

May 12, 2021
Item No. 3
Supporting Document No. 4

California Regional Water Quality Control Board
San Diego Region

Response to Comments Report

Tentative Order No. R9-2021-0011

NPDES No. CA0109045

Waste Discharge Requirements for the City of San Diego
South Bay Water Reclamation Facility
Discharge to the Pacific Ocean through the South Bay Ocean Outfall

May 12, 2021



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INTRODUCTION

This report contains the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) responses to written comments received from the City of San Diego (City) on Tentative Order No. R9-2021-0011, NPDES No. CA0109045, *Waste Discharge Requirements for the City of San Diego, South Bay Water Reclamation Plant, Discharge to the Pacific Ocean through the South Bay Ocean Outfall* (Tentative Order). The City's comments were received on March 25, 2021.

The San Diego Water Board provided public notice of the release of the Tentative Order on February 23, 2021, and provided a period of 30 days for public review and comment on the Tentative Order. The public comment period ended on March 25, 2021.

Comments and Responses

The summarized written comments and San Diego Water Board responses are set forth below. The section of the Tentative Order the comment pertains to is shown in parenthesis in each comment below. The responses include a description of any actions taken to revise the Tentative Order in response to the comment. Proposed revisions to the Tentative Order are in red-underline for added text and ~~red-strikeout~~ for deleted text.

COMMENTS AND RESPONSES

1. Comment – Add Language on Effluent Description (Section 1)

The South Bay Water Reclamation Plant (SBWRP or Facility) discharges secondary-treated wastewater from the South Bay Ocean Outfall (SBOO) and, at times when recycled water demand is low, excess tertiary reclaimed water that has been treated via ultraviolet disinfection may also be discharged.

Response

The suggested language is more appropriate in Section 2.1 of the Fact Sheet (Attachment F). Section 2.1 of the Fact Sheet (Attachment F) (fourth paragraph) has been modified as shown:

The Facility produces tertiary-treated ~~reclaimed~~ recycled water depending on anticipated ~~reclaimed~~ recycled water demands. The recycled water is transferred through a ~~reclaimed~~ recycled water distribution system to qualified recycled water customers under separate WDRs, Order No. 2000-203. During times with no recycled water demand, up to 15 MGD of secondary effluent is discharged to the Pacific Ocean through the South Bay Ocean Outfall (SBOO). During times with high recycled water demand, the entire effluent flow may be directed to tertiary treatment and reuse. At times when recycled water demand is low, excess tertiary-treated recycled water that has been treated via ultraviolet disinfection may also be discharged.

2. Comment – Change “ml” to “mL” (Section 5.1.1.3)

Change “ml” to “mL” in section 5.1.1.3.

Response

Section 5.1.1.3 has been modified as shown below:

At all areas where shellfish may be harvested for human consumption, as determined by the San Diego Water Board, the median total coliform density shall not exceed 70 CFU per 100 ~~ml~~ mL throughout the water column, and not more than 10 percent of the samples shall exceed 230 CFU per 100 ~~ml~~ mL.

3. Comment – Clarify Requirements Related to River Flow, Storm Protection, and Climate Change Impacts (Sections 6.3.4.2-6.3.4.4)

New Requirement that requires Facilities¹ to be protected against 100-year Tijuana River flows, erosion, overland runoff and other impacts, as well a regional impacts of changing climate conditions.

Does this condition apply to existing facilities or only to "new" facilities, modifications and improvements? It is not known at this time if the existing facilities comply with condition. If facilities are not in compliance with this section, we would be in violation at the time of permit issuance. This condition should be characterized as a future compliance item after the City has evaluated the facility. This ideally would be captured in the Climate Change Action Plan (CCAP) and if necessary site improvements were needed, it would allow time for the City to plan, design, permit, finance and construct necessary protections. Please note it is not appropriate for existing facilities to be held to standards and conditions that did not exist at the time the facility was originally permitted without adequate time to ensure compliance. Additionally, while the treatment plant itself is located outside of the 100-year floodplain, the possible impacts from climate change to facilities included in this permit have not yet been fully evaluated. The possible impacts will be analyzed in the CCAP. At that time, the City of San Diego (City or Discharger) will have sufficient information to advise on whether the facilities are adequately protected or if any additional action is necessary. It is too premature to mandate compliance with this condition at the time of permit issuance prior to completion of the required CCAP.

Response

The San Diego Water Board has modified the requirement for the Facilities to be protected against impacts of flooding from 100-year Tijuana River flows to apply to just the South Bay Water Reclamation Plant (SBWRP or Facility) and not to wastewater conveyance structures/facilities outside the footprint of the SBWRP. The current permit and previous iterations of the permit include similar flood, runoff, and storm protection provisions. In addition, the City in its comment letter stated the SBWRP is located outside the 100-year flood plain which means the City will be in compliance with the provision requiring the SBWRP to be protected against impacts of a 100-year 24-hour storm.

The San Diego Water Board has added additional text to clarify implementation of

¹ Collectively refers to the SBWRP, South Bay Ocean Outfall; and any associated structure or system used in the storage, treatment, and recycling of wastewater at the SBWRP, or any structure or system used in conveyance of wastewater to or from the SBWRP.

the requirement for the Facilities to be protected against regional impacts of changing climate conditions (e.g., rising sea levels, flooding, higher storm surges, and changing hydrography (including more intense atmospheric rivers). The San Diego Water Board agrees that it is appropriate for the City implement compliance with the requirement through development and implementation of measures identified in the CCAP which is required to be submitted within three years pursuant to section 6.1 of Attachment E of the Tentative Order.

The following changes have been made to the Tentative Order as a result of this comment:

Sections 6.3.4.2-6.3.4.4:

- 6.3.4.2. The ~~Facilities~~ Facility shall be protected against 100-year frequency Tijuana River flows as defined by the San Diego County Flood Control District.
- 6.3.4.3. The ~~Facilities~~ Facility shall be protected against erosion, overland runoff, and other impacts resulting from a 100-year, 24-hour storm event as defined by the NOAA Atlas 14 Point Precipitation Frequency Estimates available at:
https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=pa
- 6.3.4.4. The Facilities shall be protected against regional impacts of changing climate conditions (e.g., rising sea levels, flooding, higher storm surges, and changing hydrography (including more intense atmospheric rivers). Compliance with this requirement shall be implemented through development and implementation of applicable measures identified in the Climate Change Action Plan which is required to be submitted within three years of the effective date of this Order pursuant to section 6.1 of the MRP (Attachment E).

Sections 6.2.4.2-6.2.4.4 of the Fact Sheet (Attachment F):

- 6.2.4.2. This Order requires the Facility to be protected against impacts of flooding from 100 year frequency Tijuana River flows which is similar to carried over a provision from the previous Order, Order No. R9-2013-0006, requiring that the ~~Facilities~~ Facility ~~are~~ be protected against the impacts of flooding from peak stream flows.
- 6.2.4.3. This Order carried over a provision from the previous Order, Order No. R9-2013-0006, to ensure the ~~Facilities are~~ Facility is protected against the impact of storm events.
- 6.2.4.4. This Order adds a provision to ensure the Facilities are protected against regional impacts due to climate change (e.g., sea level rise and floods). Compliance with this provision is implemented through development and

implementation of applicable measures identified in the Climate Change Action Plan which is required to be submitted within three years of the effective date of this Order pursuant to section 6.1 of the MRP (Attachment E).

4. Comment – Clarify References (Section 6.3.5.3.7)

In the next to last sentence, it states "... section 5.3.5.3 of this Order", discussing the review of the program in the annual pretreatment report. There is no section 5.3.5.3 or 5.3.5.2.4. Please clarify the sections that are referred to here.

Response

Section 6.3.5.3.7 has been modified as shown below:

The Discharger shall continue with its implementation of a Non-Industrial Source Control Program, consisting of a public education program designed to minimize the entrance of non-industrial toxic pollutants and pesticides into the sanitary sewer system. The program shall be reviewed periodically and addressed in the annual pretreatment report required under section ~~5.3.5.2.4~~ 6.3.5.3.5.

5. Comment – Make Minor Corrections (Section 6.3.5.4.4.2)

In the last sentence, "... four °C ..." should be changed to "... 4 °C ..." (2 instances).

Response

Section 6.3.5.4.4.2 has been modified as shown below:

.....The following holding times between sample collection and analysis shall not be exceeded: fecal coliform-24 hours when cooled to ~~four~~ 4 °C; Salmonella spp. bacteria-24 hours when cooled to ~~four~~ 4 °C; enteric viruses-two weeks when frozen; and helminth ova-one month when cooled to 4 °C.

6. Comment – Make Minor Corrections (Section 7.14)

In the first sentence, "... violations or more than one pollutant ..." should be changed to "... violations of more than one pollutant ...".

Response

Section 7.14 has been modified as shown below:

A SOU that leads to simultaneous violations ~~or of~~ more than one pollutant parameter shall be treated as a single violation and limits the Discharger's liability in accordance with the following conditions:

7. Comment – Provide References for TCDD Toxicity Equivalence Table (Page A-14 of Attachment A)

We have been unable to find references to the numbers used in this table, which are not consistent with the most recent United States Environmental Protection Agency (USEPA) guidance that we have (2010). Please provide a reference for these equivalencies.

Response

The TCDD toxicity equivalence factors on page A-14 of Attachment A of the Tentative Order are from page 71 of the *Water Quality Control Plan for Ocean Waters of California, California Ocean Plan* (Ocean Plan).

No changes were made to the Tentative Order as a result of this comment.

8. Comment – Correct Page Numbers in Table of Contents (Attachment E)

The Table of Contents has incorrect page numbers listed: Section 4.2 should be p. 26 (title should also be updated to "Offshore and Kelp/Nearshore Water Quality Monitoring Requirements"); Section 4.4. should be p. 37; Section 7 should be p. 49.

Response

Page numbers in Table of Contents of the Monitoring and Reporting Program (MRP) (Attachment E) have been corrected. Note, the Table of Contents in all sections of the Tentative Order will be updated after the Revised Tentative Order is finalized.

9. Comment – Clarify QA/QC Data Submittal Requirements (Section 1.4 of Attachment E)

The current lab practice is to have a tabular report of results under each analytical method only; no quality assurance/quality control (QA/QC) data are included in the hard copy reports and results that can be entered in CIWQS are not duplicated in the hard copies. Please clarify if we have to change this process to include QA/QC results as well, and which QC parameters should be reported, as this will entail more staff time as there are numerous methods and data generated by the lab.

Additionally, we expect this amount of effort will require additional laboratory staff that are not currently budgeted so, if possible, it would be appreciated if this requirement could go into effect July 1, 2022, so that we can budget for and receive appropriate resources to comply with this requirement.

Response

Appendix III, section 11 of the Ocean Plan requires laboratories include QA/QC data with their reports. However, to reduce the reporting burden, the San Diego Water Board has modified this section to require the submittal of QA/QC data for analyses that don't meet QA/QC requirements. The QA/QC data for analyses that don't meet QA/QC requirements may be submitted as an attachment in CIWQS. All other QA/QC data shall be made available upon request.

Section 1.4 of the MRP (Attachment E) has been modified as shown:

Data produced and reports submitted pursuant to this Order shall be generated by a laboratory accredited by the State of California Environmental Laboratory Accreditation Program (ELAP). The laboratory must hold a valid certificate of accreditation for the analytical test method specified in 40 CFR part 136 or equivalent analytical test methods validated for intended use and approved by the Executive Officer. The laboratory must include quality assurance/quality control (QA/QC) data in ~~all data their~~ reports. ~~required by this Order and submit electronic data as required by the San Diego Water Board~~ The Discharger shall include in the self-monitoring reports (SMRs) the QA/QC data for analyses that do not meet QA/QC requirements. All other QA/QC data shall be available upon request.....

Section 3.3.9 of the MRP (Attachment E) has been modified as shown below:

The ~~Self-Monitoring Report (SMR)~~ shall include a full laboratory report for each toxicity test.

10. Comment – Modify Monitoring Provision on Minimum Levels (Section 1.9 of Attachment E)

The passages do not seem to align. Please revise the General Monitoring Provisions in section 1.9 so they are consistent with Note 6 of Table E-3.

Response

The following sections of the Tentative Order have been modified for clarity as shown below:

Section 1.9 of the MRP (Attachment E):

The Discharger shall ensure that analytical procedures used to evaluate compliance with effluent limitations or performance goals established in this Order use minimum levels (MLs) no greater than the applicable effluent limitations or performance goals and are consistent with the ~~requirements of 40 CFR part 136 and/or~~ MLs specified in Appendix II of the Ocean Plan, or otherwise approved by USEPA and authorized by the San Diego Water Board. If no authorized ML value is below the effluent limitation or performance goal, then the ~~method must achieve an ML no greater than the lowest ML value provided in 40 CFR part 136 and/or the Ocean Plan.~~ Discharger shall select the lowest ML value and its associated analytical method, which may be above the effluent limitation or performance goal. If the Ocean Plan does not include an ML for a parameter, the Discharger shall ensure the method detection limit (MDL) is consistent with the MDL provided in the method approved under 40 CFR part 136.

Table E-3, footnote 6 of the MRP (Attachment E):

6. ~~As required under~~ Analytical test methods shall be consistent with the requirements of 40 CFR part 136. The analytical test methods for compliance determinations shall use MLs specified in Appendix II of the Ocean Plan. The Discharger shall select the MLs that are below the effluent limitation or performance goal. If no ML value is below the effluent limitation or performance goal, the Discharger shall select the lowest ML value and its associated analytical method, which may be above the effluent limitation or performance goal. If the Ocean Plan does not include an ML for a parameter, the Discharger shall ensure the MDL is consistent with the MDL provided in the method approved under 40 CFR part 136.

11. Comment – Correct latitude/Longitude Coordinates (Table E-1 of Attachment E)

The lat/long for SD-17 in the table is incorrect and should be 32°31.918N 117°11.280W.

Response

Latitude/longitude coordinates in Table E-1 of the MRP (Attachment E) have been modified as shown below:

Discharge Point Name	Monitoring Location Name	Type of Monitoring Location	Monitoring Location Description ¹
--	SD-17	Trawl Station	Latitude: 32° 32 <u>31.200</u> ' N <u>918</u> 'N; Longitude: 117°11. 430 <u>280</u> ' W W; Depth: 99 ft (30 m)

12. Comment – Change “Dissolved Iron” to “Total Iron” (Table E-3 of Attachment E)

The lab does not routinely analyze for dissolved metal constituents, which adds additional steps in the lab procedure. Please update to Total Iron instead of Dissolved Iron.

Response

Total iron is acceptable; however, one sample event must include dissolved iron to determine the proportion of dissolved iron in total iron.

The following sections of the Tentative Order have been modified as shown below:

Table E-3 of the MRP (Attachment E):

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
<u>Iron, Total</u>	<u>mg/L</u>	<u>Grab</u>	<u>1/Month^{4,10}</u>	<u>6</u>
Iron, Dissolved	mg/L	Grab	<u>1/Month^{4,10}</u> <u>1/Permit Term^{4,14}</u>	6

The following has been added as note 14 to Table E-3 of the MRP (Attachment E):

14. Dissolved iron shall be collected once during the permit term concurrent with a sample for collected for total iron to determine the proportion of dissolved iron in total iron.

Section 7.1.2.2 of the Fact Sheet (Attachment F):

This Order adds monthly monitoring requirements for ammonium, total nitrogen, nitrate, nitrite, total organic nitrogen, total phosphorus, phosphate, total organic carbon, dissolved inorganic carbon, total dissolved iron, alkalinity, and salinity to gather data on the contribution of the discharge to ocean acidification, hypoxia, and harmful algal blooms. After one year of monitoring, the monitoring frequency for these parameters may be reduced from monthly to quarterly. This Order also requires monitoring for dissolved iron once per permit term concurrently with a sample for total iron to determine the proportion of dissolved iron in total iron.

13. Comment – Correct In-stream Waste Concentration (IWC) Value (Section 3.3.3 of Attachment E)

Discharge IWC in parenthesis should be 1.06 percent effluent, not "0.1 percent effluent."

Response

Section 3.3.3 of the MRP (Attachment E) has been modified as shown below:

If effluent samples are collected from outfalls discharging to receiving waters with salinity greater than one parts per thousand (ppt), the Discharger shall conduct the following chronic toxicity tests on effluent samples, at the Discharge IWC (~~0.1~~ 1.06 percent effluent), in accordance with species and test methods in *Short-Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Waters to West Coast Marine Estuarine Organisms* (EPA/600/R-95/136, 1995).

14. Comment – Correct Typographical Error (Section 3.3.5.3 of Attachment E)

In the first sentence, "... shall be 1-mircrometer-filtered ..." should be changed to "... shall be 1-micrometer-filtered ...".

Response

Section 3.3.5.3 of the MRP (Attachment E) has been modified as shown below:

Dilution water and control water, including brine controls, shall be 1-mi:rcrometer-filtered uncontaminated natural seawater.....

15. Comment – Clarify Frequency of Reference Toxicant Testing (Section 3.3.5.4 of Attachment E)

"Monthly" reference toxicant testing should be changed to "quarterly" to match testing frequency, unless this means that a reference toxicant test ran within the same month as the effluent test is sufficient? Please clarify.

Response

Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms (EPA/600/R-95/136, 1995) requires at least monthly reference toxicant testing if the laboratory maintains breeding cultures of the test organisms and concurrent reference toxicant testing if the laboratory receives the test organisms from outside the test laboratory. Generally, concurrent reference toxicant testing is required for most west coast marine species.

Section 3.3.5.4 of the MRP (Attachment E) has been modified as shown below:

~~Monthly r~~Reference toxicant testing ~~is sufficient if~~ shall be conducted in accordance with *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (EPA/600/R-95/136, 1995). All reference toxicant test results should be reviewed and reported using the effects concentration at 25 percent (EC₂₅).

16. Comment – Delete Repeated Words (Section 3.3.9.4 of Attachment E)

Remove the fourth sentence "The final TRE/TIE report." In the fifth sentence, please confirm that this is intended to state toxicity reduction evaluation (TRE) only or change to "TRE/TIE" if that is the intent.

Response

Section 3.3.9.4 of the MRP (Attachment E) has been modified as shown below:

Prior to the completion of the final TRE/TIE report, the Discharger shall provide status updates in the monthly SMRs, indicating which TRE/TIE steps are underway, which steps have been completed, and the estimated time to completion of the final TRE/TIE report. ~~The final TRE/TIE Report~~. At a minimum, the final TRE/TIE Report shall include the following:

17. Comment – Correct Typographical Error (Section 4 of Attachment E)

In the third paragraph, in the last sentence, "rational" should be changed to "rationale".

Response

Section 4 of the MRP (Attachment E) has been modified as shown below:

...The Discharger may also submit a list of proposed changes with supporting rationale to these monitoring requirements that it considers to be appropriate to the San Diego Water Board for approval....

18. Comment – Offshore Water Quality Monitoring for Phosphorus (Table E-5 of Attachment E)

While the City currently conducts a plume tracking program, the City would like to point out that some analytical methods for phosphorus in saltwater generate hazardous waste and, if this were to be required to be analyzed in the future, the City would likely outsource this analysis because of the nature of the hazardous waste produced.

Response

To save on potential monitoring costs, the San Diego Water Board has modified the Tentative Order to remove the requirement to monitor for total phosphorus in the receiving water entirely.

The following sections of the Tentative Order have been modified as shown below:

Table E-5 of the MRP (Attachment E)

Parameter	Units	Sample Type	Offshore Sampling Frequency ²	Kelp/Nearshore Sampling Frequency ²
Phosphorus, Total (as P)⁷	mg/L	Grab or Profile⁸	1/Quarter	1/Quarter

Section 7.2.2.3 of the Fact Sheet (Attachment F):

This Order requires monitoring for ammonia (as N); and total nitrogen, ~~and total phosphorus (as P)~~ at the offshore and kelp/nearshore monitoring locations to evaluate compliance with receiving water limitations and to assist with identification of the wastewater plume discharged from the SBOO.

19. Comment – Clarify Human Marker HF183 Monitoring Requirement (Section 4.2.2 of Attachment E)

Please clarify the statement "more than 50% of the time". Does this mean over a month, a rolling year, or some other timeframe?

Response

HF183 monitoring is triggered if a single station exceeds the bacteria receiving water limitations more than 50% of the time within a rolling one-year period for offshore monitoring locations and a rolling quarterly period for kelp/nearshore stations.

The following sections of the Tentative Order have been modified as shown below:

Footnote 7 of Table E-3 of the MRP (Attachment E):

- Monitoring is only required if the overall compliance rate with the receiving water limitations for bacterial characteristics at section 5.1.1 of the Order is below 90% within a rolling one-year period or a single monitoring location exceeds the bacteria receiving water limitations more than 50% of the time

within a rolling one-year period for offshore monitoring locations and a rolling quarterly period for at the offshore and kelp/nearshore monitoring locations, and the source of the exceedances is unknown. If required, the Discharger shall monitor the effluent the same day as the parameter is monitored in the receiving water.

Footnote 11 of Table E-5 of the MRP (Attachment E):

11. Human Marker HF183 monitoring is required only if the overall compliance rate with the receiving water limitations for bacterial characteristics at section 5.1.1 of this Order is below 90% within a rolling one-year period or a single monitoring location exceeds the bacteria receiving water limitations more than 50% of the time within a rolling one-year period for offshore monitoring locations and a rolling quarterly period for at the offshore and kelp/nearshore monitoring locations, and the source of the receiving water limitation exceedances is unknown.

Section 4.2.2 of the MRP (Attachment E):

Human Marker HF183 Monitoring Requirements.

The Human Marker HF183 (HF183) monitoring requirements specified below is required if the overall compliance rate with the receiving water limitations for bacterial characteristics at section 5.1.1 of this Order is below 90% within a rolling one-year period or a single monitoring location exceeds the bacteria receiving water limitations more than 50% of the time within a rolling one-year period for offshore monitoring locations and within a rolling quarterly period for at the offshore and kelp/nearshore monitoring locations ~~designated at I-3, I-5, I-7 to I-14, I-16, I-18 to I-26, I-30, I-32, I-33, and I-36 to I-40~~, and the source of the exceedances is unknown.....

Section 7.1.2.1 of the Fact Sheet (Attachment F):

This Order requires monitoring the effluent for fecal coliform and enterococci if the overall compliance rate with the receiving water limitations for bacterial characteristics at section 5.1.1 of this Order is below 90% within a rolling one-year period or a single monitoring location exceeds the bacteria receiving water limitations more than 50% of the time within a rolling one-year period for offshore monitoring locations and a rolling quarterly period for at the offshore and/or kelp/nearshore monitoring locations and the source of the receiving water exceedances is unknown....

Section 7.2.2.2 of the Fact Sheet (Attachment F):

This Order requires the Discharger to monitor for the Human Marker HF183 if the

overall compliance rate with the receiving water limitations for bacterial characteristics at section 5.1.1 of this Order is below 90% within a rolling one-year period or a single monitoring location exceeds the bacteria receiving water limitations more than 50% of the time within a rolling one-year period for offshore monitoring locations and a rolling quarterly period for at the offshore and kelp/nearshore monitoring locations, and the source of the exceedances is unknown....

20. Comment – Human Marker HF183 Monitoring Requirements (Section 4.2.2 of Attachment E)

HF183 identifies human waste but doesn't distinguish where that waste came from. Requiring HF183 monitoring to determine a specific source, when there are multiple point and non-point sources that exist for the SBOO monitoring region, seems to be of limited informational value compared to the potential cost, particularly since the correlation between the risk to public and/or environmental health and the presence of HF183 has not yet been fully assessed.

Response

Comment noted. The San Diego Water Board agrees that there are other sources of HF183 in the vicinity of the SBOO, particularly the Tijuana River. As stated in Attachment F, section 7.2.2.2, HF183 monitoring would not be required if the City demonstrates that the Tijuana River or some other source is likely the cause of the elevated bacteria results.

No changes were made to the Tentative Order as a result of this comment.

21. Comment – Clarify Spectrophotometric pH Monitoring Requirements (Section 4.2.3 of Attachment E)

It is unclear from the wording in this section if the requirement is to re-calibrate all pH data, and for which reports. Important for the San Diego Water Board to be aware that 1) we will not be able to re-calibrate pH data from kelp stations sampled weekly during non-quarterly months (which is fine with us, as these data are not used for biennial report assessments) and 2) there will likely be a delay in the availability of pH/TA data from bottle samples sent to Dickson Lab for analysis, resulting in difficulties reporting adjusted pH values via California Environmental Data Exchange Network (CEDEN), monthly water quality reports, possibly even Interim/Biennial reports.

Response

The San Diego Water Board modified the text to clarify that pH calibration and aragonite saturation calculations are only required during the quarterly sampling

events. The San Diego Water Board acknowledges that reporting of calibrated pH results and calculations of aragonite saturation state may be delayed due to laboratory analyses outside of the City's control.

The following sections of the Tentative Order have been modified as shown below:

Section 4.2.3.2 of the MRP (Attachment E):

Sample Analysis.

.... The Discharger shall use the spectrophotometric pH and total alkalinity results to calibrate and adjust the pH samples collected quarterly by CTD and calculate the aragonite saturation state. Calibration of pH and calculation of aragonite saturation state is only required for the kelp/nearshore monitoring locations once per quarter. Results for alkalinity, the calibrated pH, and aragonite saturation state shall be reported in the interim and biennial receiving water monitoring reports described in section 4.6 of this MRP. Due to laboratory delays, the results for the last quarter in the monitoring period may be excluded from the interim and/or biennial receiving water monitoring reports if the data are not available. If the results are not included in the interim and/or biennial receiving water monitoring report, the Discharger shall submit the results by email to SanDiego@waterboards.ca.gov.

Section 4.6.1.1 of the MRP (Attachment E):

...These reports are described below under sections 4.6.1.2 and 4.6.1.3 and cover the following monitoring requirements:

- Shoreline, kelp/nearshore, and offshore water quality, if available (sections 4.1 and 4.2 of this MRP);

Section 4.5 of the MRP (Attachment E):

California Environmental Data Exchange Network (CEDEN)

In addition to submitting SMRs, the Discharger shall also ensure that all the receiving water monitoring results are submitted to CEDEN no later than 120 days after ~~analyses have been completed~~ reports are received. If the receiving water monitoring is conducted jointly with other dischargers to the SBOO, the Discharger shall coordinate the submittal of the receiving water monitoring results with other agencies discharging through the SBOO to ensure data is not duplicated in CEDEN. A statement certifying that all monitoring results have been timely uploaded into CEDEN shall be submitted annually by March 1 of each year. Only monitoring results from the following requirements shall be reported in CEDEN:

22. Comment – Correct Typographical Error (Section 4.2.3.2 of Attachment E)

In the second sentence, "... Reference material for oceanic CO₂ analysis ..." should be changed to "... Reference material for oceanic CO₂ analysis ...".

Response

Section 4.2.3.2 of the MRP (Attachment E) has been modified as shown:

...Grab samples for total alkalinity shall be measured by a two-stage, potentiometric, and open-celled titration using coulometrically analyzed hydrochloric acid as described in *Reference material for oceanic CO₂ analysis*....

23. Comment – Clarify Fish Tissue and Sediment Monitoring Parameters (Tables E-6 and E-7, Attachment E)

Please make the target analyte list for fish tissue consistent with the analyte list in sediments, as it will significantly facilitate lab work if there is the same analyte list for both. Also, for clarity, please list out all polychlorinated biphenyls (PCBs).

Response

The requested changes have been made. (See Table E-7 of the MRP (Attachment E) of the Revised Tentative Order.) Table E-7 has been modified to be consistent with Table E-6, and list of PCB analytes have been added to Table E-7.

Section 7.2.4 of the Fact Sheet (Attachment F) has been modified as shown:

...Fish and invertebrate monitoring requirements have been carried over from the previous Order, Order No. R9-2013-0006, except this Order makes the parameters monitored in fish tissue consistent with the parameters monitored in sediment.

24. Comment – Use Consistent Chemical Name for Trimethylnaphthalene (Tables E-6 and E-7, Attachment E)

Please use the same parameter name for consistency. It is currently listed as 1,6,7-trimethylnaphthalene in sediment chemistry and 2,3,5-trimethylnaphthalene in fish tissues.

Response

1,6,7-trimethylnaphthalene is now used in Tables E-6 and E-7 in the MRP (Attachment E).

25. Comment – Correct Typographical Error (Table E-6, Attachment E)

In the Notes below Table E-6, in Note 2, "... (PBDEs or BDEs) may delayed until ..." should be changed to "... (PBDEs or BDEs) may be delayed until ...".

Response

Note 2 for Table E-6 in the MRP (Attachment E) has been modified as shown below:

Monitoring for polybrominated diphenyl ethers (PBDEs or BDEs) may be delayed until January 2022 to allow the Discharger's laboratory sufficient time to validate the analytical method.

26. Comment – Correct Number of Locations (Section 4.4.1 of Attachment E)

In the last sentence, "... SD-18), two areas up coast of ..." should be changed to "... SD-18), three areas up coast of ...".

Response

Section 4.4.1.1 of the MRP (Attachment E) has been modified as shown below:

...These monitoring locations represent two areas near Discharge Point No. 001 (i.e., monitoring locations SD-17 and SD-18), two three areas up coast of Discharge Point No. 001 (i.e., monitoring locations SD-19, SD-20, and SD-21), and two areas down coast of Discharge Point No. 001 (i.e., monitoring locations SD-15 and SD-16).

27. Comment – Clarify Southern California Bight Monitoring Requirements (Section 5.2 of Attachment E)

"When feasible, the Discharger shall reference the results and conclusions of the Southern California Bight Regional Monitoring Program to provide comparison and perspective on the results of the receiving water monitoring conducted by the Discharger. This analysis and comparison shall be reported in the receiving water monitoring reports described in section 4.6.1 of this MRP." We already put our results into context with Bight survey results in the discussion/summaries of each relevant chapter, but we do not include analyses directly comparing our data to Bight data. Please confirm that our current method of reporting is sufficient for this purpose.

Response

The City's current method of referencing the Southern California Bight Regional Monitoring Program is sufficient.

No changes were made to the Tentative Order as a result of this comment.

28. Comment – Change Submittal Date (Section 6.3 of Attachment E)

Please change the date we submit recommendations to the San Diego Water Board to October 31, 2022, so that we have sufficient time to renew the contract and include updated work that may be needed if the recommendation is to continue the study at that time.

Response

The submittal date has been changed. The following sections of the Tentative Order have been modified as shown below:

Section 6.3 of the MRP (Attachment E):

...After completion of the study, by ~~December 1, 2023~~ October 31, 2022, the Discharger shall submit to the San Diego Water Board recommendations for whether the study should be extended. Results of the Coastal Remote Sensing Study shall be included in the Biennial Receiving Water Monitoring Reports described in section 4.6.1 of this MRP.

Table E-9 of the MRP (Attachment E):

Report	Location of requirement	Due Date
Coastal Remote Sensing Study Recommendations Report	Section 6.3 of this MRP	No later than December 1, 2023 <u>October 31, 2022</u>

29. Comment – Clarify Quarterly Reporting Requirement (Table E-8, Attachment E)

Please clarify that analytical data for quarterly monitoring can be added to the closest monthly reports and are not required as separate reports.

Response

The San Diego Water Board's preference is that all quarterly monitoring results, excluding offshore water quality monitoring, are reported in the quarterly monitoring reports. However, if the City prefers to submit the quarterly monitoring results in the

monthly monitoring reports, the quarterly monitoring report must note which monitoring report(s) include the quarterly results.

No changes were made to the Tentative Order as a result of this comment.

30. Comment – Clarify Annual Reporting Requirement (Table E-8, Attachment E)

Annual reporting for Operations and laboratory data has been discontinued since 2015. Please clarify what reporting the annual reporting applies to here.

Response

Table E-8 of the MRP (Attachment E) provides both the monitoring period and reporting frequency. Fish tissue is monitored annually; therefore, Table E-8 must include the annual monitoring period. However, the fish tissue data is submitted in the receiving water monitoring reports. There are no annual reports other than those listed in Table E-9 of the Tentative Order. To add clarity, the San Diego Water Board has modified Table E-8 of the MRP to state that the self-monitoring report (SMR) due date for the annual monitoring period is not applicable. Additionally, the semiannual monitoring frequency was not included in Table E-8; however, sediment monitoring is required semiannually. Results for sediment monitoring is also submitted with the receiving water reports; therefore, the SMR due date is also not applicable.

Table E-8 of the MRP (Attachment E) has been modified as shown below:

Sampling Frequency	Monitoring Period Begins On...	Monitoring Period	SMR Due Date
<u>Semiannually</u>	<u>Closest of January 1 or July 1 following (or on) permit effective date</u>	<u>January 1 through June 30 July 1 through December 31</u>	<u>Not Applicable</u>
Annually	January 1 following (or on) the permit effective date.	January 1 through December 31	<u>Not Applicable</u> <u>March 1</u>

31. Comment – Update Page Numbers in Table of Contents (Attachment F)

Multiple page numbers are incorrect. Please update.

Response

Page numbers in the Table of Contents of the Fact Sheet (Attachment F) have been updated. Note, the Table of Contents in all sections of the Tentative Order will be updated again after the Revised Tentative Order is finalized.

32. Comment – Update Table of Contents (Attachment F)

"4.5. Interim Effluent Limitations" should be changed to "4.5. Interim Effluent Limitations – Not Applicable". "4.6. Land Discharge Specifications" should be changed to "4.6. Land Discharge Specifications – Not Applicable". "4.7. Recycling Specifications" should be changed to "4.7. Recycling Specifications – Not Applicable"

Response

The Table of Contents of the Fact Sheet (Attachment F) have been modified as shown:

4.5. Interim Effluent Limitations- <u>Not Applicable</u>	50
4.6. Land Discharge Specifications- <u>Not Applicable</u>	50
4.7. Recycling Specifications- <u>Not Applicable</u>	50

33. Comment – Change Chronic Toxicity Effluent Limitation to Performance Goal (Section 4.3.3 of Attachment F)

The justification for the added effluent limitation for chronic toxicity based on the comingling of the SBWRP effluent with the South Bay International Wastewater Treatment Plant (SBIWTP) is not applicable. The toxicity testing requirement in this permit is for the final effluent for the SBWRP only, not the combined discharge. The comingled discharge is outside of our control and outside of the jurisdiction of this permit and should not be used as a justification for the addition of an effluent limitation. We request that this justification be omitted, and that the applicable effluent limitation be changed back to a performance goal.

Response

Since effluent from the SBWRP is monitored prior to comingling with the SBIWTP effluent and since there were no exceedances of the chronic toxicity performance goal during the previous permit term, establishing an effluent limitation for chronic toxicity for the discharge is not critical at this time. As requested by the City, the San Diego Water Board has changed the effluent limitation for chronic toxicity to a performance goal. As a result, the rationale in the Fact Sheet (Attachment F) for establishing the chronic toxicity effluent limitation has been deleted.

The following sections of the Tentative Order have been modified as shown below:

Table 2, Section 4.1.1.1:

Parameter	Units	Six-Month Median ²	Average Monthly ²	Average Weekly ²	Maximum Daily ²	Instantaneous Minimum	Instantaneous Maximum ²
Chronic Toxicity^{3,4}	"Pass/Fail"	--	--	--	"Pass"	--	--

Notes for Table 2

1. See Attachment A for definitions of abbreviations and a glossary of common terms used in this Order.
2. The mass emission rate (MER) limitations, in lbs/day, were calculated based on the following equation: $MER \text{ (lbs/day)} = 8.34 \times Q \times C$, where Q is the permitted flow for the Facility (15.0 MGD) and C is the concentration (mg/L).
- ~~3. As specified in section 7.15 of this Order and section 3.3 of the MRP (Attachment E).~~
- ~~4. The chronic toxicity effluent limitation is protective of both the numeric acute and chronic toxicity 2019 Ocean Plan water quality objectives. The effluent limitation will be implemented using Short term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms (EPA/600/R-95/136, 1995); current USEPA guidance in the National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, June 2010) (https://www3.epa.gov/npdes/pubs/wet_final_tst_implementation2010.pdf); and USEPA Regions 8, 9, and 10, Toxicity Training Tool (January 2010).~~

Table 3, Section 4.1.2:

Parameter	Units	Six-Month Median ^{2,3}	Average Monthly ^{2,3}	Maximum Daily ^{2,3}	Instantaneous Maximum ^{2,3}
Chronic Toxicity^{6,7}	"Pass/Fail"	--	--	"Pass"	--

Notes for Table 3:

6. As specified in section 7.15 of this Order and section 3.3 of the MRP (Attachment E).
7. This performance goal will be implemented using *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (EPA/600/R-95/136, 1995); current USEPA guidance in the *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, June 2010) (https://www3.epa.gov/npdes/pubs/wet_final_tst_implementation2010.pdf); and *USEPA Regions 8, 9, and 10, Toxicity Training Tool* (January 2010).

Section 7.15:

...The MDEL maximum daily performance goal for chronic toxicity is exceeded ~~and a violation will be flagged~~ when a chronic toxicity test, analyzed using the TST statistical approach, results in "Fail".

The MDEL maximum daily performance goal for chronic toxicity is set at the IWC for the discharge (1.06% effluent²) and expressed in units of the TST statistical approach ("Pass" or "Fail"). All monitoring for the MDEL-maximum daily performance goal for chronic toxicity shall be reported using the IWC effluent concentration and negative control, expressed in units of the TST.....

Footnote 19 of Table E-3 of the MRP (Attachment E):

19. ~~For compliance determination e~~Chronic toxicity results shall be reported as "Pass" or "Fail". For monitoring purposes only, chronic toxicity test results shall also include, "Percent Effect," shall also be reported as part of chronic toxicity results.

Section 3.3.4 of the MRP (Attachment E):

....During the calendar month, toxicity tests used to determine the most sensitive test species shall be reported as effluent compliance monitoring results for the chronic toxicity maximum daily ~~effluent limitation (MDEL)~~ performance goal.

Section 3.3.7 of the MRP (Attachment E):

.....If one of the accelerated toxicity tests results in "Fail", the Discharger shall immediately implement the TRE Process conditions set forth below. During

² IWC = 1/minimum initial dilution factor (Dm) = 1/94.6 = 0.0106 = 1.06%

accelerated monitoring schedules, TST results (“Pass” or “Fail”) for chronic toxicity tests shall be used to determine effluent compliance for the chronic toxicity **MDEL maximum daily performance goal**.

Section 3.3.8 of the MRP (Attachment E):

TRE Process

During the TRE Process, minimum effluent monitoring shall resume and TST results (“Pass” or “Fail”) for chronic toxicity tests shall be used to determine effluent compliance for the chronic toxicity **MDEL maximum daily performance goal**.

Table F-8 of the Fact Sheet (Attachment F):

Parameter	Units	N ²	MEC ^{3,4}	Most Stringent Criteria	Background	RPA Endpoint ⁵
Chronic Toxicity	TUc	97	95.2	1 ⁸	0 ⁷	<u>2 See Note 11</u>

Section 4.3.3 of the Fact Sheet (Attachment F):

Chronic Toxicity

~~Although the RPA does not demonstrate that chronic toxicity in the effluent has reasonable potential to cause an exceedance of water quality objectives, this Order adds chronic toxicity effluent limitations based on best professional judgement (BPJ, Step 13 of the Ocean Plan RPA). Step 13 authorizes an RPA based on BPJ upon a review of all available information to determine if a water quality based effluent limitation is required to protect beneficial uses.~~

~~Treated effluent from the Facility regulated under this Order comingles with the SBIWTP discharge, separately regulated under Order No. R9-2021-0001 before discharge to the ocean through the SBOO. The SBIWTP treats sewage originating in Tijuana, Mexico. Tijuana is a major urban area with over 2,500 industrial plants; including manufacturing, chemical substances and petroleum, minerals, paper and printing, wood and wood products, textiles, clothing and leather, and food and beverage products. While Tijuana has a source control program administered by the Government of Mexico, the adequate implementation of the program cannot be relied on and sewage from the Tijuana region can still be toxic even after secondary treatment. The City of San Diego’s Environmental Impact Report, conducted to determine environmental impacts of the SBOO, indicated that “the potential impact of the expected elevated toxics/heavy metal content of the treated Mexican effluent is considered potentially significant and not mitigated at this time. Total reliance on future source control in Mexico to pretreat wastewater prior to conveyance to the~~

~~SBIWTP is not sufficiently guaranteed to occur such that the impact can be considered mitigated.” It is possible that the SBIWTP would discharge effluent that does not meet Ocean Plan water quality standards if Tijuana’s source control measures are not properly implemented. Order No. R9-2021-0001, for the SBIWTP, includes an effluent limitation for chronic toxicity.~~

~~Further, discharges into POTWs are everchanging and unknown and/or new pollutants could be introduced into the Discharger’s POTWs from nonresidential and/or residential sources at any time, resulting in synergistic and/or additive toxic effects in the receiving water. If a toxic effect is discovered in the receiving water, the results of the WET may be useful for identifying the source of the toxicity. As a result, this Order includes an effluent limit for chronic toxicity which requires routine monitoring to ensure that effluent from the Facility is not causing synergistic and/or additive toxic effects.~~

~~Several sensitive species are also known to exist in or traverse the vicinity of the SBOO. Threatened and/or endangered species with habitats in the vicinity of the SBOO include: olive ridley sea turtle (*Lepidochelys olivacea*), green turtle (*Chelonia mydas*), and the leatherback sea turtle (*Dermochelys coriacea*). (See 50 CFR section 224.10(c).) Marine fish species surrounding the SBOO also include, speckled sanddab (*Citharichthys stigmaeus*), California lizardfish (*Synodus lucioceps*), hornyhead turbot (*Pleuronichthys verticalis*), and California halibut (*Paralichthys californicus*). (Final Supplemental Environmental Impact Statement, Clean Water Act Compliance at the South Bay International Wastewater Treatment Plant (2005), p. 3-29.) An effluent limitation for chronic toxicity is necessary to protect these sensitive species, the benthic communities upon which they may feed, and other designated beneficial uses from synergistic and/or additive toxic effects the Facility’s effluent and comingled discharges from the SBOO.~~

~~Thus, in the San Diego Water Board’s best professional judgment, an effluent limitation for chronic toxicity is necessary based on the Facility, Facility operations, and potential toxic impact of the discharge. This Order establishes a chronic toxicity effluent limitation for the Facility discharge in order to further ensure that the combined discharge of effluent from the Facility and the SBIWTP through the SBOO does not cause or contribute to exceedances of effluent limits for chronic toxicity, thereby ensuring that water quality standards are achieved in the receiving water and designated beneficial uses are protected.~~

Table F-11 of the Fact Sheet (Attachment F):

Parameter	Unit	Six-Month Median ¹	Maximum Daily ¹	Instantaneous Maximum ¹
Chronic Toxicity ^{2,3}	"Pass"/"Fail"	--	"Pass"	--

Notes for Table F-11

- The mass emission rate (MER) limitations, in lbs/day, were calculated based on the following equation: $MER \text{ (lbs/day)} = 8.34 \times Q \times C$, where Q is the permitted flow for the Facility (15.0 MGD) and C is the concentration (mg/L).
- ~~As specified in section 7.12 of this Order and section 3.3 of the MRP (Attachment E).~~
- ~~A numeric WQBEL has been established for chronic toxicity based on best professional judgement (BPJ, Step 13 of the Ocean Plan RPA). The chronic toxicity performance goal is protective of both the numeric acute and chronic toxicity 2019 Ocean Plan water quality objectives. The chronic toxicity effluent limitation will be implemented using *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (EPA/600/R-95/136, 1995), current USEPA guidance in the *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA-833-R-10-003, June 2010) (https://www3.epa.gov/npdes/pubs/wet_final_tst_implementation2010.pdf), and USEPA Regions 8, 9, and 10, Toxicity Training Tool (January 2010).~~

Section 4.3.5.2 of the Fact Sheet (Attachment F):

...The chronic toxicity effluent limitation performance goal is expressed as "Pass" for each maximum daily individual result. The Discharger shall also report the "Percent Effect" as part of chronic toxicity result.

For chronic toxicity, the previous Order, Order No. R9-2013-0006, contained a performance goal of 96 TUc and quarterly monitoring. During the term of Order No. R9-2013-0006, the maximum reported effluent chronic toxicity value 95.2 TUc (reported in July 2015). Using the RPA procedures from the Ocean Plan, the effluent does not have reasonable potential to cause an exceedance of the narrative water quality objective for chronic toxicity (i.e., Endpoint 1). This Order, however, does not establishes a chronic toxicity performance goal evaluated using

~~the TST statistical approach with a maximum daily value as of "Pass," instead of a numerical chronic toxicity performance goal. However as stated in section 4.3.3 of this Fact Sheet, this Order adds an effluent limitation for chronic toxicity based on BPJ (Step 13 of the RPA procedures from the Ocean Plan).~~

Sections 4.3.5.4 through 4.3.5.6 of the Fact Sheet (Attachment F):

~~4.3.5.4. Under the Ocean Plan, chronic toxicity is measured by Toxic Units Chronic (TUc) and relies on the No Observed Effect Limit. Chapter III, section F.1, of the Ocean Plan authorizes the San Diego Water Board to establish more restrictive effluent limitations as necessary to protect designated beneficial uses of ocean waters. The San Diego Water Board has conducted a site-specific analysis and finds that a more restrictive effluent limitation for chronic toxicity based on the TST statistical approach is necessary to protect designated beneficial uses of ocean waters.~~

~~4.3.5.5. Several sensitive species are known to exist in or traverse the vicinity of the SBOO. Threatened and/or endangered species with habitats in the vicinity of the SBOO include: olive ridley sea turtle (*Lepidochelys olivacea*), green turtle (*Chelonia mydas*), and the leatherback sea turtle (*Dermochelys coriacea*). (See 50 CFR section 224.10(c).) Marine fish species surrounding the SBOO also include, speckled sanddab (*Citharichthys stigmaeus*), California lizardfish (*Synodus lucioceps*), hornyhead turbot (*Pleuronichthys verticalis*), and California halibut (*Paralichthys californicus*). (Final Supplemental Environmental Impact Statement, Clean Water Act Compliance at the South Bay International Wastewater Treatment Plant (2005), p. 3-29.) The TST approach provides a precise statistical approach that is necessary to protect these sensitive species, the benthic communities upon which they may feed, and other designated beneficial uses.~~

~~4.3.5.6. The Discharger expressed that the TST approach is its preferred method for analyzing chronic toxicity. The Facility also discharges to the SBOO, which is jointly owned and operated by USIBWC. To ensure consistency and provide comparable data, all discharges to the same outfall should evaluate chronic toxicity using the same statistical approach. USIBWC is required, under separate Order No. R9-2021-0001, to evaluate chronic toxicity using the TST statistical approach. Thus, this Order also requires the Discharger to evaluate chronic toxicity using the TST statistical approach to ensure consistency and comparable data.~~

4.3.5.4. The Discharger expressed that the TST statistical approach is its preferred method for analyzing chronic toxicity. Further, e Evaluating chronic toxicity using the TST ~~statistical~~ approach more precisely identifies toxicity in the effluent to protect the designated beneficial uses of ocean waters from potential toxic effects from the discharge. Thus, this Order requires the discharger to evaluate the chronic toxicity performance goal using the TST statistical approach.

.....Using the TST approach, the San Diego Water Board will have more confidence when making reasonable potential ~~and permit compliance~~ determinations as to whether the discharge is toxic or non-toxic. The use of the TST approach will also allow for better data comparability to other facilities in the San Diego Region, as well as other coastal regions, that also implement the TST approach for analyzing chronic toxicity data from ocean outfall discharges. ~~As a result, and in accordance with Chapter III, section F.1, of the Ocean Plan, the San Diego Water Board is exercising its discretion to use the TST statistical approach for this discharge as necessary for the protection of beneficial uses of ocean waters.~~

34. Comment – Delete Justification for Chronic Toxicity Effluent Limitation (Section 4.3.3 of Attachment F)

The justification based on the everchanging nature of publicly-owned treatment works (POTWs) and their potential synergistic/additive effects is a generalized assumption. Any effluent limitation in this permit based on best professional judgement must be justified by a site-specific analysis, which this is not. Based on the availability of monitoring data and the historical lack of exceedances any effluent limitation must be justified by a site-specific analysis and not a generalized assumption. We request that this justification be omitted.

Response

See response to comment #33 above. As requested by the City, the San Diego Water Board has changed the effluent limitation for chronic toxicity to a performance goal. As a result, the rationale in the Fact Sheet (Attachment F) for establishing the chronic toxicity effluent limitation has been deleted.

35. Comment – Delete Justification for Chronic Toxicity Effluent Limitation (Section 4.3.3 of Attachment F)

The justification for the additional effluent limitation based on sensitive species known to exist in the area is a generalized assumption that is refuted by the readily available monitoring data generated by the City's Ocean Monitoring program. When looking at the Benthic Response Index for the South Bay region over our entire

monitoring timeline, all nearfield, north farfield, and south farfield stations' values have remained essentially unchanged. This index is particularly sensitive to the loss of pollution tolerant species, so it is an excellent indicator of the lack of toxic effects on the infauna in this region. Additionally, when looking at the timeline of abundances of certain sensitive amphipod genera in the area, their populations have fluctuated over time but have generally been similar across station groups. Based on the abundance of ocean monitoring data refuting this justification, we request that it be omitted.

Response

See response to comment #33 above. As requested by the City, the San Diego Water Board has changed the effluent limitation for chronic toxicity to a performance goal. As a result, the rationale in the Fact Sheet (Attachment F) for establishing the chronic toxicity effluent limitation has been deleted.

36. Comment – Delete Justification for Chronic Toxicity Effluent Limitation (Section 4.3.3 of Attachment F)

The Ocean Plan allows a regional water board to base the need for an effluent limitation on factors other than the facility-specific monitoring data, but the San Diego Water Board has identified only generalized assumptions and inappropriate or inapplicable justifications (please see above comments). Given the availability of facility-specific monitoring data, the lack of prior exceedances, and the RPA's demonstration that the effluent lacks reasonable potential to cause exceedances of WQO's, any effluent limitation in the SBWRP permit based on best professional judgment must be justified by a site-specific analysis.

Response

See response to comment #33 above. As requested by the City, the San Diego Water Board has changed the effluent limitation for chronic toxicity to a performance goal. As a result, the rationale in the Fact Sheet (Attachment F) for establishing the chronic toxicity effluent limitation has been deleted.

37. Comment – Delete Justification for Chronic Toxicity Effluent Limitation (Section 4.3.3 of Attachment F)

Please provide facility-specific analysis to justify the need for a chronic toxicity effluent limitation. Current justification appears to be heavily based on risks associated with Mexican flows into the SBIWTP. We request that this information be omitted as it is inapplicable to our facility and thus outside of the scope of this permit. Additional justification cites the need for routine monitoring, which is already a requirement under the current permit and does not require addition of an effluent

limit. Further justification cites generalized information on protection of sensitive species. This conflicts with our long-term receiving water monitoring results which show no significant effects to marine organisms and also contradicts the Board's determination that the SBWRP effluent does not have a reasonable potential to cause an exceedance of Ocean Plan WQOs, including degradation of marine communities.

Response

See response to comment #33 above. As requested by the City, the San Diego Water Board has changed the effluent limitation for chronic toxicity to a performance goal. As a result, the rationale in the Fact Sheet (Attachment F) for establishing the chronic toxicity effluent limitation has been deleted.

38. Comment – Change Page Number for Table F-11 in Table of Contents (Attachment F of the Tentative Order)

Page number should be changed to 27 as opposed to 28.

Response

The Table of Contents of the Fact Sheet (Attachment F) have been updated as shown below:

Table F-10. Summary of WQBELs at Monitoring Location E-001 Example Parameter Water Quality Objectives	26
Table F-11. Summary of WQBELs at Monitoring Location E-001	28 <u>27</u>
Table F-12. Summary of Performance Goals at Monitoring Location E-001	28

39. Comment – Item Missing from Table of Contents (Attachment F)

Item is missing from Contents page. Page should be 28.

Response

The San Diego Water Board has added the missing item. See response to comment #38 above.

40. Comment – Correct Typographical Error (Table F-12 of Attachment F)

Below Table F-12, "Notes for Table F-11" should be changed to "Notes for Table F-12".

Response

Correction made. (See Notes for Table F-12 of the Fact Sheet, Attachment F.)

41. Comment – Concern Regarding Climate Change Action Plan Requirement (Section 6.2.4.4 of Attachment F)

A requirement to evaluate the impacts of climate change effects on facilities is warranted and required through the CCAP to be prepared. The concern with new permit language that requires facilities to immediately be protected from impacts is unrealistic and doesn't account for the time it would take to properly evaluate possible impacts, design and permitting of any necessary modifications, build these improvements and finance such actions. The cost of this is undefined at this time. It is also unknown what steps/actions may necessary to comply with this and whether or not action could be taken.

Response

See response to comment #3 above. The requirement for the Facilities to be protected against regional impacts of changing climate conditions (e.g., rising sea levels, flooding, higher storm surges, and changing hydrography (including more intense atmospheric rivers)) has been modified to clarify compliance implementation. The San Diego Water Board agrees that it is appropriate for the City to implement compliance with the requirement through development and implementation of applicable measures identified in the CCAP which is required to be submitted within three years of the effective date of the Tentative Order pursuant to section 6.1 of the MRP (Attachment E).

42. Comment – Changes Made to Ocean Receiving Water Monitoring Program in Response to Comments by the United States Section of the International Boundary and Water Commission (USIBWC)

The City requested that any changes to the ocean receiving water monitoring program made in response to comments on Tentative Order No. R9-2021-0001, *Waste Discharge Requirements for the United States Section of the International Boundary and Water Commission South Bay International Discharge to the Pacific Ocean Through the South Bay Ocean Outfall*, should also be made in the Tentative Order.

Response

The San Diego Water Board has modified the ocean receiving water monitoring requirements consistent with changes made in response to comments made on Tentative Order No. R9-2021-0001.

The following sections of the Tentative Order have been modified as shown:

Footnotes, Table E-1 of the MRP (Attachment E):

1. Monitoring at locations in Mexico is dependent on the approval of the Mexico government. Monitoring at these locations is not required if the Mexico government does not grant permission to enter and sample Mexico waters. In the event that the Mexico government does not grant permission to conduct the monitoring, the Discharger shall notify the San Diego Water Board in writing. Monitoring at locations in Mexico is needed to ensure representative sampling of the discharge's impact on water quality and beneficial uses.

...

23. Samples at shoreline stations S-0, S-2, and S-3 in Mexico are collected by either Comision Internacional de Limites y Aguas (CILA) or Comsion Estatal de Servicios Publicos de Tijuana (CESPT) and provided to the Discharger for sample analysis in the United States. Monitoring at these locations is recommended and requested to ensure representative sampling of the discharge's impact on water quality and beneficial uses. Failure to monitor at these locations is not a violation of the Order.

Section 4 of the MRP (Attachment E):

All receiving water monitoring shall be conducted in accordance with restrictions and requirements established by the State of California Department of Fish and Wildlife and this Order. Monitoring at locations in Mexico is dependent on the approval of the Mexico government. Monitoring is not required if the Mexico government does not grant permission to enter and sample Mexico waters. In the event that the Mexico government does not grant permission to conduct the monitoring, the Discharger shall notify the San Diego Water Board in writing. The purpose of the receiving water monitoring in Mexico is to ensure representative sampling of the discharge's impact on water quality and beneficial uses.

Section 4.1.1 of the MRP (Attachment E)

All ~~s~~Shoreline monitoring locations in the U.S. listed in Table E-1 (i.e., monitoring locations ~~S-0, S-2~~ S-4 through S-6, and S-8 through S-12) shall be monitored ~~as follows~~ in accordance with Table E-4 below. The San Diego Water Board recommends and requests the Discharger apply these same requirements to shoreline monitoring locations in Mexico (i.e., monitoring locations S-0, S-2, and S-3).

Section 7.2 of the Fact Sheet (Attachment F)

The receiving water and sediment monitoring requirements in section 4 of the MRP are designed to measure the effects of the SBOO discharge on the receiving water. These monitoring requirements will remain in effect on an interim basis, pending development of a new and updated monitoring and assessment program.

Monitoring at locations in Mexico is dependent on the approval of the Mexico government. Monitoring is not required if the Mexico government does not grant permission to enter and sample Mexico waters. In the event that the Mexico government does not grant permission to conduct the monitoring, the Discharger is required to provide written notice to the San Diego Water Board. The purpose of the receiving water monitoring in Mexico is to ensure representative sampling of the discharge's impact on water quality and beneficial uses. Sampling in the waters of Mexico provides regional context and essential information regarding the potential impact of the SBOO discharge south of the outfall and, thus, south of the border. To truly assess the potential impacts of the SBOO discharge on the marine environment, it is necessary to sample throughout the water column in all directions around the outfall, whether that be in State or international waters.

Section 7.2.1 of the Fact Sheet (Attachment F)

... Thus, this repeat sampling requirement has not been carried over from Order No. R9-2013-0006. This Order also modifies the GPS coordinates for monitoring location S4 and S5 due to access issues. Shoreline monitoring locations S-0, S-2, and S-3 are located in Mexico and samples at the locations are currently collected by agencies in Mexico and provided to the Discharger for analyses in the U.S. Monitoring location S-2 and S-3 have been incorporated into the monitoring and reporting program for the SBWRP since the adoption of Order No. 2000-0129 by the San Diego Water Board on September 13, 2000. Monitoring location S-0 replaced monitoring location S-1 following adoption of Order No. R9-2006-0067 by the San Diego Water Board on November 8, 2006. Sampling at monitoring locations S-0, S-2, and S-3 is recommended and requested but not required as the stations are located in Mexico and sample collection is subject to the permission of the Mexico government. The San Diego Water Board recommends monitoring at these locations to ensure representative sampling of the effluent's impact on water quality and beneficial uses. The data collected at these monitoring locations are also useful for differentiating the effects of shoreline sewage discharges in Mexico from the effects of discharge through the SBOO. During certain oceanographic conditions, sewage discharges in Mexico can be transported north causing exceedances of receiving water limitations for fecal indicator bacteria at shoreline monitoring locations in the U.S.

43. Other Changes to the Tentative Order

a. Changes to Table 2, Section 4.1.1.1

The instantaneous maximum effluent limitations for oil and grease and settleable solids shown below are carried over from the existing permit for the Facility and are based on Table 4 of the Ocean Plan. These limitations were included in Table F-7 of the Fact Sheet (Attachment F) but were inadvertently missing from the version of the Tentative Order released to the public on February 23, 2021. The City does not object to adding these limitations to Table 2, section 4.1.1.1 of the Tentative Order.

Table 2, Section 4.1.1.1 has been modified as shown:

Parameter	Units	Six-Month Median ²	Average Monthly ²	Average Weekly ²	Maximum Daily ²	Instantaneous Minimum	Instantaneous Maximum ²
Oil and Grease	mg/L	--	25	40	--	--	<u>75</u>
Oil and Grease	lbs/day	--	3,128	5,004	--	--	<u>9,383</u>
Settleable Solids	milliliter per liter (ml/L)	--	1.0	1.5	--	--	<u>3.0</u>

b. Changes to Section 6.3.5.7

The Asset Management Plan requirements in Section 6.3.5.7 of the Tentative Order have been modified for clarity as shown below:

6.3.5.7. Asset Management Plan

The Discharger shall develop and submit to the San Diego Water Board within 180 days of the effective date of this Order an Asset Management Plan (AMP) to ensure proper operation and maintenance of the Facility. The Discharger may rely on existing documents to develop the AMP. The AMP shall include the following elements: an asset management program to cover the treatment plant and collection system. The Discharger shall:

~~6.3.5.7.1. Procure, populate, and utilize asset management and/or work order management software within two years of permit issuance. The software shall:~~

~~6.3.5.7.1.1. Inventory all critical assets valued over \$5,000 into a single database. Assets may include, but are not limited to, sewer lines, manholes, outfalls, pump stations, force mains, catch basins, and wastewater treatment facility assets. Each entry shall include:~~

- ~~• Name and identification number;~~
- ~~• Location (GPS coordinate or equivalent identifier);~~
- ~~• Current performance/condition;~~
- ~~• Purchase and installation date;~~
- ~~• Purchase price;~~
- ~~• Replacement cost;~~
- ~~• Quantitative consequence of failure; and~~
- ~~• Quantitative likelihood of failure.~~

~~6.3.5.7.1.2. Automate work order production and tracking.~~

~~6.3.5.7.1.3. Prioritize system maintenance and rehabilitation projects.~~

~~6.3.5.7.2. Create and submit to San Diego Water Board an Asset Management Plan (AMP) within three years of the issuance of this Order. To avoid any duplication of effort, the Discharger may reference relevant sections of asset management plans required under other waste discharge requirements for the Facility as appropriate in providing a full and complete response to this requirement. The AMP shall be updated and re-evaluated every five years. The components of the AMP shall include:~~

~~6.3.5.7.2.1. Rehabilitation and Replacement Plan~~

~~The AMP shall identify and prioritize upcoming asset rehabilitation and replacement projects costing greater than \$5,000 and outline a proposed schedule for completion of each project.~~

~~6.3.5.7.2.2. Maintenance Plan~~

~~The AMP shall identify individual or categories of maintenance activities and frequency with which they are performed. The Maintenance Plan shall estimate ongoing and projected cost of maintenance activities.~~

~~6.3.5.7.2.3. System Map~~

~~A ~~sewer collection system~~ map of the system of pipes, pump stations, sewer lines, or other conveyances, upstream of a~~

wastewater treatment plant headworks used to collect and convey wastewater to the Facility shall incorporate assets from the asset management inventory. The map shall be color-coded to identify maintenance and rehabilitation priorities.

6.3.5.7.2.4. Funding

The AMP shall create an accounting of current and projected funding sources, relevant expenses and financial reserves. Expenses may include operational, administrative, interest, or capital expenses. Funding sources may include federal, State, local or private grants, loans, or bonds, as well as connection and user fees.

6.3.5.7.2.5. System Projections

The AMP shall evaluate growth projections of population and service area and potential vulnerabilities resulting from climate change over the next 30 years. ~~To avoid any duplication of effort, the Discharger may reference specific sections of the Climate Change Action Plan described in Attachment E, section 6.1 of this Order as appropriate in providing a full and complete response to this requirement.~~

6.3.5.7.6. Asset Management Software

The AMP shall incorporate software to inventory all critical assets valued over \$5,000 into a single database, automate work order production and tracking, and prioritize system maintenance and rehabilitation projects. Assets may include, but are not limited to, sewer lines, manholes, outfalls, pump stations, force mains, catch basins, and wastewater treatment facility assets. Each entry shall include:

- Name and identification number
- Location (GPS coordinate or equivalent identifier)
- Current performance/condition
- Purchase and installation date
- Purchase price
- Replacement cost
- Quantitative consequence of failure
- Quantitative likelihood of failure

6.3.5.7.7 The Discharger shall implement the AMP within 60 days following submission to the San Diego Water Board, unless otherwise directed in writing by the San Diego Water Board Executive Officer.

6.3.5.7.8. The Discharger shall reevaluate and update the AMP as needed at least 180 days prior to the expiration date of this Order. The Discharger shall timely provide each updated or revised AMP to the San Diego Water Board.