warning sign, a subsequent informational post should detail the steps taken in response to the situation, along with any pertinent updates or additional relevant information within 30 days. ● The approach to monitoring and reporting violations that apply to spills, overflows, and bypasses is integral to maintaining environmental standards and ensuring public safety. However, the Regional Board defines monitoring and reporting violations as not severe, and therefore are not subject to MPPs, giving the perception that such violations are not a cause for concern. To address this issue, it is crucial to recognize the importance of consistent enforcement of monitoring and reporting protocols to ensure that all records are available to the Los Angeles Water Board, public agencies, or other interested parties upon request, including all mandatory information.	The Tentative Order already includes multiple requirements to ensure the facility is adequately protected, as described below: 1. Section 6.1.2.c. of the Tentative Order already requires the Discharger to adequately protect all its facilities used for collection, transport, treatment, or disposal of wastes against damage resulting from overflow, washout, or inundation from a storm or flood having a 1-percent chance of occurring in a 24-hour period in any given year. 2. Attachment D, Section 1.4 requires the Discharger to properly operate and maintain all facilities and systems of treatment and control used to achieve compliance with the Tentative Order. Although the Tentative Order does not specify how the Discharger must achieve such protection, proper operation and maintenance includes both emergency and non-emergency infrastructure. 3. Section 6.3.4.d. of the Tentative Order requires monthly maintenance and operational testing for all emergency infrastructure and equipment at the facility including but not limited to any bypass gate/weir in the headworks, alarm systems, backup pumps, standby power generators, and other critical emergency pump station components. 4. Attachment E, section 10.4.7. requires the Discharger to submit a technical report on preventive (failsafe) and contingency (cleanup) plans that includes evaluation of the current	

		facilities, identification of possible sources of accidental loss, untreated waste bypass, and contaminated drainage, and proposals of facilities or procedures needed to control accidental discharges and minimize the effect of such events. Planned routine maintenance of emergency and non-emergency equipment necessary to prevent spills from occurring should be included in this report. In addition to these permit requirements, the Climate Change Plan required in section 6.3.4.b. of the Tentative Order also already requires the Discharger to identify new or increased threats to the sewer system resulting from climate change and the projected upgrades to the existing assets or new infrastructure projects. Since the Tentative Order already addresses operation and maintenance and testing of emergency and non-emergency infrastructure, no additional changes to the Tentative Order are necessary at this time. • **Violations** The Los Angeles Water Board takes all violations seriously and enacts penalties, including civil and criminal penalties, for violating an adopted permit in accordance with the Water Code. Water Code section 13385(h)(2) provides that a "serious violation" is any waste discharge that exceeds effluent limitations by certain amounts and requires a mandatory minimum penalty (MMP). Under Water Code section 13385.1(a), the failure to file a discharge monitoring report required	

		pursuant to Section 13383 for each complete period of 30 days following the deadline for submitting the report is a serious violation, which is subject to mandatory minimum penalty (MMP) under the Enforcement Policy. Deficient monitoring and reporting are not subject to MMPs but are subject to discretionary enforcement actions under Water Code section 13385(b) and 13385(c). All discretionary enforcement actions are ranked based on the relative significance of each violation. For the Avalon WWTF, there were no monitoring and reporting violations for spills during the Order No. R4-2019-0023 permit cycle. The monitoring and reporting violations were for deficient reporting of the following pollutants: bacteria, dissolved oxygen, organic nitrogen, total phosphorus, mercury and cyanide. Deficient reports for bacteria, dissolved oxygen, organic nitrogen, total phosphorus, mercury and cyanide have not occurred since July 2019, but the previous monitoring violations will be considered for enforcement action in accordance with the discretionary enforcement actions section of the Enforcement Policy.	
H3	**The Regional Board must set the temperature effluent limitation at Discharge Point 001 to not exceed the natural temperature of receiving waters by more than 20°F.** Pursuant to the Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California (Thermal Plan),	The commenter references the Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California (Thermal Plan) and cites the temperature water quality objective for thermal waste discharges to coastal waters. Under the Thermal Plan, the Avalon WWTF is an existing discharger, so the water quality objectives for new discharger does not apply to the Avalon	None necessary.

	"elevated temperature wastes shall comply with limitations necessary to assure protection of the beneficial uses and areas of special biological significance…" and "the maximum temperature of thermal waste discharges shall not exceed the natural temperature of receiving waters by more than 20°F." Water temperature influences the types of aquatic life that are able to survive and reproduce. An increase in temperature also increases the rate of decaying organic matter, which then depletes the supply of oxygen. This could lead to hypoxic conditions, as warm water also holds less dissolved oxygen. Effluent discharges at high temperatures can also exacerbate the impacts of nutrient loading. Algal blooms resulting from high nutrient concentrations thrive in warmer waters, along with the bacteria that feed on these blooms. Heat is a catalyst for eutrophic conditions and increases both chemical and biological oxygen demand in the receiving waters. In general, increases in water temperature will lead to an increase in water pollution problems. As currently written in the Proposed Permit, "the temperature of wastes discharged shall not exceed 100°F." However, the average ocean water temperature in Avalon during the summer rises to 68°F, and 100°F would exceed this maximum value by 32°F. Warmer water temperatures negatively	WWTF. Additionally, the discharge from the Avalon WWTF is not considered a thermal discharge under the Thermal Plan, which defines a thermal discharge as, "Cooling water and industrial process water used for the purpose of transporting waste heat." The waste discharged from the Avalon WWTF is not cooling water, nor does it originate from industrial processes used for the purpose of transporting waste heat. The discharge from the Avalon WWTF is an elevated temperature waste as defined in the Thermal Plan, which states, "Liquid, solid, or gaseous material including thermal waste discharged at a temperature higher than the natural temperature of receiving water." As such, the discharge is subject to the following water quality objective in the Thermal Plan applicable to existing discharges to coastal waters: *Elevated temperature wastes shall comply with limitations necessary to assure protection of the beneficial uses and areas of special biological significance.* Since there has been no indication that the temperature of the wastes discharged from the facility has impacted the beneficial uses of the receiving water or areas of special biological significance, the temperature effluent limitation has been carried over from the previous permit. Although the water quality objective for new discharges cited by the commenter is not applicable to the discharge from the Avalon WWTF as explained above, Los Angeles Water Board	

	affect beneficial uses, particularly for the organisms that rely on these water sources for survival, and we are concerned about the negative impacts if these warmer effluent conditions are allowed to persist. We request that the Regional Board change the temperature effluent limitation at Discharge Point 001 to align with the Thermal Plan to not exceed the natural temperature of receiving waters by more than 20°F in order to assure protection of beneficial uses.	staff reviewed the temperature data in the receiving water and effluent throughout the permit cycle and summarize the data in the Table below. Columns “RSW-001” to “RSW-006” in the table below represent the average receiving water temperatures for each quarter. The individual receiving water temperature was obtained from depth profile measurements using multiple temperature sensors to measure through the entire water column (from the surface to as close to the bottom as practicable). Column “EFF-001” in the table below represents the maximum effluent temperatures recorded in each quarter. The column labeled “Difference” in the table below represents the range of the temperature difference between effluent temperature and receiving water temperature in each quarter (effluent temperature – receiving water temperature). Average ocean temperatures observed at the receiving water stations specified in the permit show temperatures that are within 20°F of the effluent temperatures.	

Receiving Water and Effluent Temperatures (F)

2019 Q2 - 2023 Q3

	RSW-001	RSW-002	RSW-003	RSW-004	RSW-005	RSW-006	EFF-001	Difference
2019 Q2	68.4	63.5	63.5	63.1	63.2	63	73.8	5.4 ~ 10.8
2019 Q3	65.8	63.2	62.8	80.3	65.5	62.6	71	-9.3 ~ 8.4
2019 Q4	67.5	61.4	61.5	61.7	61.6	61.5	70.5	3 ~ 9.1
2020 Q1	72.2	61.3	61.6	61.5	60.4	61.8	68.5	-3.7 ~ 8.1
2020 Q2	64.8	62.2	61.2	62.3	63.3	61.9	73.8	9 ~ 12.6
2020 Q3	70.5	67.2	69.2	67.7	63.3	75.3	71.2	-4.1 ~ 7.9
2020 Q4	65.1	63.3	63.1	65.1	65.2	63.2	70.7	5.5 ~ 7.6
2021 Q1	66.2	61.8	61.7	63.2	62.1	63.1	68.5	2.3 ~ 6.8
2021 Q2	62.3	62.8	61.9	62.8	62.1	64.1	73	8.9 ~ 11.1
2021 Q3	67.1	62.7	64.3	63.6	62.9	63.7	79.2	12.1 ~ 16.5
2021 Q4	65.7	63.7	62.2	62.1	61.1	60.9	76.5	10.8 ~ 15.6
2022 Q1	64.1	63.9	62.4	61.5	61.9	61.7	68.5	4.4 ~ 7
2022 Q2	67.2	62.7	63.9	61.8	62.5	63.8	71.8	4.6 ~ 10
2022 Q3	70.5	67.2	69.2	67.7	63.3	75.3	64.2	-11.1 ~ 0.9
2022 Q4	64.7	61.1	62.2	63.7	60.9	62.4	63.3	-1.4 ~ 2.4
2023 Q1	63.8	61.6	62.2	62.1	60.5	62.2	60.8	-3 ~ 0.3
2023 Q2	65.7	62.1	62.7	64.2	62.8	63.9	74.5	8.8 ~ 12.4
2023 Q3	71.1	63.3	65.1	66.4	64.1	67.8	79.2	8.1 ~ 15.9

The water quality data suggests the temperature of the effluent has not exceeded the temperature of the receiving water by more than 20°F (the biggest difference is 16.5°F). In addition, if the average effluent temperatures are compared to an average ocean temperature of 68°F (as referenced in the comment), the maximum temperature difference is 11.2°F. The receiving water reports submitted in compliance with Order No. R4-2019-0023 also provide no indication that the temperature of the effluent is negatively impacting the beneficial uses. Receiving Water and effluent temperature monitoring continues to be a requirement in the Tentative Order so that effluent temperatures and their effects on the receiving water can continue to be evaluated.

H4	**The Regional Board should consider effluent limitations for Total Nitrogen set at 5 mg/L.** Anthropogenic discharges of nutrients into nearshore marine environments drive increased frequency of eutrophication events and exacerbate dissolved oxygen loss as well as inorganic carbon intake, increasing the rate of ocean acidification. In fact, human nutrient loading is doubling algal productivity and lowering pH and dissolved oxygen levels in the Southern California Bight at rates equal to global climate change, further compressing open water (pelagic) vertical marine habitat. These impacts contribute to the decline of shell-forming invertebrates and benthic macrofauna in these sensitive coastal habitats. Continuous nutrient loading, will therefore contribute to the decline of nearshore ecosystems and threaten the balance of vibrant fisheries that humans have depended on for thousands of years. While, ideally, nitrogen limits should be less than 1 mg/L to minimize that risk, research indicates that an 85% reduction in nutrient loading from current standard nutrient treatment (40+ mg/L in raw sewage, treated to 35 mg/L, reduced 85% to 5 mg/L) would result in recognizable improvement to water quality.	The Tentative Order includes effluent limitations for constituents that show reasonable potential to cause or contribute to exceedances of the applicable water quality objectives in 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 that applies to the Avalon WWTF. Quarterly monitoring for ammonia was required under Order No. R4-2019-0023. This monitoring data was used to assess whether the discharge has reasonable potential to exceed the water quality objective. The Avalon WWTF discharge did not show reasonable potential to exceed the water quality objectives for ammonia, therefore, effluent limitations were not proposed in the Tentative Order, but a performance goal was included. The quarterly monitoring requirements for ammonia from Order No. R4-2019-0023 were carried over into the Tentative Order. Effluent limitations are not included in the Tentative Order for other nitrogen species since they do not have numeric water quality objectives; however, a narrative receiving water limitation for nutrients is included in section 5.1.3. of the Tentative Order that was carried over from Order No. R4-2019-0023. Nevertheless, since nutrient loading to the receiving water is an increasing concern, the discharger must conduct quarterly influent and effluent monitoring for nitrate, nitrite, total Kjeldahl	None necessary.

	We appreciate the inclusion of average monthly performance goals for Ammonia as N, currently set at 19 mg/L, as well as the additional effluent monitoring for nitrite, nitrate, and nitrite + nitrate. However, these performance goals and monitoring requirements are not protective of water quality and beneficial uses for coastal water within the Southern California Bight. In order to protect the Southern California Bight through nutrient reduction, we request that the Regional Board consider effluent limitations for Total Nitrogen set at 5 mg/L.	nitrogen, organic nitrogen, and total nitrogen in Tables E-2 and E-3 of the Tentative Order.	
H5	**The Facility should determine feasibility of recycled water reuse.** 1. Due to its remote location, Avalon faces issues of severe drought. While areas on the mainland of Southern California have access to additional sources of water, Avalon must rely on locally sourced water and the ships that deliver water in environmentally harmful plastic bottles. Avalon currently uses seawater for toilet flushing, but more must be done to maximize the use of local water. In addition to wastewater, the Avalon Wastewater Treatment Facility also processes dry-weather runoff and first-flush stormwater runoff, addressing pollution issues from surface runoff. All of this secondary-treated water is then	As stated in the comment, the Los Angeles Water Board strongly encourages water recycling, water conservation, and use of stormwater and dry-weather urban runoff, and this is consistent with the Water Quality Control Policy for Recycled Water (Recycled Water Policy) and Resolution Nos. 2017-0012 and R18-004 that the Los Angeles Water Board and State Water Board have adopted on these subjects – recycling, climate change, etc. The current Order requires the Discharger to evaluate the feasibility of recycling, conservation, and/or alternative disposal methods of wastewater, and/or capture and treatment of dry weather urban runoff and stormwater. The Tentative Order carries over this requirement in section 4.3. and requires that the City of Avalon submit a feasibility investigation report as part of the submittal of the ROWD for the next order renewal cycle. Section 4.3 of the Tentative Order indicates that there is currently no recycled water program	None necessary.

	discharged to the Pacific Ocean from Discharge Point 001. 2. Under various local ordinances and state laws, the wasteful use of water is illegal. Water suppliers must comply with water loss standards, individuals must comply with water restrictions and prohibitions on wasteful water uses, and new development or redevelopment must comply with applicable low impact development (LID) requirements that support sustainability post-construction. Additionally, the California Water Code requires that water resources be put to beneficial use to the fullest extent possible and the State Board Recycled Water Policy includes a narrative goal to minimize the direct discharge of treated wastewater to ocean waters, except where necessary to maintain beneficial uses. 3. The Proposed Permit states that "The Regional Board strongly encourages, wherever practicable, water recycling, water conservation, and use of storm water and dry-weather runoff" (Attachment F, Section 3.3.9 Water Recycling). We recommend that the Regional Board require beneficial reuse of the recycled water and elimination of discharge into the Pacific Ocean, as this discharge is not necessary to maintain	applicable to the City of Avalon due to the high salinity in the treated effluent generated at the Avalon WWTF. The City of Avalon is unique because it uses seawater for toilet flushing throughout the city and this poses significant challenges to the small community. Due to this high salinity, the effluent would need to receive advanced treatment before it could be used for title 22 recycled water applications. Advanced treatment can be costly and funding for such projects can be challenging. The Tentative Order requires the City of Avalon to conduct a recycled water feasibility investigation to better understand what type of treatment would be needed, the cost associated with such treatment, the potential uses of recycled water, and the amount of recycled water that could be needed to meet those uses. According to the comment letter from the Discharger on the feasibility study, the City is also planning to conduct an assessment of the Avalon WWTF to determine potential upgrades to the system. The Discharger should discuss any findings from this assessment that could help promote reuse and conservation into the recycled water feasibility investigation. Due to the challenges facing the City of Avalon in recycling the effluent from the Avalon WWTF and consistent with the Los Angeles Water Board's approach to encouraging reuse and conservation throughout the Los Angeles region, the Los Angeles Water Board finds the feasibility	

	beneficial uses. Repurposing all of the recycled water from this facility would be in line with the California regulations discussed above, and provide an additional water resource for the City of Avalon.	investigation to be an appropriate next step in promoting reuse and conservation at the Avalon WWTF.	
H6	**The Facility should consider transition from chlorination to ultraviolet water purification.** The Facility currently uses chlorination during the final disinfection process. However, the best available science indicates that ultraviolet water purification is a preferred method for this process because it is proven effective while minimizing the potential for by-product formation, which has been observed in the chlorination process. Additionally, ultraviolet water purification requires less maintenance. We recognize that facility upgrades take significant resources. However, the Proposed Permit discloses that during the Order No. R4-2019-0023 permit term, the Facility's "chlorine contact basin deteriorated over the years…" and that the "rehabilitation project began on November 27, 2023, and was completed on January 10, 2024" (Attachment F, Section 2.5 Planned Changes). <u>We request that the Regional Board work with the Avalon Wastewater Treatment Facility to</u>	California Water Code section 13360(a) states: "No waste discharge requirement or other order of a regional board or the state board or decree of a court issued under this division shall specify the design, location, type of construction, or particular manner in which compliance may be had with that requirement, order, or decree, and the person so ordered shall be permitted to comply with the order in any lawful manner." Therefore, the Los Angeles Water Board cannot dictate the technologies used for POTWs to comply with waste discharge requirements. Adequate disinfection is necessary to meet the indicator bacteria water quality objectives, but excess chlorine residual can be detrimental to aquatic life. Since the City of Avalon had challenges controlling indicator bacteria in the effluent, the City of Avalon switched the disinfectant used in the Avalon WWTF chlorine contact basin from calcium hypochlorite to sodium hypochlorite in August 2023. This switch has effectively enhanced effluent disinfection ensures indicator bacteria in the effluent is adequately controlled. To determine the impact the discharge may have on the receiving water, staff reviewed receiving	None necessary.

	investigate the feasibility of converting from chlorination to ultraviolet water purification, for consideration if and when additional facility upgrades are necessary in the future.	water indicator bacteria monitoring results. Indicator bacteria receiving water monitoring results submitted in compliance with Order No. R4-2019-0023 indicated that the indicator bacteria receiving water limitations of the Order No. R4-2019-0023 were consistently met. The receiving water limitation in Order No. R4-2019-0023 are as follows: 30-day Geometric Mean Limits Total coliform density < 1,000/100 mL Fecal coliform density < 200/100 mL *Enterococcus* density shall < 35/100 mL Single Sample Maximum Limits Total coliform density < 1,000/100 mL Fecal coliform density < 200/100 mL *Enterococcus* density < 35/100 mL The following table shows that the City of Avalon has been meeting the bacteria indicator water quality objectives during the Order No. 2019-0023 permit cycle.	

		AVALON WWTF - RECEIVING WATER BACTERIAL TESTING RESULTS (#/100mL) |	2019	2020	2021	2022	2023
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RSW-1 TC	< 1 - 1	< 1 - 1	< 1 - 1	< 1 - 1	< 1 - 4.5
RSW-1 Fecal	<1	<1	<1	< 1 - 1	< 1 - 2
RSW-1 Enterro	< 1 - 1	<1	< 1 - 1	< 1 - 1	< 1 - 2
RSW-2 TC	< 1 - 3	< 1 - 2	< 1 - 3	< 1 - 3	< 1 - 3
RSW-2 Fecal	< 1 - 1	< 1 - 1	< 1 - 1	< 1 - 1	< 1 - 2
RSW-2 Enterro	<1	<1	<1	< 1 - 1	< 1 - <1.8
RSW-4 TC	< 1 - 7.5	< 1 - 2	< 1 - 7.5	< 1 - 1	< 1 - 6.8
RSW-4 Fecal	<1	<1	<1	< 1 - 1	< 1 - 6.8
RSW-4 Enterro	< 1 - 1	< 1 - 1	< 1 - 1	< 1 - 1	< 1 - 2
RSW-6 TC	< 1 - 3	< 1 - 1	< 1 - 3	< 1 - 1	< 1 - 33
RSW-6 Fecal	<1	< 1 - 1	<1	< 1 - 1	< 1 - 1.8
RSW-6 Enterro	< 1 - 1	<1	< 1 - 1	< 1 - 1	< 1 - 2	 Since the City of Avalon has been meeting the receiving water objectives for indicator bacteria, the Los Angeles Water Board finds the current disinfection process to be sufficient. If the discharge from the Avalon WWTF starts to cause frequent exceedances of the receiving water objectives for indicator bacteria, the Los Angeles Water Board will consider enforcement actions necessary to ensure compliance with the objectives.	