December 11, 2019
Item No. 11
Supporting Document No. 4

California Regional Water Quality Control Board
San Diego Region

Response to Comments Report

Tentative Order R9-2019-0166
NPDES No. CA0107433

Waste Discharge Requirements for the City of Oceanside
San Luis Rey Water Reclamation Facility, La Salina Wastewater Treatment Plant, and
Mission Basin Groundwater Purification Facility
Discharge to the Pacific Ocean through the Oceanside Ocean Outfall

December 11, 2019

CALIFORNIA
Water Boards
STATE WATER RESOURCES CONTROL BOARD
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CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION
2375 Northside Drive, Suite 100
San Diego, California 92108
Telephone: (619) 516-1990
Documents are available at: http://www.waterboards.ca.gov/sandiego

STATE OF CALIFORNIA
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JARED BLUMENFELD, Agency Secretary, California Environmental Protection Agency

California Regional Water Quality Control Board,
San Diego Region
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Stefanie Warren

David W. Gibson, *Executive Officer*
James G. Smith, *Assistant Executive Officer*

Catherine Hagan, Senior Staff Counsel, Office of Chief Counsel
Vincent Vu, Staff Counsel, Office of Chief Counsel

This report was prepared
by
Joann Lim, *Water Resource Control Engineer*
Keith Yaeger, *Environmental Scientist*

under the direction of
David Barker, P.E., *Supervising Water Resource Control Engineer*
Ben Neill, P.E.*, Water Resource Control Engineer*

INTRODUCTION

This report contains California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) responses to written comments received on Tentative Order No. R9 2019-0166, NPDES No. CA0107433, *Waste Discharge Requirements for the City of Oceanside San Luis Rey Water Reclamation Facility, La Salina Wastewater Treatment Plant, and Mission Basin Groundwater Purification Facility Discharge to the Pacific Ocean through the Oceanside Ocean Outfall* (Tentative Order). The San Diego Water Board provided public notice of the release of the Tentative Order on September 27, 2019 and provided a period of 30 days for public review and comment on the Tentative Order. The public comment period ended on October 28, 2019.

Comments and Responses
The summarized written comments and San Diego Water Board responses are set forth 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

The San Diego Water Board responses are labeled and follow each comment.

1. City of Oceanside (City)

    1.1 Comment – Calculate New Dm

    The Tentative Order utilizes the minimum initial dilution (Dm) ratio of 87:1, citing the State Water Board determination prior to issuance of Order No. R9-2005-01364 and based on a total flow rate of 29.055 MGD from the City facilities, Genentech, Inc., Fallbrook Public Utility District, and the Marine Corps Base, Camp Pendleton. The Tentative Order then utilizes this Dm ratio of 87:1 to calculate the parameter concentrations presented in Table 7 Effluent Limitations and Table 9 Performance Goals, to ensure the requirements meet the Water Quality Control Plan for Ocean Waters of California (Ocean Plan) water quality objectives.

    The City's routine discharges to the OOO are expected to decrease significantly below the permitted 16.6 MGD due to the City's numerous capital improvement projects for water reuse, both for land application of recycled water and indirect potable reuse. Due to the decrease, the City respectfully requests the opportunity to propose a Dm ratio associated with the lower routine flow rate that could be used for the parameter concentrations in Tables 7 and 9, when the lower flow rates are observed, or alternatively to set the limits based on design, not actual flows. The City understands that, for the first alternative, the Regional Board would require additional information, such as OOO discharge modeling and the associated conservative modeling assumptions, to consider a proposed Dm ratio, and the City would provide this as part of the proposal. Consideration of multiple Dm ratios based on flow rate has been used recently in Order No. R3-2018-0017 from the Central Coast Regional Water Quality Control Board, as an example.

    The City places a high priority on compliance with the Ocean Plan to protect the valuable resource of the Pacific Ocean. The request above allows the City to ensure Ocean Plan compliance while increasing water reuse in the region.

    Response

    The San Diego Water Board did not conduct an analysis to determine a new minimum probable initial dilution (Dm) ratio (expressed as parts seawater per part wastewater) for this NPDES permit reissuance because the City of Oceanside (City) renewal application submitted on September 3, 2015 stated "the City is not requesting any modification to flow limits, effluent concentration standards, effluent mass emission limits, or performance goals established within Order No. R9-2011-0016." Also, the San Diego Water Board does not have the information needed to conduct a new dilution study.

During the next reissuance of the City's NPDES permit, the City may conduct and submit an initial dilution study to propose a new Dm ratio in accordance with the provisions of the Ocean Plan.

Action Taken

None.

1.2 Comment – Daily Maximum Limits

Where effluent limitations are authorized, federal regulations provide that, for discharges from POTWs, all permit effluent limits shall, unless impracticable, be stated as average weekly and average monthly discharge limitations. 40 C.F.R. §122.45(d)(2); see also State Board WQO 2002-12 at 20-21. Nevertheless, the Regional Board proposes to include daily maximum limitations in the Permit, without making the requisite determination of impracticability, or without evidence to support any findings of impracticability (where made). See accord Statement of Decision, City of Los Angeles v. State Water Resources Control Board, Los Angeles County Superior Court Case No. BS 060957 (April 4, 2001) and Statement of Decision, City of Burbank v. State Water Resources Control Board, Los Angeles County Superior Court Case No. BS 060960 (April 4, 2001).

Response

The Tentative Order proposes six-month median, maximum daily, and instantaneous maximum effluent limitations for ammonia, total chlorine residual, and chronic toxicity. All other effluent limitations in the Tentative Order have been carried over from the current Order.

These proposed effluent limitations are federally required to meet water quality standards. Section 301 (b)(1)(C) of the CWA requires "any more stringent limitation, including those necessary to meet water quality standards, treatment standards, or schedules of compliance, established pursuant to any State law or regulations." The California Ocean Plan contains water quality standards and implementation provisions for those standards that were adopted by the State Water Resource Control Board (State Water Board) (with the latest amendment adopted by State Water Board on August 7, 2018 and approved by the U.S. Environmental Protection Agency (USEPA) on March 22, 2019). These water quality standards include six-month median, maximum daily, and instantaneous maximum standards for ammonia, total chlorine residual, and chronic toxicity. Since reasonable potential to cause or contribute to an exceedance of the water quality standards for ammonia, total chlorine residual, and chronic toxicity was concluded for Oceanside's discharge, the Tentative Order proposes the necessary effluent limitations to meet the water quality standards. Average weekly and average monthly discharge limitations are not practicable for meeting six-month median, maximum daily, and instantaneous maximum standards.

Action Taken

None.

1.3 Comment – Chronic Toxicity RPA and TST/Pass/Fail

Chronic Toxicity Limit: This limit is proposed without a solid basis for finding reasonable potential (RP). Without a valid and supported impracticability and RP analysis, the proposed daily maximum effluent limit for chronic toxicity is unlawful. In addition to the above objections, Oceanside also incorporates by reference the extensive comments made by Fallbrook Public Utility District about the illegality of utilizing guidance to impose pass/fail limits based on the Test of Significant Toxicity (TST) that has not been properly promulgated by the USEPA in 40 C.F.R. Section 136 and no valid Alternative Test Procedure (ATP) authorizes the use of the TST with a two-concentration test procedure instead of the five concentration dose-response, pass/fail endpoints, use of a null hypothesis presuming the toxicity of every water sample, and statistical methods not identified in Part 136. For these reasons, the Tentative Order should be modified to remove the chronic toxicity effluent limit and replace the limit with a performance goal based on the NOEC (TUc units) as prescribed in the Ocean Plan instead.

Response

The San Diego Water Board does not agree with removing the chronic toxicity effluent limitation. Justification for the chronic toxicity effluent limitation is provided in Attachment F section IV.C.3, Table F-10, Note 14. The Tentative Order includes chronic toxicity effluent limitations based on best professional judgement. The City is authorized to discharge up to 16.6 MGD to the OOO. The City's influent consists of a variety of sources that may include municipal and industrial discharges. Toxicants may enter the influent from a variety of sources, and the types, nature, quality of the possible toxicants contained in the influent are not fully understood. The influent may also contain pollutants, such as pesticides, that interact with plant operations affecting the quality of the effluent. These pollutants may also pass through the SLRWRF and LSWTP pollutant treatment process into the final effluent discharge through the OOO. In addition, because a variety of potential sources of toxicity exists, differing pollutants, from more than one source, may have synergistic or additive toxic effects creating a higher risk of toxicity that can affect plant operations and effluent quality. Any pollutants that are discharged in the effluent from these facilities may adversely impact aquatic life beneficial uses in receiving water. Routine monitoring for chronic toxicity would alert dischargers to toxic events, and effluent limitations would in turn provide a higher level of ecological protection.

The TST approach is not a toxicity test method and does not alter the USEPA approved toxicity test methods. Rather, the TST approach is a statistical approach to analyze the data generated by the existing USEPA approved

toxicity test methods. The TST approach analyzes data from a single concentration compared to a control. Interpreting resulting data using the TST approach does not result in changes to the whole effluent toxicity (WET) test methods identified in 40 CFR part 136.3 or USEPA method manuals. It does not alter specified procedures in the test methods (e.g. organism age, food, temperature, exposure length), nor does it alter the number of concentrations required to be used in producing data. Therefore, the TST approach does not need to be approved at 40 CFR 136.

The TST approach provides greater confidence in the accuracy of the toxicity monitoring results as the TST approach minimizes both the occurrence of false negatives (i.e., declaring an effluent safe when it is actually toxic), and the occurrence of false positives (i.e., declaring an effluent toxic when it is actually not toxic). The findings of the peer-reviewed journal article by Diamond et al, 2013, found that the TST approach improves understanding of the discharge condition by correctly identifying toxic and non-toxic samples more often than when using the NOEC-LOEC statistical approach.

Action Taken

None.

1.4 Comment – Approved Monitoring Methods

The Tentative Order, Attachment E, Section I.C states: “Monitoring must be conducted according to U.S. Environmental Protection Agency (USEPA) test procedures approved at 40 CFR part 136, Guidelines Establishing Test Procedures for the Analysis of Pollutants under the CWA as amended, or unless other test procedures are specified in this Order and attachments thereof or otherwise approved by USEPA and authorized by the by the [sic] San Diego Water Board.”

The RWQCB has no authority to overrule the requirements of 40 CFR Part 136. An Alternate Test Procedure is required if changes are needed and approved; otherwise, Part 136 must be followed. The City requests the underlined language in the quote above be removed from the tentative Order and that Part 136 be followed for all test procedures.

Response

The San Diego Water Board does not have the authority to approve methods for parameters that have a method defined at 40 CFR 136. However, the San Diego Water Board has the authority to prescribe methods for parameters that do not have a method defined at 40 CFR 136.

Based on these considerations, the San Diego Water Board has modified the following sections of the Tentative Order:

Section VII.J.3

Sample dilutions for fecal coliform bacterial analyses should be performed so the range of values extends from 2 to 16,000 CFU. Sample dilutions for enterococci bacterial analyses shall range from 1 to 10,000 CFU per 100 mL. The detection methods used for each analysis shall be reported with the results of the analysis. Detection methods used for fecal coliform shall be those listed in 40 CFR part 136 or ~~any improved method determined by the San Diego Water Board (and~~ an Alternative Test Procedure approved by USEPA~~) to be appropriate~~. Detection methods used for enterococci shall be those presented in USEPA publication USEPA 600/4-85/076, *Test Methods for Escherichia coli and Enterococci in Water by Membrane Filter Procedure*, listed under 40 CFR part 136, and any other method approved by the San Diego Water Board.

Attachment E section I.C

Monitoring must be conducted according to U.S. Environmental Protection Agency (USEPA) test procedures approved at 40 CFR part 136, *Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the CWA* as amended, or an alternative test procedure (ATP) approved by USEPA, or by the San Diego Water Board when there are no methods specified for a pollutant at 40 CFR part 136~~ unless other test procedures are specified in this Order and attachments thereof or otherwise approved by USEPA and authorized by the by the San Diego Water Board~~.

Attachment E section I.D

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 136, an ATP approved by USEPA, or by the San Diego Water Board when there are no methods specified for a pollutant at 40 CFR part 136 ~~or equivalent analytical test methods validated for intended use and approved by the San Diego Water Board~~.

Action Taken

Modified Section VII.J.3 and Attachment E sections I.C and I.D

1.5 Comment - Surf Zone Water Quality Monitoring Frequency

The City objects to the sampling frequency of five times per month for several constituents, and requests that the frequency be reduced. The scheduling of sample collection based on staffing resources, analysis coordination, and

sampling handling is adversely impacted by the spacing of five samples per month, and the frequency is unnecessary. The City requests this be changed to once per week or two times per month.

Response

Attachment E section IV.A.1 requires the City to monitor for total and fecal coliforms, and enterococci five times per month at all seven surf zone monitoring locations. The August 7, 2019 amendment to the Ocean Plan includes receiving water limitations for enterococci and fecal coliform based on a 30-day geometric mean calculated from the five most recent samples. Without five samples for enterococci and fecal coliform, the San Diego Water Board will be unable to determine compliance with the receiving water limitation, which requires five samples within a 30-day period. Furthermore, the Ocean Plan requires a minimum of weekly sampling for fecal indicator bacteria for any point source discharges greater than 10 MGD.

The receiving water limitation for total coliform is the median total coliform density shall not exceed 70 per 100 mL, and not more than 10 percent of the samples shall exceed 230 per 100 mL. The San Diego Water Board agrees that five total coliform samples are not needed to evaluate compliance with the total coliform receiving water limitation. Only three samples are required to determine the median total coliform density.

The San Diego Water Board has modified the following sections of the Tentative Order:

Attachment E section IV.A, Table E-7

Parameter	Units	Sample Type	Minimum Sampling Frequency
Total Coliform	CFU/100 ml	Grab	~~5~~3/Month (note 2)

Attachment E section IV.A, Table E-7, Note 2:

2. ~~The Discharger shall sample five times per month with s~~Sampling shall be spaced equally throughout the month to the extent possible.

Attachment F, section VII.B.1

Surf zone water quality monitoring is required to determine if the effluent is causing or contributing to exceedances of the water quality standards in the surf zone, the area where the ocean surface waves come closer to shore and break. For monitoring locations S1 through S5, monitoring for enterococcus bacteria has been changed to monitoring for enterococci bacteria; ~~and~~ weekly monitoring for ~~total coliform,~~ fecal coliform~~,~~ and

enterococcus has been increased to five times per month; and weekly monitoring for total coliform has been decreased to three times per month.

Action Taken

Modified Attachment E section IV.A, Table E-7; Attachment E section IV.A, Table E-7, Note 2; and Attachment F, section VII.B.1

1.6 Comment – Human Marker HF-183 Monitoring Requirements and Costs

The City strongly objects to Receiving Water Monitoring Requirement VI.B.2 that would require the quarterly collection of receiving water samples for the human fecal marker HF-183 for all nearshore and offshore stations. The Tentative Order requires that the HF-183 samples be filtered upon collection and stored at a temperature of -80° C. The stored samples are to then be analyzed for the HF-183 marker using EPA Method 1696 if the associated fecal coliform samples from the same location exceed the Ocean Plan body contact single sample maximum limit for fecal coliform. The proposed HF-183 monitoring represents a significant monitoring cost and imposition on the City without providing corresponding value. Immediate implementation of the proposed HF-183 monitoring is thus simply not feasible.

The stated reason for this monitoring is: “Human Marker HF-183 monitoring is required to confirm the presence of human fecal material when the single sample maximum receiving water limitation for fecal coliform is exceeded.” Testing for human marker does not identify the source of the exceedance, but only identifies that the bacteria collected potentially contained a human source. The proposed monitoring is neither required nor useful for compliance assessment. The Tentative Order (see page F-49 of the Fact Sheet) acknowledges that no receiving water limitations exist for HF-183. The mandated HF-183 monitoring does not address the key monitoring questions applicable to the discharge. The Monitoring and Assessment element of the Regional Water Board’s Practical Vision emphasizes a question-based approach for monitoring. The Tentative Order does not follow this approach, and instead justifies the imposition of HF-183 monitoring is being required for “information purposes” without stating the specific questions to be addressed or identifying how the collected information will be used.

This monitoring cannot be compared any promulgated water quality standard and cannot be guaranteed to be valid or accurate. “The current lack of a formal standardized method protocol for any HF-183 method poses a large obstacle for integration into water management frameworks.” See Improved HF-183 Quantitative Real-Time PCR Assay for Characterization of Human Fecal Pollution in Ambient Surface Water Samples, Green, et al., Applied and Environmental Microbiology, May 2014. Very recent 2019 studies show that freshwater Bacteroides were identified in uncontaminated water samples, demonstrating that measures of total Bacteroides do not reflect fecal pollution. In addition, a comparison of two previously described human

Bacteroides assays (HB and HF-183/BacR287) in municipal wastewater influent and sewage-contaminated urban water samples revealed identical results. See Highly Specific Sewage-Derived Bacteroides Quantitative PCR Assays Target Sewage-Polluted Waters, Feng, McLellan, Appl Environ Microbiol, 2019 Mar 6.

Estimates were retrieved from a local Southern California laboratory qualified to collect, handle and process host-specific genetic marker samples. Below is an estimate of a conservative scenario for annual and permit-term costs associated with HF-183 sample processing.

Assay/Service	**Price**	**Quantity or #Samples**	**Frequency**	**Cost**
One-time Field Sampling Training (Molecular grade clean hands technique)	$690	1	1	$690
Filtration of water sample	$45	24	4	$4,320
DNA/RNA Extraction & archival from filtered water sample (1- year of cold storage included)	$49	24	4	$4,704
HF-183 Assay via qPCR (includes filtration, extraction, controls)	$189	24	4	$18,144
HF-183 Assay via **ddPCR** (includes filtration, extraction, controls) – *included herein only as reference – not part of annual total*	$369	24	4	($35,424)
Cooler Prep	$175	1	4	$700
Annual Total (Note 1)	--	--	--	$28,558
Over the life of 5-year NPDES permit (Notes 2 and 3)	--	--	--	$142,790

Note 1 for above table: Annual Total (assumes worst-case scenario of FIB exceedance at every station) – includes one-time training, filtration & extraction of samples, qPCR run, and sample cooler preps.

Note 2 for above table: costs herein do not include courier fees for sample transport to contract lab

Note 3 for above table: Digital Droplet PCR (ddPCR) is not included in the annual total; this method is optional to confirm target gene copy counts and reduce quantification inhibition (increased accuracy).

Because of these downfalls and problems with using Human Markers, the burden of this monitoring, including costs, are unreasonable and do not bear a reasonable relationship to the need for or benefits obtained from this additional data. (California Water Code §13267(b), §13225(c), and §13000).

Response

The San Diego Water Board does not agree with the removal of the HF-183 monitoring requirements and has concluded the monitoring costs are reasonable and not overly burdensome.

The City states a conservative estimate of HF-18 monitoring costs for a calendar year is $28,558. However, this estimate is the worse-case scenario assuming every offshore and nearshore monitoring location exceeds the fecal coliform receiving water limitation during every sampling event. From 2011 to 2019, there were 28 fecal coliform receiving water exceedances at the offshore monitoring stations. Assuming one fecal coliform exceedance per quarter and using the City's cost estimates, the HF-183 monitoring requirements would cost the City approximately $10,480 per year. This estimate includes filtration, cooler prep, and DNA/RNA extraction and storage, but does not include the one-time field sampling training cost of $690.

Monitoring for HF-183 when a fecal coliform exceedance occurs will provide a valuable line of evidence for determining the potential sources of receiving water bacteria exceedances. The City asserts that "Testing for human marker does not identify the source of the exceedance, but only identifies that the bacteria collected potentially contained a human source." While testing for the human marker will not solely identify the source of the exceedance, it can rule out the Oceanside Ocean Outfall as a source if the human marker HF-183 is not detected. If the human marker is consistently detected when there are fecal coliform exceedances, it suggests that the source of the exceedances may be due to the Oceanside Ocean Outfall as there are limited sources of the human marker HF-183 in the vicinity of the Oceanside Ocean Outfall. This finding would warrant further investigation into the causes of receiving water bacteria exceedances. Furthermore, total and fecal coliforms, and enterococci (collectively fecal indicator bacteria or FIB) receiving water limitation exceedances occur more frequently at monitoring locations near the Oceanside Ocean Outfall than at the reference monitoring locations located one mile north and south of the Oceanside Ocean Outfall, with 65 exceedances occurring near the outfall and only 6 exceedances occurring at the reference monitoring locations.

The City states the HF-183 monitoring requirements is not consistent with the San Diego Water Board's Practical Vision that emphasizes a question driven monitoring approach as the Tentative Order does not state the specific question to be addressed with the HF-183 monitoring. The City's statement is incorrect, Attachment E section IV.B, question number 9 of the Tentative Order states "Is fecal indicator bacteria present outside the zone of initial dilution? If so, is the bacteria human source?" The HF-183 will determine if the fecal bacteria exceedance correlate to the presence of the HF-183. As previously mentioned, there are limited sources of HF-183 in the vicinity of the Oceanside Ocean Outfall.

The City quotes "The current lack of a formal standardized method protocol for any HF-183 method poses a large obstacle for integration into water management frameworks." While this may be true for developing water quality objectives for HF-183, it does not apply to the HF-183 monitoring requirements in the Tentative Order as there is currently no receiving water limitation for HF-183, and the monitoring is for informational purposes only.

For the reasons noted above, the San Diego Water Board believes the cost of the HF-163 monitoring is reasonable. The information obtained will provide a line of evidence for identifying potential sources of FIB receiving water limitation exceedances that occur more frequently around the Oceanside Ocean Outfall than at the offshore reference stations located one mile north and south of the Oceanside Ocean Outfall. However, to reduce monitoring costs further, the San Diego Water Board agrees to remove the requirement to monitor for HF-183 at the nearshore monitoring locations as there have been no FIB exceedances at these monitoring locations.

The San Diego Water Board also agrees that additional information should be included in the Fact Sheet on the number of receiving water exceedances near the Oceanside Ocean Outfall.

The San Diego Water Board has modified the following sections of the Tentative Order:

Attachment E section IV.B.1, Table E-7, Note 4

4. Samples shall be collected at the offshore monitoring locations A1-A5, B1 and B2 and analyzed i~~I~~n accordance with section IV.B.2 of this MRP.

Attachment E section IV.B.2.a

Sample Collection. The Discharger shall collect samples for the Human Marker HF-183 concurrently with samples collected for fecal coliform at the offshore monitoring locations A1 through A5, B1, and B2, and in accordance with EPA method 1696, or an alternative method proposed by the Discharger with comparable accuracy, unless the alternative method is not accepted by the San Diego Water Board. Samples shall be filtered through a membrane filter as soon as possible, but no later than 6 hours

after sample collection. Following filtration, the membrane filter shall be stored at -80 ºC for later analysis.

Attachment F section VII.B.2.d

Results for the Human Marker HF-183 is used for informational purposes only, there is no receiving water limitation for the Human Marker HF-183. This requirement was included ~~because of~~ due to the 65 ~~large number of~~ exceedances of bacteria receiving water limitations at the offshore monitoring locations located near the OOO.

Action Taken

Modified Attachment E section IV.B.1, Table E-7, Note 4; Attachment E section IV.B.2.a; and Attachment F section VII.B.2.d.

1.7 Comment – Added Nearshore and Offshore Monitoring

The RWQCB has added quarterly monitoring for total nitrogen, phosphorus, temperature, dissolved oxygen, light transmittance, pH and salinity at all Nearshore and Offshore monitoring locations. The only justification in the Fact Sheet is to gather data, the burden of which, including the cost and the financial impact of collecting and analyzing these samples with a contract laboratory, far outweighs the benefit of this data.

Additionally, this information will be addressed in Plume Tracking activities, and appears to be a redundant requirement. Due to the extensive financial impact of both the additional quarterly monitoring and the Plume Tracking requirements, the City objects to these duplicative and costly monitoring requirements and does not see adequate reasoning established for the addition of these samples and requests that they be removed from the permit.

Response

For clarification, the Current Order required monitoring for temperature, dissolved oxygen, pH, light transmittance, and conductivity (a measure of salinity) once per month for a 12-month period. The Tentative Order reduces this requirement to once per quarter, but for the entire permit term. This requirement is consistent with Appendix III section 10.1 of the Ocean Plan. Collecting this information does not incur a significant cost as these parameters are measured by a conductivity-temperature-depth (CTD) profiler.

Monitoring for total nitrogen and total phosphorous is needed to evaluate the contribution of nutrients to the receiving water which has implications for ocean acidification and harmful algal blooms. Recent studies suggest anthropogenic nutrient inputs from wastewater effluent contributes the same quantity of nitrogen as upwelling in subregions of the Southern California

Bight.[1] Wastewater effluent may contribute to localized ocean acidification, and an increase in nearshore productivity and incidences of harmful algal blooms.

For the reasons noted above, the San Diego Water Board believes the cost of the monitoring for total nitrogen and total phosphorus is reasonable. The information obtained will allow the San Diego Water Board to evaluate the threat of the discharge to ocean acidification and harmful algal blooms. However, to reduce monitoring costs further, the San Diego Water Board agrees to remove the requirement to sample for total nitrogen and total phosphorus at mid-depth at the nearshore stations. To save additional costs, the San Diego Water Board also agrees to remove the FIB monitoring requirement to sample at mid-depth at the nearshore monitoring locations.

Action Taken

The San Diego Water Board has modified the following sections of the Tentative Order:

Attachment E section IV.B.1, Table E-8, Footnote 2

At the surface for nearshore monitoring locations N1 through N7 and at the surface and mid-depth for offshore monitoring locations A1 through A5, B1 and B2.

1.8 Comment – Climate Change Action Plan

No authority has been provided for these new requirements that do not belong in an NPDES permit and would be more logical to be included in a 13267 order. If maintained over objection, the permit must include the authority for this provision as well as a 13267 analysis.

Response

The California Public Resources Code (Public Resources Code) recognizes that anthropogenic greenhouse gas emissions responsible for climate change are also driving major shifts in the chemical properties of the world's oceans (Public Resources Code section 35630(c)). Furthermore, Governor Newsom's Executive Order N-10-1920 directs state agencies to prepare a water resiliency portfolio that meets the needs of California's communities, economy, and environment. The State Water Board's Resolution No. 2017-0012, *Comprehensive Response to Climate Change*, and the San Diego Water Board's Resolution No. R9-2018-0051, *Addressing Threats to*

[1] Howard, M.D.A., M. Sutula, D.A. Caron, Y. Chao, J.D. Farrara, H. Frenzel, B. Jones, G. Robertson, K. McLaughlin, A. Sengupta. 2014. Anthropogenic nutrient sources rival natural sources on small scales in the coastal waters of the Southern California Bight. *Limnology and Oceanography* 59:285-297.

Beneficial Uses from Climate Change, also require a proactive approach to climate change in all state and regional actions.

Action Taken

The Tentative Order Fact Sheet has been modified in Attachment F, section VII.D.1, Climate Action to include the response above as follows:

….. The changes to the water temperature and pH may affect how the receiving waters reacts to the discharges.

The California Public Resources Code (Public Resources Code) recognizes that anthropogenic greenhouse gas emissions responsible for climate change are also driving major shifts in the chemical properties of the world's oceans (Public Resources Code section 35630(c)). Furthermore, Governor Newsom's Executive Order N-10-1920 directs state agencies to prepare a water resiliency portfolio that meets the needs of California's communities, economy, and environment. The State Water Board's Resolution No. 2017-0012, Comprehensive Response to Climate Change, and the San Diego Water Board's Resolution No. R9-2018-0051, Addressing Threats to Beneficial Uses from Climate Change, also require a proactive approach to climate change in all state and regional actions.

Based on all of these considerations, this ~~This~~ Order requires the Discharger to prepare and submit a Climate Change Action Plan (CCAP) within three years of the effective date of this Order.

1.9 Comment – Biosolids, Adequate Screening

The Tentative Order improperly prescribes the size of the treatment plants' bar screens. Such in-plant requirements are not authorized by State or federal law. Water Code section 13360(a) prohibits the Regional Board from specifying the particular manner of compliance and allows dischargers to comply in any lawful manner. California Water Code §13360(a) ("no order of a Regional Board shall specify the design, location, type of construction, or particular manner in which compliance may be had with that order"_; see also American Iron and Steel Institute v. EPA, 115 F.3d 979, 996 (D.C. Cir. 1997) that specifically determined that a permitting authority may not go beyond the imposition of effluent limits to regulating the internal processes of a plant – "the statute does not permit this sort of meddling inside a facility." For these reasons, the bar screen specifications must be removed from the Tentative Order.

Response

Section 503.5 40 CFR allows the permitting authority to impose additional or more stringent standards when necessary to protect public health or the

environment. There have been several instances where POTWs did not have adequate screening, resulting in agricultural fields being loaded with pieces of glass, plastic, rags, and aluminum. However, the specifications of an actual diameter may be deleted. This requirement would apply to biosolids that are land applied, and not to those landfilled.

Action Taken

The Tentative Order has been modified as follows:

Section VI.C.5.c.i.(i)

If the biosolids are land applied, there ~~There~~ shall be adequate screening at the SLRWRF and the LSWTP headworks and/or at the biosolids treatment units to ensure that all pieces of metal, plastic, glass, and other inert objects ~~with a diameter greater than ¾ inches~~ are removed.

1.10 Comment – Potential Violations for Biosolids

The Findings of Violation referenced in [the Tentative Order, Attachment F, Section II.D (last paragraph)] was an informal letter from the Arizona Department of Environmental Quality (AZDEQ), which is still under determination. Denali Water Solutions, the biosolids hauling company contracted by the City, received a Notice of Violation (NOV) from the AZDEQ on February 15, 2019. In its cover letter, AZDEQ described this document as an "informal compliance assurance tool . . . used to put a responsible party . . . on notice" of potential violations. The NOV did not include formal finding that Denali had violated any provision of Arizona or federal law. Rather, the NOV identified concerns that AZDEQ had based on the information then in its possession and provided Denali the opportunity to demonstrate, through documentation and otherwise, that no violation had occurred.

Since no formal NOV has been issued, and the information submitted by Denali for review by the AZDEQ is in process, the language in this section of the NPDES permit should be removed. The section makes a statement that a violation had occurred, even though no final determination supports this statement.

Response

USEPA's Center of Excellence has not made a final decision yet on how to proceed on enforcement of a land application company in Arizona applying Southern California biosolids. Thus, the last paragraph of the Tentative Order, Attachment F, Section II.D may be deleted.

Action Taken

The last paragraph of the Tentative Order, Attachment F, Section II.D has been deleted as follows:

~~While the SLWRF and LSWTP have not been found to be in violation of any~~

~~biosolids requirements themselves, the Arizona Department of Environmental Quality has issued Findings of Violation to the Discharger's land application contractor for violations of agronomic rate requirements (applying at a rate for a high nitrogen uptake crop and then a crop with lower nitrogen uptake is planted). USEPA's Biosolids Center of Excellence issued a 308-letter to the Discharger's land application contractor on August 15, 2019. USEPA may follow up with letters to the generators, including the Discharger, as the Discharger is ultimately responsible for compliance with the rule.~~

1.11 Comment – Number of Exceedances of Bacteria Receiving Water Limitations

Section VII.B.2.d of the Fact Sheet (see page F-49) states that HF-183 monitoring is included as part of the Monitoring and Reporting Program "because of the large number of exceedances of bacteria receiving water limitations near the OOO." This statement conflicts with language within Section V of the Fact Sheet (page F-42) which states:

The Ocean Plan Bacterial Standards for total coliform, fecal coliform, and enterococcus were exceeded several times at the nearshore and offshore receiving water monitoring locations between January 2011 and December 2018.

The City disagrees with the contention that "a large number" of receiving water bacteriological exceedances have occurred. Additionally, neither of the above statements reflects the City's completion of compliance tasks performed pursuant to Table 12 of RWQCB Order No. R9-2011-0016. In conforming with the time schedule tasks in Table 12, the City implemented facilities that allow for the injection of a disinfectant (sodium hypochlorite) at the SLRWRF effluent wet well to reduce overall concentrations of bacterial contaminants potentially contained in the combined ocean outfall discharge. The City has been implementing this partial disinfection project from 2015 forward, and the City believes that receiving water data from the past several years indicate that the project has had a beneficial effect on receiving water bacteriological compliance. The City continues its program of annual assessment of receiving water bacteriological data to determine if adjustments to the SLRWRF chlorine dose rates are appropriate.

Response

The San Diego Water Board does not agree that the City's injection of disinfectant at the SLRWRF effluent well has been effective at reducing FIB receiving water limitation exceedances at the offshore monitoring locations. From 2011 to 2014, there were 29 exceedances of FIB receiving water limitations at the offshore monitoring locations. From 2015 to mid-2019, there were 36 exceedances of FIB receiving water limitations at the offshore monitoring locations located near the Oceanside Ocean Outfall (i.e., not including the reference monitoring locations). The corrective action noted on

at least one of these exceedances was to increase the disinfectant injection rate. The City may not be adequately injecting the disinfectant to reduce the FIB loads.

The San Diego Water Board agrees that sections V and VII.B.2.d of the Fact Sheet in Attachment F of the Tentative Order should provide clarity on the number of FIB receiving water limitation exceedances.

Action Taken

The San Diego Water Board has modified the following sections of the Fact Sheet in Attachment F of the Tentative Order:

Attachment F section V

The Ocean Plan Bacterial Standards for total coliform, fecal coliform, and enterococcus were exceeded ~~several~~ 71 times at the nearshore and offshore receiving water monitoring locations (including the offshore monitoring locations used as a reference) between January 2011 and ~~December 2018~~July 2019.

Attachment F section VII.B.2.d

Results for the Human Marker HF-183 is used for informational purposes only, there is no receiving water limitation for the Human Marker HF-183. This requirement was included ~~because of~~ due to the 65 ~~large number of~~ exceedances of bacteria receiving water limitations at the offshore monitoring locations located near the OOO.

1.12 Comment – Incorporating Other Comments

In addition to the comments included herein, the City supports and incorporates by reference the comments made by the other permittees for the permits also up for adoption in December.

Response

Please see the Response-to-Comment documents contained in Board Meeting Agenda Item Nos. 12 and 14 for the San Diego Water Board's responses to the comments submitted by Genentech, Inc. and Fallbrook Public Utility District. Marine Corps Base Camp Pendleton did not submit comments.

Action Taken

None.

1.13 Comment – Modify Permit for Consent Calendar

The City encourages Regional Board staff to work with the permittees to modify the permits in order to have these permits adopted on consent instead of in a contested hearing.

Response

Comment Noted.

Action Taken

None.