

RESPONSE TO WRITTEN COMMENTS

on the Tentative Order and the public notice draft NPDES permit for

The Orange County Sanitation District
Reclamation Plant No. 1, Treatment Plant No. 2, Wastewater Collection System, and Outfalls

The United States Environmental Protection Agency, Region 9 (hereinafter “USEPA”) and the California Regional Water Quality Control Board, Santa Ana Region (hereinafter “Santa Ana Water Board” or “SARWQCB”) received written comments on the tentative order (No. R8-2021-0010) and the public notice draft NPDES permit (No. CA0110604), consolidated under 40 C.F.R. § 124.4(c)(2), distributed for public comment during the public notice period from February 2, 2021 to March 4, 2021 from the following:

1. Orange County Sanitation District (March 3, 2021, corrected March 4, 2021)
2. County of Orange, OC Public Works (March 4, 2021)
3. Orange County Coastkeeper (March 4, 2021)

We summarized the comments and responded in the table below. For the full content and context of the comments, readers should refer to the comment letters. Where Orange County Coastkeeper submitted its comments in a tabular format, we responded in the same tabular format.

In addition to making minor editorial and formatting changes, we also made the staff-initiated revisions related to factual corrections (see the table below - 4. Staff-Initiated Changes).

Revisions to the tentative order are shown with underline text for additions and ~~strikethrough~~ text for deletions. Section numbers to be revised correspond to the tentative order/draft permit publicly noticed on February 2, 2021.

#	Section	Comment	Response	Proposed Revisions
1. Orange County Sanitation District (“OC San”)				
1	III.K.1	The Orange County Sanitation District (hereinafter “OC San”) requests that the phrase “to a functional capacity that is necessary to prevent infrastructure or equipment damage” be added to Discharge Prohibition section III.K.1 to clarify the term “maximized”.	We revised the tentative order/draft permit as proposed.	<p>K. The discharge of wastewater to a water of the United States from any locations other than Discharge Point 001 (120” outfall) is prohibited, except during the following situations:</p> <ol style="list-style-type: none"> 1. Emergency discharge of disinfected secondary effluent provided that discharges through Discharge Point 001 (120” outfall) and discharges to Orange County Water District (OCWD)’s water recycling facilities, if OCWD remains on-line, are maximized <u>to a functional capacity that is necessary to prevent infrastructure or equipment damage</u> before wastewater is discharged through Discharge Point 002;
2	VIII.A.3	OC San requests that the proposed language in the draft permit section VIII.A.3 be replaced by the specific language within Section III.C.8.b of the California Ocean Plan. It is appropriate to use California Ocean Plan language to define how DNQ values are applied. Generating a sum (which may exceed permit limits) by adding a series of values whose certainty is estimated or questionable does not yield a result which is reliable and is inconsistent with California Ocean Plan requirements.	Consistent with the California Ocean Plan provision in section III.C.8.b, we revised the tentative order/draft permit as proposed.	<p>3. Compliance with Effluent Limitations expressed as Sum of Several Constituents</p> <p>... Individual pollutants of the group will be considered to have a concentration of zero if the constituent is reported as ND or less than the MDL, but considered as a detected value if reported as DNQ.</p>

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3	Attachment E Table E-2	In OC San’s 2012 permit, the quarterly Regional sampling entailed sampling 38 Regional stations in conjunction with the 28 Core water quality stations (n=66). Under the new permit, OC San will sample the 28 Core and the 44 Regional stations (n=72). Provided that the Core and Regional receiving water monitoring scheme is accurately described above, OC San accepts all water quality sampling requirements in the Draft NPDES permit and seeks no changes.	USEPA and the Santa Ana Water Board appreciate the clarification.	None.
4	Attachment E Table E-3 Table E-4	OC San requests that a footnote be added to Tables E-3 and E-4 to specify that 1,3-dichloropropene is the sum of cis- and trans-1,3-dichloropropene	Footnotes 9 and 12 for 1,3-dichloropropene were added to Tables E-3 and E-4, respectively.	⁹ <u>1,3-dichloropropene is the sum of cis- and trans-1,3-dichloropropene.</u>
5	Attachment E Table E-3 Table E-4	OC San requests one of the following actions from the USEPA/SARWQCB: 1) Provide OC San with a list of laboratories approved for the analysis of tributyltin by the SARWQCB’s Executive Officer; 2) Provide an exception within Section I.K of Attachment E that exempts tributyltin analysis from the ELAP certification; or 3) Make a formal request to California ELAP to add	On April 1, 2021, ELAP updated its Field of Accreditation (FOA) Table 109 to include tributyltin by analytical method of SM 6710B - 2011 (Subgroup Code: 109.800). USEPA and the Santa Ana Water Board highly recommend the OC San laboratories apply for and obtain ELAP accreditation to analyze for tributyltin by SM 6710B. Meanwhile, until OC San obtains ELAP accreditation for this method, USEPA and the Santa Ana Water Board will	⁷ <u>Tributyltin: SM 6710B or other improved methods approved by the Santa Ana Water Board and USEPA shall be used to analyze tributyltin in wastewater.</u>

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		tributyltin to ELAP’s Field of Accreditation (FOA) forms, so that laboratories can apply for and obtain ELAP accreditation to analyze for tributyltin in wastewater.	allow the use of SM 6710B upon OC San’s request. Footnotes 7 and 10 were added to Tables E-3 and E-4, respectively, to clarify the tributyltin analytical method.																					
6	Attachment E Table E-6	OC San requests that the Santa Ana Water Board approve its request to analyze for E. coli using Colilert-18 (IDEXX) in lieu of fecal coliform as done in the past for REC-1 Water Quality Monitoring (Offshore Zone).	Based on supporting documents and the 3-year QA/QC data for comparison of fecal coliforms to E. coli (i.e., Attachment A through E of supplemental information package submitted by OC San on March 24, 2021), USEPA and the Santa Ana Water Board allow the use of E. coli as a surrogate for fecal coliform, which is also consistent with Appendix III.11 of the 2019 California Ocean Plan stating that “[t]he Regional Water Board may allow analysis for Escherichia coli (E. coli) by approved test methods to be substituted for fecal coliforms if sufficient information exists to support comparability with approved methods and substitute the existing methods”. The tentative order/draft permit has been revised as proposed, to enable OC San to continue to analyze E. Coli using Colilert-18 and report the results in fecal coliform by multiplying E. coli density by 110 %. Footnote 4 was revised to address analytical test methods for total coliform, fecal coliform and	<p>Table E-6. REC-1 Water Quality Monitoring (Offshore Zone)</p> <table border="1"> <thead> <tr> <th data-bbox="1360 570 1570 691">Parameter</th> <th data-bbox="1570 570 1713 691">Units</th> <th data-bbox="1713 570 1856 691">Sample Type</th> <th data-bbox="1856 570 2066 691">Required Analytical Test Method</th> </tr> </thead> <tbody> <tr> <td data-bbox="1360 691 1570 786">Total coliform density</td> <td data-bbox="1570 691 1713 786">MPN /100 mL³</td> <td data-bbox="1713 691 1856 786">grab</td> <td data-bbox="1856 691 2066 786">2,³4</td> </tr> <tr> <td data-bbox="1360 786 1570 880"><i>Enterococcus</i> density</td> <td data-bbox="1570 786 1713 880">CFU /100 mL³</td> <td data-bbox="1713 786 1856 880">grab</td> <td data-bbox="1856 786 2066 880">2,4</td> </tr> <tr> <td data-bbox="1360 880 1570 974">Fecal coliform density</td> <td data-bbox="1570 880 1713 974">MPN /100 mL³</td> <td data-bbox="1713 880 1856 974">grab calculated</td> <td data-bbox="1856 880 2066 974">2,³4</td> </tr> <tr> <td data-bbox="1360 974 1570 1143"><u>E. Coli density (converted to fecal coliform density)</u></td> <td data-bbox="1570 974 1713 1143"><u>MPN /100 mL³</u></td> <td data-bbox="1713 974 1856 1143"><u>grab</u></td> <td data-bbox="1856 974 2066 1143"><u>2,4</u></td> </tr> </tbody> </table> <p>³–Test methods used for total and fecal coliforms shall be those presented in Table 1A of 40 CFR § 136, unless alternate methods have been approved in advance by USEPA pursuant to 40 CFR § 136, or improved methods have been determined by the Executive Officer and/or USEPA.</p>	Parameter	Units	Sample Type	Required Analytical Test Method	Total coliform density	MPN /100 mL ³	grab	2, ³ 4	<i>Enterococcus</i> density	CFU /100 mL ³	grab	2,4	Fecal coliform density	MPN /100 mL ³	grab calculated	2, ³ 4	<u>E. Coli density (converted to fecal coliform density)</u>	<u>MPN /100 mL³</u>	<u>grab</u>	<u>2,4</u>
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			enterococcus monitoring at REC-1 water quality monitoring stations.	<p>4- Enterococcus shall be analyzed using the USEPA Method 1600 or other equivalent method to measure culturable enterococcus density.</p> <p><u>4 Total coliform and E. coli are analyzed using the Colilert-18 method and Enterococcus is analyzed using the Enterolert method. Values for E. coli are multiplied by 110% to determine fecal coliform values.</u></p>																	
7	Attachment F - IV.C.3.c Table F-4 Table F-9 Table F-10 Table F-14 Table F-15	OC San requests that the Reasonable Potential Analysis (RPA) for TCDD equivalents be revised to reflect corrected TEQ results. OC San believes that the likely result of this reanalysis will be the removal of the proposed changes to TCDD equivalents analysis, allowing OC San to continue the previous practice of analyzing only the effluent sample for TCDD equivalents on a quarterly basis.	<p>USEPA and the Santa Ana Water Board appreciate receiving the corrected effluent data for TCDD equivalents, including blank sample results, for the period from May 2015 to December 2019. Based on this data review and section VII.A.3 of the previous 2012 permit, USEPA and the Santa Ana Water Board agree that all total TCDD equivalents results should have been reported as “zero” or “not detected” (ND). See the revised Table F-4 of the tentative order/draft permit.</p> <p>USEPA and the Santa Ana Water Board re-conducted RPA for TCDD equivalents using the corrected data, which resulted in a change of the reasonable potential result from Endpoint 1 (RP) to Endpoint 3 (Inconclusive). According to the California Ocean Plan RPA procedure, the existing effluent limits for TCDD equivalents are retained in the final Order/Permit. Therefore, there is no change in the effluent limits for TCDD</p>	<p>Table F-4. Historic Water Quality Based Effluent Limitations and Monitoring Data at EFF-001</p> <table border="1" data-bbox="1360 651 2072 1097"> <thead> <tr> <th rowspan="2">Parameter</th> <th rowspan="2">Units</th> <th colspan="3">Monitoring Data (May 2015 – December 2019)</th> </tr> <tr> <th>Highest Average Monthly (or 6-Month Median*)</th> <th>Highest Maximum Daily Discharge</th> <th>Highest Instantaneous Maximum Discharge</th> </tr> </thead> <tbody> <tr> <td rowspan="2">TCDD equivalents</td> <td>pg/L</td> <td>0.983 ND</td> <td>--</td> <td>--</td> </tr> <tr> <td>lbs/day</td> <td>0.000019 ND</td> <td>--</td> <td>--</td> </tr> </tbody> </table> <p>c. RPA for Pollutants in Table 3 of the Ocean Plan</p> <p>Based on the RPA for Discharge Point 001, Endpoint 1 is established for total chlorine residual and TCDD equivalents. Consequently, WQBELs for total chlorine residual and TCDD equivalents are included in the Order/Permit and periodic effluent monitoring is also required. ... Endpoint 3 with inconclusive results was</p>	Parameter	Units	Monitoring Data (May 2015 – December 2019)			Highest Average Monthly (or 6-Month Median*)	Highest Maximum Daily Discharge	Highest Instantaneous Maximum Discharge	TCDD equivalents	pg/L	0.983 ND	--	--	lbs/day	0.000019 ND	--	--
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			<p>equivalents as compared to what we proposed in the tentative order/draft permit.</p> <p>Based on the RPA results, Table F-9 and F-10 and section IV.C.3.c of Attachment F have been revised. In addition, the monitoring frequency for TCDD equivalents in both the influent and the effluent has been reduced from monthly to quarterly due to an inconclusive (Endpoint 3) RP finding. Influent monitoring for TCDD equivalents is required to assess the performance of treatment plants and determine the effectiveness of pretreatment program regarding dioxin and dioxin-like compounds.</p>	<p>reported for benzidine, hexachlorobenzene, PCBs, <u>TCDD equivalents</u>, and toxaphene. Consequently, existing WQBELs for these four <u>five</u> pollutants are retained in this Order/Permit and periodic effluent monitoring is also required. This Order/Permit does not include effluent limitations for other pollutants displaying Endpoint 3; instead, monitoring requirements for those pollutants were included.</p> <p>Based on the RPA for Discharge Point 002, Endpoint 1 is established for ammonia (as nitrogen), <u>and</u> total chlorine residual, and TCDD equivalents. Consequently, WQBELs for these pollutants <u>ammonia and total chlorine residual</u> are included in the Order/Permit and periodic effluent monitoring is also required. ... <u>Endpoint 3 with inconclusive results was reported for TCDD equivalents and thus, existing WQBELs and quarterly effluent monitoring for TCDD equivalents are retained in this Order/Permit. This Order/Permit does not include effluent limitations for other pollutants displaying Endpoint 3; instead, monitoring requirements for those pollutants were included. This Order/Permit does not include effluent limitations for pollutants displaying Endpoint 3 with inconclusive results; instead, monitoring requirements for those pollutants were included.</u></p>

Table F-9. Reasonable Potential Analysis for Discharge Point No. 001 (120" Outfall)

Table 3 Pollutant	Most Stringent WQO (µg/L)	No. of Samples	No. of Non-Detects
TCDD Equivalents	3.9×10^{-9}	18	9 18
Max Effluent Conc. (µg/L)	MEC After Mixing (µg/L)	Projected 95 th Percentile (µg/L)	Result
<u>9.83×10^{-7}</u> <u>$< 7.0 \times 10^{-7}$</u>	<u>5.43×10^{-9}</u> <u>$< 3.9 \times 10^{-9}$</u>	---	<u>Endpoint 1</u> <u>Endpoint 3:</u> <u>WQBEL</u> <u>carry over</u>

Table F-10. Reasonable Potential Analysis for Discharge Point No. 002 (78" Outfall)

Table 3 Pollutant	Most Stringent WQO (µg/L)	No. of Samples	No. of Non-Detects
TCDD Equivalents	3.9×10^{-9}	18	9 18
Max Effluent Conc. (µg/L)	MEC After Mixing (µg/L)	Projected 95 th Percentile (µg/L)	Result
<u>9.83×10^{-7}</u> <u>$< 7.0 \times 10^{-7}$</u>	<u>2.66×10^{-8}</u> <u>$< 1.9 \times 10^{-8}$</u>	---	<u>Endpoint 1</u> <u>Endpoint 3:</u> <u>WQBEL</u> <u>carry over</u>

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				<p>Table F-14. Summary of Effluent Limitations – Discharge Point 001 (120” outfall)</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Units</th> <th>Average Monthly</th> <th>Basis</th> </tr> </thead> <tbody> <tr> <td rowspan="2">TCDD Equivalents</td> <td>pg/L</td> <td>0.7059</td> <td rowspan="2">RP <u>Inconclusive/Carry over</u></td> </tr> <tr> <td>lbs/day</td> <td>0.0000012</td> </tr> </tbody> </table> <p>Table F-15. Summary of Effluent Limitations – Discharge Point 002 (78” outfall)</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Units</th> <th>Average Monthly</th> <th>Basis</th> </tr> </thead> <tbody> <tr> <td rowspan="2">TCDD Equivalents</td> <td>pg/L</td> <td>0.14430</td> <td rowspan="2">RP <u>Inconclusive/Carry over</u></td> </tr> <tr> <td>lbs/day</td> <td>0.00000028</td> </tr> </tbody> </table>	Parameter	Units	Average Monthly	Basis	TCDD Equivalents	pg/L	0.7059	RP <u>Inconclusive/Carry over</u>	lbs/day	0.0000012	Parameter	Units	Average Monthly	Basis	TCDD Equivalents	pg/L	0.14430	RP <u>Inconclusive/Carry over</u>	lbs/day	0.00000028
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8	Table 6 IV.B.2.b VI.A.1.a & d Attachment E Table E-4 Table E-6 Table E-14 Attachment F Table F-15	OC San has used Enterolert to test for enterococci in REC-1, and data is reported in MPN/100 mL. Enterolert (IDEXX) is a USEPA approved culture method under 40 CFR Part 136 for testing of enterococci in ambient water. OC San requests that the Draft Permit be revised to provide the flexibility to report test results for Enterococcus, fecal coliform, and total coliform in either CFU/100mL or MPN/100mL.	USEPA and the Santa Ana Water Board have reviewed the supporting documents (i.e., Attachments K, L, and M of OC San’s supplemental information package submitted by OC San on March 24, 2021) to examine the comparison of the Enterolert (in MPN/100 mL) and USEPA 1600 (in CFU/100 mL) methods for detection of enterococcus, and have found that no significant difference and high comparability were observed between the two methods. In addition, the 2019 Ocean Plan, Appendix III.10 states that	A footnote for the flexibility of bacteria density units has been added in Tables 6, E-4, E-6, E-14, and F-15 as below. Table 6 ^[7] <u>Results may be reported as either Most Probable Number (MPN)/100 mL if the laboratory method used provides results in MPN/100 mL or Colony Forming Units (CFU)/100 mL if the laboratory method used provides results in CFU/100 mL.</u> Table E-4 ² USEPA Method 1600 or other equivalent method shall be used to measure culturable enterococci.																				

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			<p>“Test methods used for enterococcus shall be those presented in U.S. EPA publication EPA 600/4-85/076, Test Methods for Escherichia coli and Enterococci in Water by Membrane Filter Procedure or any improved method determined by the Regional Board to be appropriate”. Therefore, the permitting authorities are allowing OC San to continue to use the Enterolert test as a method for enterococcus detection in either wastewater or receiving water. Since Enterolert provides a most probable number (MPN) result, the permit was revised to provide the flexibility to report test results for enterococcus in either CFU/100 mL or MPN/100 mL.</p>	<p><u>Results may be reported as either MPN/100 mL if the laboratory method used provides results in MPN/100 mL or CFU/100 mL if the laboratory method used provides results in CFU/100 mL.</u></p> <p>Table E-6</p> <p>³ <u>Results may be reported as either MPN/100 mL if the laboratory method used provides results in MPN/100 mL or CFU/100 mL if the laboratory method used provides results in CFU/100 mL.</u></p> <p>Table E-14</p> <p>³ As specified in 40 CFR § 136, or in the MRP QAPP and Laboratory Quality Manual.</p> <p>⁴ <u>Results may be reported as either MPN/100 mL if the laboratory method used provides results in MPN/100 mL or CFU/100 mL if the laboratory method used provides results in CFU/100 mL.</u></p> <p>⁴⁵ Test methods used for coliforms (total and fecal) shall be those presented in Table 1A of 40 CFR § 136, unless alternate methods have been approved in advance by USEPA pursuant to 40 CFR § 136, or improved methods have been determined by the Executive Officer and/or USEPA</p> <p>⁵ Enterococcus shall be analyzed using the USEPA Method 1600 or other equivalent method to measure culturable enterococcus density.</p> <p>Table F-15</p> <p>^[7] <u>Results may be reported as either MPN/100 mL if the laboratory method used provides results in MPN/100 mL or CFU/100 mL if the laboratory</u></p>

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				<p><u>method used provides results in CFU/100 mL.</u></p> <p>Section IV.B.2.b. Bacteria Water Quality Based Effluent Limitations (WQBELs): ...</p> <p><u>Fecal Coliform</u></p> <ol style="list-style-type: none"> 1. The 30-day geometric mean of fecal coliform density shall not exceed a Most Probable Number (MPN) of fecal coliform bacteria of 7,400 MPN/100 mL, calculated based on the five most recent samples; and 2. The single sample maximum shall not exceed 14,800 MPN/100 mL. <p><u>Enterococcus</u></p> <ol style="list-style-type: none"> 1. The six-week rolling geometric mean of enterococcus bacteria, calculated weekly, shall not exceed 1,110 colony forming units per 100 milliliters (CFU/100 mL) or MPN/100 mL; and 2. No more than 10 percent of all enterococcus bacteria samples collected in a calendar month shall exceed a statistical threshold value of 4,070 CFU/100 mL <u>or MPN/100 mL.</u> <p>Section VI.A.1.a.i. Within a zone...</p> <p><u>Enterococci</u></p> <ol style="list-style-type: none"> 1. A 6-week rolling geometric mean of enterococci, calculated weekly, shall not exceed 30 CFU <u>or MPN</u> per 100 mL. The geometric mean value shall be applied based on a statistically sufficient number of samples, which is generally not less than five samples distributed over a 6-week period.

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				<p>2. A statistical threshold value of 110 CFU <u>or MPN</u> per 100 mL shall not be exceeded by more than 10 percent of all enterococci samples collected in a calendar month, calculated in a static manner.</p> <p>Section VI.A.1.d. USEPA Recreational Water Quality Criteria (RWQC) ...</p> <p>Estimated illness rate of 32 per 1,000 primary contact recreators:</p> <p>A 30-day geometric mean shall not exceed 30 CFU <u>or MPN</u> per 100 mL, which is calculated based on a statistically sufficient number of samples (generally not less than five samples equally spaced over any 30-day period).</p> <p>A statistical threshold value corresponding to the 90th percentile of the same water quality distribution shall not exceed 110 CFU <u>or MPN</u> per 100 mL in the same 30-day interval.</p>
<p>2. County of Orange, OC Public Works</p>				

1-1	Attachment E Table E-2	Shoreline station locations between the Santa Ana River mouth and Crystal Cove would be better characterized as Newport Beach instead of Bolsa Chica/Huntington Beach.	We updated Table E-2 of the tentative order/draft permit as proposed.	<p>Table E-2. Receiving Water Core and Regional Monitoring Station Locations</p> <table border="1"> <thead> <tr> <th data-bbox="1360 315 1549 440">Station Location Name</th> <th data-bbox="1549 315 1829 440">Station Location</th> <th data-bbox="1829 315 2039 440">Station Description</th> </tr> </thead> <tbody> <tr> <td colspan="3" data-bbox="1360 440 2039 737"> <p>Orange County Regional Shoreline REC-1 Cooperative Monitoring Program Stations (Nearshore Zone) (n=36) r = Regional OCHCA station. c = OC San station. Orange County Regional Shoreline REC-1 stations are monitored at least once per week. * = These stations are monitored at least twice per week.</p> </td> </tr> <tr> <td data-bbox="1360 737 1549 857">3S</td> <td data-bbox="1549 737 1829 857">Bolsa Chica/ Huntington Beach Newport Beach</td> <td data-bbox="1829 737 2039 857">Projection Orange St.</td> </tr> <tr> <td data-bbox="1360 857 1549 977">6S</td> <td data-bbox="1549 857 1829 977">Bolsa Chica/ Huntington Beach Newport Beach</td> <td data-bbox="1829 857 2039 977">Projection 52nd/53rd St.</td> </tr> <tr> <td data-bbox="1360 977 1549 1097">9S</td> <td data-bbox="1549 977 1829 1097">Bolsa Chica/ Huntington Beach Newport Beach</td> <td data-bbox="1829 977 2039 1097">Projection 38th St.</td> </tr> <tr> <td data-bbox="1360 1097 1549 1218">15S</td> <td data-bbox="1549 1097 1829 1218">Bolsa Chica/ Huntington Beach Newport Beach</td> <td data-bbox="1829 1097 2039 1218">Projection of 15th/16th St.</td> </tr> <tr> <td data-bbox="1360 1218 1549 1339">21S</td> <td data-bbox="1549 1218 1829 1339">Bolsa Chica/ Huntington Beach Newport Beach</td> <td data-bbox="1829 1218 2039 1339">Upcoast of Balboa Pier</td> </tr> </tbody> </table>	Station Location Name	Station Location	Station Description	<p>Orange County Regional Shoreline REC-1 Cooperative Monitoring Program Stations (Nearshore Zone) (n=36) r = Regional OCHCA station. c = OC San station. Orange County Regional Shoreline REC-1 stations are monitored at least once per week. * = These stations are monitored at least twice per week.</p>			3S	Bolsa Chica/ Huntington Beach Newport Beach	Projection Orange St.	6S	Bolsa Chica/ Huntington Beach Newport Beach	Projection 52 nd /53 rd St.	9S	Bolsa Chica/ Huntington Beach Newport Beach	Projection 38 th St.	15S	Bolsa Chica/ Huntington Beach Newport Beach	Projection of 15 th /16 th St.	21S	Bolsa Chica/ Huntington Beach Newport Beach	Upcoast of Balboa Pier
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				27S	Bolsa Chica/ Huntington Beach Newport Beach	The Wedge
				29S	Bolsa Chica/ Huntington Beach Newport Beach	Corona del Mar State Beach
				BGC	Bolsa Chica/ Huntington Beach Newport Beach	Little Corona Beach
				PPC	Newport Beach/ Crystal Cove	Pelican Point Beach (reef)
				39S	Newport Beach/ Crystal Cove	Pelican Point (ramp)
				WFC	Newport Beach/ Crystal Cove	Pelican Hill Waterfall
				ONB39	Newport Beach/ Crystal Cove	Crystal Cove - Los Trancos
				MDC	Newport Beach/ Crystal Cove	Muddy Creek Beach (Reef Point)
1-2	Attachment E Table E-2	Table E-2 identifies the appropriate agency responsible for monitoring at various stations across North Orange County. The County would also recommend that stations HB1, HB2, HB3, HB4, HB5, BGC,	To avoid any confusion, the Order/Permit will not refer to the Orange County MS4 permit requirements. The Discharger's participation in the Orange County Regional Shoreline REC-1 Cooperative Monitoring Program is required only to meet the regional	None.		

#	Section	Comment	Response	Proposed Revisions
		<p>PPC, WFC, and MDC be footnoted as “also satisfies the requirements of the Orange County MS4 permit.</p>	<p>monitoring requirements under this tentative order/draft NPDES permit.</p>	
2	Attachment F - VIII.E	<p>County of Orange requests the inclusion of the following statement in the final Order/Permit. “Collaboration is encouraged across water sectors (water supply, wastewater, groundwater, and stormwater) to evaluate implementation of integrated water resource projects that helps achieve sustainable integrated water resources management consistent with the 2020 California Water Resilience Portfolio.”</p>	<p>The proposed statement has been included in the Fact Sheet (Attachment F), section VIII.E of the tentative order/draft permit.</p>	<p>E. Receiving Water Regional Monitoring Discharger participation and level of effort in regional monitoring programs continues to be a required condition of the Order/Permit. Regional monitoring programs which must be conducted under the Order/Permit include: Southern California Bight Regional Monitoring Program, Southern California Bight Regional Water Quality Program, Central Regional Kelp Survey, Orange County Regional Shoreline REC-1 Cooperative Monitoring Program, and Ocean Acidification and Hypoxia (OAH) Mooring. The Discharger currently participates in all five programs. <u>For the regional monitoring program, collaboration with other water sectors (e.g., water supply, wastewater, groundwater, and stormwater) is encouraged to evaluate implementation of integrated water resource projects that helps achieve sustainable integrated water resources management.</u></p>
<p>3. Orange County Coastkeeper (“Coastkeeper”)</p>				

I.a	V.A	<p>Orange County Coastkeeper (hereinafter “Coastkeeper”) is concerned about the performance goals’ lack of enforceability. The Order’s exceedance response procedures are nonspecific and lack meaningful enforcement power. There are no further specified requirements for the scope, content, or timing of the investigation and no indication of what happens if exceedances persist even after report. Coastkeeper respectfully requests the Order be modified to establish meaningful enforcement actions for performance goal exceedances.</p>	<p>The performance goals and mass emission benchmarks are based on actual performance and are calculated using the 95th percentile of the final effluent monitoring data from May 2015 through September 2019. Since performance goals are only assigned to a pollutant if the pollutant did not have reasonable potential to exceed the water quality objectives during the preceding permit term, the calculated performance goals are always less than the water quality objectives. As a result, an exceedance of a performance goal does not automatically indicate that there was an exceedance of the water quality objectives. Such an exceedance is not subject to enforcement.</p> <p>The performance goal and mass emission benchmarks are designed to provide an early measure of changes in effluent quality which may substantially increase the toxic pollutant concentration/loading discharged to the marine environment. Consistent with State and federal antidegradation policies, these performance goals and benchmarks are intended to serve as a basis for antidegradation analyses during renewal of the permit.</p> <p>Performance goals and mass emission benchmarks are also designed to encourage consistent treatment performance, recognize normal variations in treatment efficiency and sampling and analytical techniques,</p>	None.
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#	Section	Comment	Response	Proposed Revisions
			<p>evaluate its pretreatment program, and minimize pollutant loading. See the Permit Fact Sheet (Attachment F), section V.</p> <p>Pursuant to CWA sections 308 and 402, the Santa Ana Water Board and USEPA are authorized to collect necessary and appropriate information and make regulatory decisions. If the Discharger exceeds the performance goal in two consecutive monitoring periods, an investigation is required. If the Discharger does exceed the water quality objectives for any pollutant, the Santa Ana Water Board and USEPA may reopen the permit at any time to include a final effluent limitation for that pollutant.</p> <p>Because the performance goals are more stringent than the water quality objectives in the California Ocean Plan and they are only applied to pollutants that do not have reasonable potential to exceed the water quality objectives, the performance goals are not considered enforceable limitations for the regulation of the discharge from the treatment facilities. The 2014 California Permit Quality Review also states that “[p]erformance goals are not limits but are used solely for informational purposes and may be used in reopening a permit, if necessary.”</p>	

#	Section	Comment	Response	Proposed Revisions
I.b	V.B	<p>Coastkeeper notes that the Order’s mass emission benchmarks include at least one instance of a less stringent standard (e.g., selenium) as compared to the 2012 Permit. Coastkeeper respectfully requests the Order be modified to establish more stringent mass emission benchmarks to comply with State and federal antidegradation requirements.</p>	<p>The mass emission benchmarks in the previous 2012 permit were carried over from the 1998 evaluation. In this Order/Permit, we re-evaluated the mass emission benchmarks based on actual effluent data from May 2015 to December 2019 and updated discharge flow using a different approach. The method for calculating performance goals and mass emission benchmarks was significantly modified from the 1998 approach to be more consistent with other ocean dischargers’ permits adopted by the Regional Water Boards (e.g., Hyperion permit). See section V of the Permit Fact Sheet (Attachment F). The new mass emission benchmarks in this Order/Permit are therefore not directly comparable with the previous values in the 2012 or earlier permits.</p> <p>Most mass emission benchmarks have significantly reduced due to improved performance by completion of full secondary treatment facilities and implementation of an extensive source control pretreatment program. However, as commented, mass emission benchmarks for some constituents (e.g., selenium) have increased, probably due to the use of more sensitive analytical method with a lower detection limit and increased concentrations in the influent.</p> <p>Despite the elevated mass emissions of some constituents, we believe that the</p>	None.

#	Section	Comment	Response	Proposed Revisions												
			<p>increase of any mass emission benchmarks is not expected to result in additional degradation of water quality since there is no reasonable potential to exceed the water quality objectives for those constituents.</p>													
<p>I.c</p>	<p>V.A Table 7</p>	<p>Coastkeeper requests that parameters with effluent limitations remain within the effluent limitation framework, at least for monthly averages. By way of example, Coastkeeper requests the Table 7 average monthly performance goal for Total Chlorine Residual be removed and replaced with an enforceable average monthly effluent limitation.</p>	<p>We agree that the constituents with effluent limitations remain within the effluent limitation framework. As requested, the average monthly performance goals for total chlorine residual and radioactivity were removed from the Table 7 of the tentative order/draft permit because effluent limitations for these parameters have been determined.</p> <p>Since the performance goal is not an enforceable effluent limitation and the California Ocean Plan, Table 3 does not include the 30-day average water quality objective for total chlorine residual, average monthly effluent limitation for total chlorine residual is not required in the Order/Permit.</p>	<p>Table 7. Performance Goals and Mass Emission Benchmarks – Discharge point 001</p> <table border="1" data-bbox="1377 574 2043 1018"> <thead> <tr> <th data-bbox="1377 574 1598 764">Parameter</th> <th data-bbox="1598 574 1812 764">Average Monthly Performance Goals (µg/L)</th> <th data-bbox="1812 574 2043 764">12-month Average Mass Emission Benchmarks (MT/yr)</th> </tr> </thead> <tbody> <tr> <td colspan="3" data-bbox="1377 764 2043 824" style="text-align: center;">Marine Aquatic Life Toxicants</td> </tr> <tr> <td data-bbox="1377 824 1598 919">Total Chlorine Residual^[3]</td> <td data-bbox="1598 824 1812 919" style="text-align: center;">133.85 ==</td> <td data-bbox="1812 824 2043 919" style="text-align: center;">38.09</td> </tr> <tr> <td data-bbox="1377 919 1598 1018">Radioactivity^[4]</td> <td data-bbox="1598 919 1812 1018" style="text-align: center;">[4] ==</td> <td data-bbox="1812 919 2043 1018" style="text-align: center;">--</td> </tr> </tbody> </table> <p data-bbox="1377 1036 2043 1391"> ^[3] <u>Enforceable effluent limitations for these parameters have been determined due to RP.</u> ^[4] <u>Radioactivity: Based on EPA's 2000 radionuclides rule (65 FR 76707), performance goals for gross alpha, gross beta, combined radium-226/228, uranium are 15 pCi/L, 50 pCi/L, 5 pCi/L, and 30 µg/L, respectively.</u> ^[5] <u>Enforceable average monthly effluent limitations for these parameters have been determined due to RP.</u> </p>	Parameter	Average Monthly Performance Goals (µg/L)	12-month Average Mass Emission Benchmarks (MT/yr)	Marine Aquatic Life Toxicants			Total Chlorine Residual ^[3]	133.85 ==	38.09	Radioactivity ^[4]	[4] ==	--
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#	Section	Comment	Response	Proposed Revisions
		<p>In addition, Coastkeeper requests the performance goals and mass emission benchmarks be revised to apply to all active and then-operable discharge points, at the least Discharge Point 002 during planned diversions. As Discharge Point 001 reaches end of life, Coastkeeper anticipates Discharge Point 002 may be used more frequently during essential Discharge Point 001 maintenance.</p>	<p>We were not able to calculate the performance goals and mass emission benchmarks for other emergency outfalls, as Discharge Point 002 and Discharge Point 003 did not discharge during the period from May 2015 to December 2019. For the last 10 years, there has been only one-time discharge to Discharge Point 002 in 2012.</p> <p>Since OC San is currently undertaking a comprehensive condition assessment for Discharge Point 001 to ensure this primary outfall maintains a desired level of operation, we do not anticipate Discharge Point 002 to be used more frequently during the next permit term. Therefore, no revisions were made to the tentative order/draft permit.</p>	<p>None.</p>
<p>II</p>	<p>Attachment E - VIII.C.2</p>	<p>The Order describes the discharge of chlorinated effluent resulted in a decline in benthic communities with negative changes observed, which leads to the cessation of continuous disinfection practices at Discharge Point 001 (120" outfall). Since the Discharger continues to use disinfection practices at Discharge Points 002 and 003 to protect human health, Coastkeeper requests the Order be revised to require benthic community testing around</p>	<p>We do not agree that monitoring for benthic community is required for Discharge Point 002. Negative changes in the structure and health of benthic communities were noticed after 4 years of continuous disinfection practices at Discharge Point 001, which was a chronic impact.</p> <p>There has been no discharge to Discharge Point 003 and only one discharge to Discharge Point 002 over the past 10 years. From September 11, 2012 to October 4, 2012 (i.e., 6 weeks), OC San temporarily diverted disinfected secondary treated effluent to Discharge</p>	<p>None.</p>

#	Section	Comment	Response	Proposed Revisions
		<p>Discharge Point 002 in light of ongoing continuous disinfection practices.</p>	<p>Point 002 due to the infrastructure rehabilitation project. We believe that the discharge of chlorinated effluent once in 10 years and for a short period (i.e., up to few weeks) does not negatively impact benthic communities around Discharge Point 002.</p> <p>Even though there is no continuous benthic monitoring around Discharge Point 002, receiving water quality around Discharge Point 002 has been monitored quarterly under the Sothern California Bight water quality monitoring program. OC San also conducted the extensive environmental monitoring program to characterize the temporal and spatial extent of the discharged effluent and anticipated impacts to the receiving water before, during and after 2012 diversion to Discharge Point 002.</p>	
<p>III</p>	<p>Attachment F - II.E. GWRS Final Expansion Project</p>	<p>Coastkeeper supports the planned diversion of approximately 175 MGD from the OC San plants via the Groundwater Replenishment System (“GWRS”) Final Expansion. Coastkeeper applauds the GWRS for its pioneering efforts and believes the GWRS is the most sustainable option for drought resiliency and water affordability.</p>	<p>USEPA and the Santa Ana Water Board appreciate Coastkeeper’s support on the GWRS Final Expansion project.</p>	<p>None.</p>

#	Section	Comment	Response	Proposed Revisions		
IV	Attachment E - XI.A. PFAS monitoring	Coastkeeper commends the inclusion of per- and polyfluoroalkyl substance (PFAS) in the Order’s Monitoring and Reporting Program. Coastkeeper encourages the SARWQCB and EPA to continuously revise the Order as necessary and permissible to ensure the Order is up to date on the most current PFAS data and legislation.	USEPA and the Santa Ana Water Board appreciate your comments.	None.		
4. Staff-Initiated Changes						
1	Attachment E Table E-2	N/A	We revised a footnote in Table E-2, Receiving Water Core Monitoring Stations, to specify sampling stations for nitrate nitrogen.	<p>Table E-2. Receiving Water Core and Regional Monitoring Station Locations</p> <table border="1" data-bbox="1360 808 2053 1047"> <tr> <td data-bbox="1360 808 2053 878">Receiving Water Core Monitoring Stations</td> </tr> <tr> <td data-bbox="1360 878 2053 1047"> Monthly Water Quality Monitoring Stations (n=28) * = Station sampled for ammonia (NH₃-N) <u>and nitrate nitrogen.</u> </td> </tr> </table>	Receiving Water Core Monitoring Stations	Monthly Water Quality Monitoring Stations (n=28) * = Station sampled for ammonia (NH ₃ -N) <u>and nitrate nitrogen.</u>
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2	Attachment C Figure C-1 Attachment E Table E-1	N/A	<p>We received additional information from OC San to clarify future influent monitoring station locations at Treatment Plant No. 2 after GWRS final expansion. There will be additional monitoring station (INF-002A) at Plant No.2 for non-reclaimable influent including SARI influent, Plant No.1 recycle flow, and GWRS Wastestream, which is pending until the GWRS Final Expansion project is complete and the Orange County Water District (OCWD) starts receiving secondary treated wastewater from the Treatment Plant No. 2. We made the change based on information provided by OC San and updated Table E-1 and an associated figure (i.e., Figure C-1) of flow schematic and monitoring locations after GWRS final expansion.</p>
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Table E-1. Monitoring Station Locations				
Monitoring Location Type	Monitoring Location Name	Monitoring Location Description	Latitude	Longitude
Influent Monitoring Stations (n=2)				
Reclamation Plant No.1 Influent	INF-001	Reclamation Plant No. 1 sampling stations shall be located at each point of inflow to the treatment plant and upstream of any in-plant return flows, where representative samples of the influent can be obtained.	33° 41.588' N	117° 56.294' W
Treatment Plant No. 2 Influent <u>(Before OCWD receives reclaimed water from Plant No.2)</u>	INF-002	Treatment Plant No. 2 sampling stations shall be located at each point of inflow to the treatment plant and upstream of any in-plant return flows, where representative samples of the influent can be obtained.	33° 38.342' N	117° 57.462' W

#	Section	Comment	Response	Proposed Revisions				
				<p><u>Treatment Plant No. 2 Influent</u></p>	<p><u>INF-002</u></p>	<p><u>INF-002 sampling stations shall be located at each point of reclaimable inflow to the Treatment Plant No.2, where representative samples of the reclaimable influent can be obtained.</u></p>	<p><u>33°</u> <u>38.342'</u> <u>N</u></p>	<p><u>117°</u> <u>57.462'</u> <u>W</u></p>
				<p><u>(Pending until OCWD receives reclaimed water from Plant No.2)</u></p>	<p><u>INF-002A</u></p>	<p><u>INF-002A sampling station shall be located at a point of non-reclaimable influent from the 78-inch interplant trunkline containing SARI influent, Reclamation Plant No.1 recycle flow, and GWRS wastestream.</u></p>	<p><u>33°</u> <u>38.317'</u> <u>N</u></p>	<p><u>117°</u> <u>57.453'</u> <u>W</u></p>
<p>3</p>	<p>Attachment E Table E-3 Table E-4</p>	<p>N/A</p>	<p>Based on the most recent ELAB Fields of Accreditation Tables 106 and 112 for radionuclides in drinking water and non-potable water, respectively, footnotes 6 of Tables E-3 and footnote 9 of Table E-4 in the tentative order/draft permit were</p>	<p>⁶ Radioactivity: The following methods shall be used: USEPA Method 900.0 or Standard Methods 7110B for gross alpha and gross beta; USEPA Method 903.0 or 903.1 for radium-226; USEPA Method 904.0 for radium-228; USEPA Method 906.0 for tritium; USEPA Method 905.0 for strontium-90; and USEPA Method</p>				

#	Section	Comment	Response	Proposed Revisions										
			revised to update radioactivity analysis methods.	908.0, <u>908.1</u> , or <u>200.8</u> for uranium. Analysis for combined radium-226 & 228 shall be conducted only if gross alpha or gross beta results for the same sample exceed the stipulated criteria. If combined radium-226 & 228 exceeds the stipulated criteria, then analyze for tritium, strontium-90, and uranium. Note that as of February 2021, the stipulated criteria for gross alpha, gross beta, and radium-226 & 228 are 15 pCi/L, 50 pCi/L, and 5 pCi/L, respectively. These criteria are prospective, including future changes to any incorporated provisions of federal law, as the changes take effect.										
4	Attachment E Table E-4	N/A	As a result of ESA consultation, we included an annual monitoring and reporting requirement for total nitrogen in Table E-4 of the tentative order/draft permit. OC San shall calculate and report annual mass loading of total nitrogen (lbs/year) based on effluent monitoring data of all nitrogen forms including ammonia nitrogen.	<p>Table E-4. Effluent Monitoring</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Units</th> <th>Sample Type</th> <th>Minimum Sampling Frequency</th> <th>Required Analytical Test Method</th> </tr> </thead> <tbody> <tr> <td><u>Total nitrogen</u></td> <td><u>lbs/year</u></td> <td><u>calculated</u></td> <td><u>1/year</u></td> <td><u>==</u></td> </tr> </tbody> </table>	Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method	<u>Total nitrogen</u>	<u>lbs/year</u>	<u>calculated</u>	<u>1/year</u>	<u>==</u>
Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method										
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5	Attachment E - XII.D.2. Biosolids Report	N/A	We revised Attachment E, Section XII.D.2 to be consistent with the reporting requirements stated in Attachment G (Biosolids), Section VI.A.	<p>2. Biosolids Report. <u>By February 19th of each year, the Discharger shall submit an annual biosolids report into USEPA’s CDX electronic reporting system, with a hard copy to the Santa Ana Water Board, with an electronic copy to the Santa Ana Water Board by email at santaana@waterboards.ca.gov, for the period covering the previous calendar year (January 1 through December 31).</u></p>										

#	Section	Comment	Response	Proposed Revisions
6	Attachment F F- III.C.7	N/A	We revised Fact Sheet (attachment F) section III.C.7 to update the rationale for toxicity monitoring using the TST statistical approach.	<p>7. Section 403(c) of the Clean Water Act (CWA):</p> <p>... USEPA and the Santa Ana Water Board are applying the Basin Plan and the Ocean Plan as specified in section III.C.1 and 2 of this Fact Sheet, except for evaluating acute/chronic toxicity for Discharge Points 001 and 002 using the TST statistical approach. Chapter III.F of the Ocean Plan provides for more stringent requirements if necessary, to protect the designated beneficial uses of ocean waters. USEPA has reviewed <u>the previous studies to examine</u> the comparison of the Discharger's chronic toxicity data-test results, including use of using the TST and NOEC statistical methods approaches and has determined that use of the TST statistical approach is consistent with the Ocean Plan and CWA § 403(c) <u>in that it provides protection of the designated beneficial uses of ocean waters. TST statistical approach is also used in other NPDES permits for large publicly owned treatment works, including City of Los Angeles.</u> Given the available dilution (i.e. 180), the receiving water monitoring requirements, and the Discharger's analysis of the ocean discharge criteria as part of its application (See Appendix E.1 Ocean Discharge Criteria Response to CWA 403(c)), <u>and USEPA's additional 403(c) analysis,</u> USEPA makes a determination that the discharges authorized in this permit will not cause unreasonable degradation of the marine environment.</p>