

Los Angeles Regional Water Quality Control Board

October 30, 2018

Mr. Thien Ng
Assistant Public Works Director, City of Oxnard
300 West Third Street
Oxnard, CA 93030

FINAL WASTE DISCHARGE REQUIREMENTS (WDRs) AND NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR THE CITY OF OXNARD, OXNARD WASTEWATER TREATMENT PLANT (ORDER NO. R4-2013-0094, NPDES NO. CA0054097, CI NO. 2022)

Dear Mr. Ng:

Our letter, dated October 2, 2018, transmitted the revised tentative Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) Permit for the Oxnard Wastewater Treatment Plant. In accordance with administrative procedures, this Regional Water Board at a public hearing held on October 11, 2018, reviewed the revised tentative requirements, considered all the factors in the case, and adopted WDRs and NPDES Order No. R4-2018-0140.

The complete adopted Orders will be sent only to the Discharger. However, these documents are available on the Regional Water Board's website for your review. The Regional Water Board's web address is www.waterboards.ca.gov/losangeles/.

If you have any questions, please contact mr at (213) 576-6616 or Elizabeth Erickson at (213) 576-6665.

Sincerely,



Jeong-Hee Lim, Ph.D. P.E.
Chief, Municipal Permitting Unit

Cc

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Department of Interior, U.S. Fish and Wildlife Service
State Water Resources Control Board, Division of Drinking Water
California Department of Fish and Wildlife, Region 5
California State Parks and Recreation

Mr. Thien Ng
City of Oxnard

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October 30, 2018

State Coastal Conservancy
California Coastal Commission, South Coast Region
Ventura County, Department of Environmental Health
City of Los Angeles, Bureau of Sanitation
Los Angeles County Sanitation Districts
Ventura Coast Keeper
Wishtoyo Foundation
Heal the Bay
Environment Now
Natural Resources Defense Council
U.S. Army Corps of Engineers
Los Angeles County Department of Public Works
Los Angeles Waterkeeper
Surfrider Foundation

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION**

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**ORDER R4-2018-0140
NPDES NO. CA0054097**

**WASTE DISCHARGE REQUIREMENTS AND
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
FOR THE CITY OF OXNARD, OXNARD WASTEWATER TREATMENT PLANT
DISCHARGE TO THE PACIFIC OCEAN**

The following Discharger is subject to waste discharge requirements (WDRs), as set forth in this Order:

Table 1. Discharger Information

Discharger	City of Oxnard Municipal Corporation (Discharger)
Name of Facility	Oxnard Wastewater Treatment Plant (OWTP or Plant or Facility) and its associated wastewater collection system and outfalls
Facility Address	6001 South Perkins Road
	Oxnard, CA 93033-9047
	Ventura County

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	Secondary treated wastewater plus brine waste	34.1261°	119.1906°	Pacific Ocean

Table 3. Administrative Information

This Order was adopted on:	October 11, 2018
This Order shall become effective on:	December 1, 2018
This Order shall expire on:	November 30, 2023
The Discharger shall file a Report of Waste Discharge as an application for reissuance of WDRs in accordance with title 23, California Code of Regulations, and an application for reissuance of a National Pollutant Discharge Elimination System (NPDES) permit no later than:	180 days prior to the Order expiration date (Title 40, Code of Federal Regulations, part 122.21(d))
The U.S. Environmental Protection Agency (USEPA) and the California Regional Water Quality Control Board, Los Angeles Region have classified this discharge as follows:	Major

I, Deborah J. Smith, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on the date indicated above.


 for Deborah J. Smith, Executive Officer

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I. FACILITY INFORMATION

Information describing the Oxnard Wastewater Treatment Plant (Facility or Oxnard WTP) is summarized in Table 1 and in sections I and II of the Fact Sheet (Attachment F). Section I of the Fact Sheet also includes information regarding the Facility's permit application.

II. FINDINGS

The California Regional Water Quality Control Board, Los Angeles Region (Regional Water Board), finds:

- A. **Legal Authorities.** This Order serves as waste discharge requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the California Water Code (CWC) (commencing with section 13260). This Order is also issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the USEPA and chapter 5.5, division 7 of the CWC (commencing with section 13370). It shall serve as a National Pollutant Discharge Elimination System (NPDES) permit authorizing the Discharger to discharge into waters of the United States at the discharge location described in Table 2 subject to the WDRs in this Order.
- B. **Background and Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs (MRPs), and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for the requirements in this Order, is hereby incorporated into and constitutes Findings for this Order. Attachments A through E and G through I are also incorporated into this Order.
- C. **Notification of Interested Parties.** The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of the notification are provided in the Fact Sheet.
- D. **Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet.

THEREFORE, IT IS HEREBY ORDERED, that this Order supersedes Order R4-2013-0094 except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the CWC (commencing with section 13000) and regulations adopted thereunder, and the provisions of the CWA and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order. This action in no way prevents the Regional Water Board from taking enforcement action for past violations of the previous Order.

III. DISCHARGE PROHIBITIONS

- A. The discharge of any radiological, chemical, or biological warfare agent or high-level radioactive waste into the ocean is prohibited.
- B. Discharge to designated Areas of Special Biological Significance is prohibited.
- C. Pipeline discharge of biosolids to the ocean is prohibited by federal law. The discharge of municipal and industrial waste biosolids directly to the ocean, or into a waste stream that discharges to the ocean, is prohibited by the California Ocean Plan. The discharge of sludge digester supernatant directly to the ocean, or to a waste stream that discharges to the ocean without further treatment, is prohibited.
- D. The bypassing of untreated wastes containing concentrations of pollutants in excess of those in Table 1 or Table 2 of the California Ocean Plan is prohibited.

- E.** The treatment, use, and disposal of sewage sludge shall be carried out in the manner found to have the least adverse impact on the total natural and human environment.
- F.** The bypass or overflow of untreated wastewater or wastes to surface waters or surface water drainage courses is prohibited, except as allowed in Standard Provision I.G. of Attachment D, Standard Provisions.
- G.** Discharge of treated wastewater at a location different from that described in this Order is prohibited.
- H.** Wastes discharged from Discharge Point 001 shall be limited to secondary treated wastewater from the Oxnard Wastewater Treatment Plant and brine waste produced at the Advanced Water Purification Facility (AWPF) of the City of Oxnard's Groundwater Enhancement and Treatment Program (GREAT Program).
- I.** Other than the secondary treated and brine waste discharge authorized by this Order, the discharge of water, materials, chemicals, thermal wastes, elevated temperature wastes, toxic wastes, deleterious substances, radiological wastes, biological warfare agent, or other wastes to the Pacific Ocean, a storm drain system, or other waters of the State are prohibited.
- J.** Neither the treatment nor the discharge of secondary treated and brine waste shall create a pollution, contamination, or nuisance as defined by section 13050 of the CWC.
- K.** The discharge shall not contain any substances in concentrations toxic to human, animal, plant, or aquatic life.
- L.** The discharge shall not cause a violation of any applicable federal CWA water quality requirement, or water quality standard adopted by the Regional Water Board or the State Water Board as required by the CWA and regulations adopted thereunder. If a more stringent applicable water quality standard is promulgated or approved pursuant to CWA section 303 and amendments thereto, the Regional Water Board will revise and modify this Order in accordance with the more stringent standard.

IV. EFFLUENT LIMITATIONS, PERFORMANCE GOALS AND DISCHARGE SPECIFICATIONS

A. Final Effluent Limitations and Performance Goals – Discharge Point 001

The Oxnard Wastewater Treatment Plant (OWTP) has a design flow rate of 31.7 MGD secondary treated effluent which discharges through a one-mile outfall to the Ocean after mingling with brine from the AWPf. The AWPf brine stream has a design flow rate of 3.1 MGD while producing 12.5 MGD of recycled water.

The point of compliance for this NPDES facility No. CA0054097 changed during the term of the existing Order R4-2013-0094. The original point EFF-001A was located after the chlorine contact chamber, and was replaced by EFF-001B at a downstream blending station after the AWPf began discharging brine in April of 2016 into the secondary effluent waste stream. Due to the issue of obtaining a representative sample for Biochemical Oxygen Demand (BOD or BOD₅20°C) and bacteria at the EFF-001B sample blending station, the compliance point for BOD, with BOD percent removal and TSS, with TSS percent removal, has been shifted back to EFF-001A. The Ocean Plan requires compliance with the TSS percent removal criteria, so the concentration in mg/L for TSS at EFF-001B cannot be higher than that measured at EFF-001A. Bacteria do not have an effluent limit in this Order, but are monitored in effluent at EFF-001A. As shown in the following tables, all other constituents are measured at EFF-001B.

The performance goals for Discharge Point 001 are prescribed below in this Order. Performance goals are based upon actual performance data for the Oxnard Waste Treatment Plant and are specified only as an indication of the treatment efficiency of the plant. They are not considered enforceable effluent limitations or standards for the plant. The Discharger shall maintain, if not improve, the effluent quality at or below the performance goal concentrations. Any two consecutive exceedances of the performance goals shall trigger an investigation into the cause of the exceedance. If the exceedance persists in three successive monitoring periods, the Discharger shall submit a written report to the Regional Water Board on the nature of the exceedance, the results of the investigation including the cause of the exceedance, the corrective actions taken, any proposed corrective measures, and a timetable for implementation, if necessary. The Executive Officer of the Regional Water Board may modify any of the performance goals if the Discharger submits a request and demonstrates that the change is warranted. The existing performance goals have been maintained where analytical techniques did not allow reliable detection of the constituent.

1. Final Effluent Limitations and Performance Goals – Discharge Point 001

The Discharger shall maintain compliance with the following effluent limitations at Discharge Point 001, with compliance measured at Monitoring Locations EFF-001A, and EFF-001B as described in the attached Monitoring and Reporting Program (MRP; Attachment E).

Table 4. Water Quality Based Effluent Limitations and Performance Goals for Discharge Point 001

Parameter	Units	Effluent Limitations ¹					Performance Goals Average Monthly
		Average Monthly ²	Average Weekly	Maximum Daily ³	Instantaneous Maximum ⁴	Average Monthly	
Biochemical Oxygen Demand 5-day @ 20°C ^{5 7}	mg/L	30	45	--	--	--	--
	lbs/day ⁶	7,960	11,900	--	--	--	--
BOD ₅ 20 ⁰ Removal Efficiency ⁷	%	85	--	--	--	--	--
Oil and Grease	mg/L	25	40	--	75	--	--
	lbs/day ⁶	6,630	10,600	--	19,900	--	--
Total Suspended Solids	mg/L	30	45	--	--	--	--
	lbs/day ⁶	7,960	11,900	--	--	--	--
TSS Removal efficiency ⁷	%	85	--	--	--	--	--
Settleable solids	ml/L	1.0	1.5	--	3	--	--
Turbidity	NTU	75	100	--	225	--	--
Temperature ⁸	F ⁰			--	100	--	--
pH	Units	Within the limits of 6 to 9 at all times					
Marine Aquatic Life Toxicants							
Arsenic	µg/L	--	--	--	--	--	2 ⁹

¹ The minimum dilution ratio used to calculate effluent limitations for nonconventional and toxic pollutants for Discharge Point 001 is 1: 108 for all (i.e., 108 parts sea water to one part effluent)

² Average monthly effluent limitations for benzidine, PCBs, and TCDD equivalents at Discharge Point 001 are based on the 6-month median water quality objectives in the 2015 Ocean Plan. For intermittent discharges, the daily value used to calculate these average monthly values shall be considered to equal zero for days on which no discharge occurred.

³ The maximum daily, average weekly and average monthly effluent limitations shall apply to flow weighted 24-hour composite samples. These limitations may apply to grab samples if the collection of composite samples for those constituents is not appropriate because of the instability of the constituents.

⁴ The instantaneous maximum effluent limitations shall apply to grab samples.

⁵ Weekly and Monthly Average may be calculated from daily measurements.

⁶ The mass emission rate is calculated using 31.7 MGD and water-quality based limits in µg/L. Lbs/day = 0.00834 x Ce (effluent concentration in µg/L) x Q (flow rate in MGD). During storm events when flow exceeds 31.7 MGD, the mass emission rate limitations shall not apply.

⁷ Compliance for all constituents is measured at EFF-001B, except compliance with BOD, TSS and BOD and TSS removal efficiency is measured at EFF-001A.

⁸ Changed from maximum daily to comply with the thermal plan which allows an increase over ambient receiving water temperatures.

Parameter	Units	Effluent Limitations ¹					Performance Goals Average Monthly
		Average Monthly ²	Average Weekly	Maximum Daily ³	Instantaneous Maximum ⁴	Average Monthly	
Cadmium	µg/L	--	--	--	--	--	1 ¹⁰
Chromium VI ¹¹	µg/L	--	--	--	--	--	8
Copper	µg/L	--	--	--	--	--	30
Lead	µg/L	--	--	--	--	--	23
Mercury	µg/L	--	--	--	--	--	0.3
Nickel	µg/L	--	--	--	--	--	8
Silver	µg/L	--	--	--	--	--	2.5
Selenium	µg/L	--	--	--	--	--	6.4
Zinc	µg/L	--	--	--	--	--	35
Cyanide	µg/L	--	--	--	--	--	25
Chlorine Residual	µg/L	--	--	--	--	--	0.13
Ammonia as N	mg/L	--	--	--	--	--	51.8
Phenolic compounds (non-chlorinated)	µg/L	--	--	--	--	--	5
Phenolic compounds (chlorinated) ¹¹	µg/L	--	--	--	--	--	0.42
Endosulfan	µg/L	--	--	--	--	--	0.05
Hexachloro-cyclohexane (HCH) ¹¹	µg/L	--	--	--	--	--	0.1
Endrin	µg/L	--	--	--	--	--	0.05
Chronic toxicity (Test of Significant Toxicity (TST)) ¹²	Pass or Fail	--	--	Pass	--	--	--
Radioactivity ¹¹							

⁹ The existing performance goals are carried forward based on best professional judgement where new information would otherwise call for a relaxation of the PG because future recycling is expected to increase the concentration of pollutants in the waste stream.

¹⁰ Where a conclusive but nonparametric finding of no reasonable potential is made, the existing PG is retained.

¹¹ See Attachment A and section VIII for definitions of terms.

¹² The Chronic Toxicity final effluent limitation is protective of both the numeric acute and chronic toxicity 2015 Ocean Plan water quality objectives. The final 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) (http://water.epa.gov/polwaste/npdes/basics/upload/wet_final_tst_implementation2010.pdf) and *EPA Regions 8, 9, and 10, Toxicity Training Tool (January 2010)*. The Maximum Daily Effluent Limitation (MDEL) shall be reported as "Pass" or "Fail." (Also % Effect (percent effect) shall be reported.) See the MRP.

Parameter	Units	Effluent Limitations ¹					Performance Goals Average Monthly
		Average Monthly ²	Average Weekly	Maximum Daily ³	Instantaneous Maximum ⁴	Average Monthly	
Gross alpha ¹¹ ₁₃	pCi/L	--	--	--	15	--	--
Gross beta ¹¹ ₁₃	pCi/L	--	--	--	50	--	--
Combined Radium 226 and 228	pCi/L	--	--	--	5	--	--
Tritium	pCi/L	--	--	--	20,000	--	--
Strontium 90	pCi/L	--	--	--	8	--	--
Uranium	pCi/L	--	--	--	20	--	--
Human Health Toxicants – Non-Carcinogens							
Acrolein	µg/L	--	--	--	--	--	10
Antimony	µg/L	--	--	--	--	--	2.5
Bis(2-chloroethoxy) methane	µg/L	--	--	--	--	--	25
Bis(2-chloro-isopropyl) ether	µg/L	--	--	--	--	--	10
Chlorobenzene	µg/L	--	--	--	--	--	2.5
Chromium (III)	µg/L	--	--	--	--	--	8
Di-n-butyl-phthalate	µg/L	--	--	--	--	--	0.33
Dichlorobenzene	µg/L	--	--	--	--	--	2.5
Diethyl phthalate	µg/L	--	--	--	--	--	0.25
Dimethyl phthalate	µg/L	--	--	--	--	--	10
2-Methyl-4,6-dinitrophenol	µg/L	--	--	--	--	--	25
2,4-Dinitrophenol	µg/L	--	--	--	--	--	25
Ethyl benzene	µg/L	--	--	--	--	--	2.5
Fluoranthene	µg/L	--	--	--	--	--	0.25
Hexachloro-cyclo-pentadiene	µg/L	--	--	--	--	--	25
Nitrobenzene	µg/L	--	--	--	--	--	5
Thallium	µg/L	--	--	--	--	--	5
Toluene	µg/L	--	--	--	--	--	0.6

¹³ Radioactivity: As noted in the 2015 California Ocean Plan: Not to exceed limits specified in Title 17, division 1, chapter 5, subchapter 4, group 3, article 3, section 30253 of the California Code of Regulations (CCR). Reference to section 30253 is prospective, including future changes to any incorporated provisions of federal law, as the changes take effect.

Parameter	Units	Effluent Limitations ¹					Performance Goals Average Monthly
		Average Monthly ²	Average Weekly	Maximum Daily ³	Instantaneous Maximum ⁴	Average Monthly	
Tributyltin	µg/L	--	--	--	--	--	0.0263
1,1,1-Trichloroethane	µg/L	--	--	--	--	--	2.5
Human Health Toxicants – Carcinogens							
Acrylonitrile	µg/L	--	--	--	--	--	10
Aldrin	µg/L	--	--	--	--	--	0.025
Benzene	µg/L	--	--	--	--	--	2.5
Benzidine	µg/L	0.0068	--	--	--	--	--
	lbs/day ⁶	0.0018	--	--	--	--	--
Beryllium	µg/L	--	--	--	--	--	2.5
Bis(2-chloroethyl) ether	µg/L	--	--	--	--	--	5
Bis(2-ethylhexyl) phthalate	µg/L	--	--	--	--	--	15
Carbon tetrachloride	µg/L	--	--	--	--	--	2.5
Chlordane ¹¹	µg/L	--	--	--	--	--	0.5
Chlorodibromomethane	µg/L	--	--	--	--	--	1.3
Chloroform	µg/L	--	--	--	--	--	1.2
DDT ¹¹	µg/L	--	--	--	--	--	0.25
1,4-Dichlorobenzene	µg/L	--	--	--	--	--	3
3,3'-Dichlorobenzidine	µg/L	--	--	--	--	--	25
1,2-Dichloroethane	µg/L	--	--	--	--	--	2.5
1,1-Dichloroethylene	µg/L	--	--	--	--	--	2.5
Bromodichloromethane	µg/L	--	--	--	--	--	2.5
Dichloromethane	µg/L	--	--	--	--	--	2.5
1,3-Dichloropropene	µg/L	--	--	--	--	--	2.5
Dieldrin	µg/L	--	--	--	--	--	0.05
2,4-Dinitrotoluene	µg/L	--	--	--	--	--	25
1,2-Diphenylhydrazine	µg/L	--	--	--	--	--	5

Parameter	Units	Effluent Limitations ¹					Performance Goals Average Monthly
		Average Monthly ²	Average Weekly	Maximum Daily ³	Instantaneous Maximum ⁴	Average Monthly	
Halomethanes ¹¹	µg/L	--	--	--	--	--	4.4
Heptachlor	µg/L	--	--	--	--	--	0.05
Heptachlor epoxide	µg/L	--	--	--	--	--	0.05 ¹⁴
Hexachlorobenzene	µg/L	--	--	--	--	--	5
Hexachlorobutadiene	µg/L	--	--	--	--	--	5
Hexachloroethane	µg/L	--	--	--	--	--	5
Isophorone	µg/L	--	--	--	--	--	5
N-Nitrosodimethylamine	µg/L	--	--	--	--	--	25
N-Nitrosodi-N-propylamine	µg/L	--	--	--	--	--	25
N-Nitrosodiphenylamine	µg/L	--	--	--	--	--	5
PAHs ¹¹	µg/L	--	--	--	--	--	0.097
Total PCBs ¹¹	µg/L	0.0019	--	--	--	--	--
	lbs/day ⁶	0.0005	--	--	--	--	--
TCDD equivalents ¹¹	µg/L	0.00000039	--	--	--	--	--
	lbs/day ⁶	0.0000001	--	--	--	--	--
1,1,2,2-Tetrachloroethane	µg/L	--	--	--	--	--	2.5
Tetrachloroethylene	µg/L	--	--	--	--	--	2.5
Toxaphene	µg/L	--	--	--	--	--	2.5
Trichloroethylene	µg/L	--	--	--	--	--	2.5
1,1,2-Trichloroethane	µg/L	--	--	--	--	--	2.5
2,4,6-Trichlorophenol	µg/L	--	--	--	--	--	0.74
Vinyl chloride	µg/L	--	--	--	--	--	2.5

2. Additional Effluent Limitations

- a. Waste discharged to the ocean must be essentially free of

¹⁴ A non paramateric RPA analysis concluded there was no need to maintain the limit in R4-2013-0094, as no detections were found. A value five times the minimum level in the 2015 Ocean Plan is used as the PG.

- i. Material that is floatable or will become floatable upon discharge.
- ii. Settleable material or substances that may form sediments which will degrade benthic communities or other aquatic life.
- iii. Substances that will accumulate to toxic levels in marine waters, sediments or biota.
- iv. Substances that significantly decrease the natural light to benthic communities and other marine life.
- v. Materials that result in aesthetically undesirable discoloration of the ocean surface.

3. Interim Effluent Limitations – Not Applicable

B. Land Discharge Specifications – Not Applicable

C. Recycling Specifications

The reuse of the reclaimed water is regulated under a separate WDRs and Water Recycling Requirements (WRRs) for the City of Oxnard GREAT Program – Phase 1 Project, Order No. R4-2008-0083, as amended by Order No. R4-2011-0079, Order No. R4-2011-0079-A01 and Order No. R4-2011-0079-A02, File No. 64-104 and File No. 08-070, CI-9456.

V. RECEIVING WATER LIMITATIONS

The Discharger shall not cause a violation of the following water quality objectives. Compliance with these water quality objectives shall be determined by samples collected at stations outside the zone of initial dilution as specified in the Monitoring and Reporting Program.

A. Surface Water Limitations

1. Bacterial Characteristics

a. State/Regional Water Contact Standards

Within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is further from the shoreline, and in areas outside this zone used for water contact sports, as determined by the Regional Water Board (i.e., waters designated as REC-1), the following bacterial objectives shall be maintained throughout the water column.

- i. 30-day Geometric Mean Limits
 - (a) Total coliform density shall not exceed 1,000/100 mL.
 - (b) Fecal coliform density shall not exceed 200/100 mL.
 - (c) Enterococcus density shall not exceed 35/100 mL
- ii. Single Sample Maximum Limits (SSM)
 - (a) Total coliform density shall not exceed 10,000/100 mL.
 - (b) Fecal coliform density shall not exceed 400/100 mL.
 - (c) Enterococcus density shall not exceed 104/100 mL.

- (d) Total coliform density shall not exceed 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

The geometric mean values should be calculated based on a statistically sufficient number of samples (generally not less than the 5 samples most recent samples at a site). If any of the single sample limits are exceeded, the Regional Water Board may require repeat sampling on a daily basis until the sample falls below the single sample limit in order to determine the persistence of the exceedance. When repeat sampling is required because of an exceedance of any one single sample limit, values from all samples collected during that 30-day period will be used to calculate the geometric mean.

During a wet-weather event, stormwater runoff will impact inshore and offshore stations. The day of rain (0.1 inch and greater), plus three following days' worth of bacteriology data, should be excluded from Single and Geometric mean limits.

- b. The Initial Dilution Zone for any wastewater outfall shall be excluded from designation as kelp beds for purposes of bacterial standards. Adventitious assemblages of kelp plants on waste discharge structures (e.g., outfall pipes and diffusers) do not constitute kelp beds for purposes of bacterial standards.
- c. State Water Resources Control Board, Division of Drinking Water (DDW) Standards

DDW has established minimum protective bacteriological standards for coastal waters adjacent to public beaches and for public water-contact sports areas in ocean waters. These standards are found in the CCR, Title 17, section 7958, and they are identical to the objectives contained in subsection a, above. When a public beach or public water-contact sports area fails to meet these standards, DDW or the local public health officer may post with warning signs or otherwise restrict use of the public beach or public water-contact sports area until the standards are met. DDW regulations impose more frequent monitoring and more stringent posting and closure requirements on certain high-use public beaches that are located adjacent to a storm drain that flows in the summer.

For beaches not covered under AB 411 regulations¹⁵(this incorporation by reference is prospective including future changes to the incorporated provisions as changes take effect), DDW imposes the same standards as contained in Title 17, CCR, and requires weekly sampling but allows the county health officer more discretion in making posting and closure decisions.

- d. Shellfish Harvesting Standards

At all areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the following bacterial objectives shall be maintained throughout the water column: The median total coliform density for any

¹⁵ [ftp://www.leginfo.ca.gov/pub/97-98/bill/asm/ab_0401-0450/ab_411_bill_19971008_chaptered.pdf](http://www.leginfo.ca.gov/pub/97-98/bill/asm/ab_0401-0450/ab_411_bill_19971008_chaptered.pdf)

6-month period shall not exceed 70 per 100 mL, and not more than 10 percent of the samples shall exceed 230 per 100 mL for any six-month period.

During a wet-weather event, stormwater runoff may impact areas where shellfish are harvested. The day of rain (0.1 inch and greater), plus three following days' worth of bacteriology data, should be excluded from compliance monitoring data.

2. Physical Characteristics

The waste discharged shall not:

- a. cause floating particulates and oil and grease to be visible;
- b. cause aesthetically undesirable discoloration on the ocean surface;
- c. significantly reduce the transmittance of natural light at any point outside the initial dilution zone;
- d. change the rate of deposition of inert solids and the characteristics of inert solids in ocean sediments such that benthic communities are degraded; and
- e. cause trash to be present in ocean waters, along shorelines or adjacent areas in amounts that adversely affect beneficial uses or cause nuisance.

3. Chemical Characteristics

The waste discharged shall not:

- a. cause the dissolved oxygen concentration at any time to be depressed more than 10 percent from that which occurs naturally, as a result of the discharge of oxygen demanding waste;
- b. change the pH of the receiving waters at any time more than 0.2 units from that which occurs naturally;
- c. cause the dissolved sulfide concentration of waters in and near sediments to be significantly increased above that present under natural conditions;
- d. cause concentration of substances (as set forth in Chapter II, Table 1 of the 2015 Ocean Plan) in marine sediments to be increased to levels that would degrade indigenous biota;
- e. cause the concentration of organic materials in marine sediments to be increased to levels that would degrade marine life;
- f. contain nutrients at levels that will cause objectionable aquatic growths or degrade indigenous biota;
- g. cause total chlorine residual exceeding 0.1 mg/L in the receiving water and shall not persist in the receiving water at any concentration that causes impairment of beneficial uses as a result of the discharge;
- h. produce concentrations of substances in the receiving water that are toxic to or cause detrimental physiological responses, in human, animal, or aquatic life; and
- i. contain individual pesticides or combinations of pesticides in concentrations that adversely affect beneficial uses.

4. Biological Characteristics

The waste discharged shall not:

- a. degrade marine communities, including vertebrate, invertebrate, and plant species;

- b. alter the natural taste, odor, and color of fish, shellfish, or other marine resources used for human consumption;
- c. cause the concentration of organic materials in fish, shellfish or other marine resources used for human consumption to bioaccumulate to levels that are harmful to human health; and
- d. contain substances that result in biochemical oxygen demand that adversely affects the beneficial uses of the receiving water.

5. **Radioactivity**

Discharge of radioactive waste shall not degrade marine life.

B. Groundwater Limitations – Not Applicable

C. Storm Water Requirements – Not Applicable

VI. PROVISIONS

A. Standard Provisions

- 1. The Discharger shall comply with all Standard Provisions included in Attachment D of this Order.
- 2. **Regional Water Board Standard Provisions.** The Discharger shall comply with the following provisions. In the event that there is any conflict, duplication, or overlap between provisions specified by this Order, the more stringent provision shall apply:
 - a. Neither the treatment nor the discharge of pollutants shall create a pollution, contamination, or nuisance as defined by section 13050 of the CWC.
 - b. Odors, vectors, and other nuisances of sewage or biosolids origin beyond the limits of the treatment plant site or the sewage collection system due to improper operation of facilities, as determined by the Regional Water Board, are prohibited.
 - c. All facilities used for collection, transport, treatment, or disposal of wastes shall be adequately protected against damage resulting from overflow, washout, or inundation from a storm or flood having a recurrence interval of once in 100 years.
 - d. Collection, treatment, and disposal systems shall be operated in a manner that precludes public contact with wastewater.
 - e. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of in a manner approved by the Executive Officer of the Regional Water Board.
 - f. The provisions of this Order are severable. If any provision of this Order is found invalid, the remainder of this Order shall not be affected.
 - g. Nothing in this Order shall be construed to preclude the institution of any legal action or relieve the Discharger from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation under authority preserved by section 510 of the CWA.
 - h. Nothing in this Order/Permit shall be construed to preclude the institution of any legal action or relieve the Discharger from any responsibilities, liabilities or penalties to which the Discharger is or may be subject to under section 311 of the CWA.
 - i. Discharge of wastes to any point other than specifically described in this Order is prohibited.

- j. The Discharger shall comply with all applicable effluent limitations, national standards of performance, toxic effluent standards, and all federal regulations established pursuant to sections 301, 302, 303(d), 304, 306, 307, 316, 403, and 405 of the federal CWA and amendments thereto.
- k. These requirements do not exempt the operator of the waste disposal facility from compliance with any other laws, regulations, or ordinances which may be applicable; they do not legalize this waste disposal facility; and they leave unaffected any further restraints on the disposal of wastes at this site which may be contained in other statutes or required by other agencies.
- l. Oil or oily material, chemicals, refuse, or other polluting materials shall not be stored or deposited in areas where they may be picked up by rainfall and carried off of the property and/or discharged to surface waters. Any spill of such materials shall be contained and removed immediately.
- m. A copy of these waste discharge specifications shall be maintained at the Facility so as to be available at all times to operating personnel.
- n. If there is any storage of hazardous or toxic materials or hydrocarbons at this Facility and if the Facility is not manned at all times, a 24-hour emergency response telephone number shall be prominently posted where it can easily be read from the outside.
- o. The Discharger shall file with the Regional Water Board a Report of Waste Discharge at least 120 days before making any proposed change in the character, location or volume of the discharge.
- p. The Discharger shall comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of storm water to storm drain systems or other water courses under their jurisdiction; including applicable requirements in municipal storm water management program developed to comply with NPDES permits issued by the Regional Water Board to local agencies.
- q. In the event of any change in name, ownership, or control of these waste disposal facilities, the Discharger shall notify the Regional Water Board of such change and shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to the Regional Water Board and USEPA 30 days prior to taking effect.
- r. The CWC provides that any person who violates a waste discharge requirement or a provision of the CWC is subject to civil penalties of up to \$5,000 per day, \$10,000 per day, or \$25,000 per day of violation, or when the violation involves the discharge of pollutants, is subject to civil penalties of up to \$10 per gallon per day or \$25 per gallon per day of violation, or some combination thereof, depending on the violation, or upon the combination of violations. Violation of any of the provisions of the NPDES program or of any provisions of this Order may subject the violator to any of the penalties described herein, or any combinations thereof, at the discretion of the prosecuting authority; except that only one kind of penalty may be applied for each kind of violation.
- s. CWC section 13387 provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this Order, including monitoring reports or reports of compliance or noncompliance, or who knowingly falsifies, tampers with, or renders

- inaccurate any monitoring device or method required to be maintained in this Order is subject to a fine of not more than \$25,000 or imprisonment of not more than two years, or both. For a second conviction, such a person shall be punished by a fine of not more than \$25,000 per day of violation, or by imprisonment of not more than four years, or by both.
- t. The discharge of any waste resulting from the combustion of toxic or hazardous wastes to any waste stream that ultimately discharges to waters of the United States is prohibited, unless specifically authorized elsewhere in this Order.
 - u. The Discharger shall notify the Executive Officer in writing no later than 6 months prior to planned discharge of any chemical, other than the products previously reported to the Executive Officer, which may be toxic to aquatic life. Such notification shall include:
 - i. Name and general composition of the chemical,
 - ii. Frequency of use,
 - iii. Quantities to be used,
 - iv. Proposed discharge concentrations, and
 - v. USEPA registration number, if applicable.
 - v. Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges from this facility, may subject the Discharger to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.
 - w. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, effluent limitation, or receiving water limitation of this Order, the Discharger shall notify the Chief of the Watershed Regulatory Section at the Regional Water Board by telephone (213) 620-2083, or by fax at (213) 576-6660 within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in writing to the Regional Water Board within five days, unless the Regional Water Board waives confirmation. The written notification shall state the nature, time, duration, and cause of noncompliance, and shall describe the measures being taken to remedy the current noncompliance and, prevent recurrence including, where applicable, a schedule of implementation. The written notification shall also be submitted via email with reference to CI--2022 to losangeles@waterboards.ca.gov. Other noncompliance requires written notification as above at the time of the normal monitoring report.
 - x. CWC section 13385(h)(1) requires the Regional Water Board to assess a mandatory minimum penalty of three-thousand dollars (\$3,000) for each serious violation. Pursuant to CWC section 13385(h)(2), a "serious violation" is defined as any waste discharge that violates the effluent limitations contained in the applicable waste discharge requirements for a Group II pollutant by 20 percent or more, or for a Group I pollutant by 40 percent or more. Appendix A of 40 CFR § 123.45 specifies the Group I and II pollutants. Pursuant to CWC section 13385.1(a)(1), a "serious violation" is also defined as "a failure to file a discharge monitoring report required

pursuant to section 13383 for each complete period of 30 days following the deadline for submitting the report, if the report is designed to ensure compliance with limitations contained in waste discharge requirements that contain effluent limitations.”

- y. CWC section 13385(i) requires the Regional Water Board to assess a mandatory minimum penalty of three-thousand dollars (\$3,000) for each violation whenever a person violates a waste discharge requirement effluent limitation in any period of six consecutive months, except that the requirement to assess the mandatory minimum penalty shall not be applicable to the first three violations within that time period.
- z. Pursuant to CWC section 13385.1(d), for the purposes of section 13385.1 and subdivisions (h), (i), and (j) of section 13385, “effluent limitation” means a numeric restriction or a numerically expressed narrative restriction, on the quantity, discharge rate, concentration, or toxicity units of a pollutant or pollutants that may be discharged from an authorized location. An effluent limitation may be final or interim, and may be expressed as a prohibition. An effluent limitation, for these purposes, does not include a receiving water limitation, a compliance schedule, or a best management practice.

B. Monitoring and Reporting Program (MRP) Requirements

The Discharger shall comply with the MRP, and future revisions thereto, in Attachment E of this Order.

C. Special Provisions

1. Reopener Provisions.

- a. This Order may be reopened and modified to incorporate new limits based on future reasonable potential analyses to be conducted based on on-going monitoring data collected by the Discharger and evaluated by the Regional Water Board.
- b. This Order may be modified, in accordance with the provisions set forth in 40 CFR § 122 to 124, to include new minimum levels (MLs).
- c. This Order may be reopened and modified to revise effluent limitations as a result of future Basin Plan Amendments or the adoption of a TMDL for Various Ventura Watershed Management Areas.
- d. The Regional Water Board may modify or revoke and reissue this Order if present or future investigations demonstrate that the discharge(s) governed by this Order will cause, have the potential to cause, or will contribute to adverse impacts on water quality and/or beneficial uses of the receiving waters.
- e. This Order may be modified, revoked, and reissued or terminated in accordance with the provisions of 40 CFR § 122.44, 122.62 to 122.64, 125.62, and 125.64. Causes for taking such actions include, but are not limited to, failure to comply with any condition of this Order, endangerment to human health or the environment resulting from the permitted activity, or acquisition of newly obtained information which would have justified the application of different conditions if known at the time of Order adoption and issuance. The filing of a request by the Discharger for an Order modification, revocation, and issuance or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.
- f. This Order may be modified, revoked and reissued, or terminated for cause, including, but not limited to:

- i. Violation of any term or condition contained in this Order;
 - ii. Obtaining this Order by misrepresentation, or by failure to disclose fully all relevant facts; or
 - iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- g. The filing of a request by the Discharger for an Order modification, revocation, and issuance or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.
 - h. If an applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under section 307(a) of the CWA for a toxic pollutant and that standard or prohibition is more stringent than any limitation on the pollutant in this Order, the Regional Water Board may institute proceedings under these regulations to modify or revoke and reissue the Orders to conform to the toxic effluent standard or prohibition.
 - i. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the CWA, or amendments, thereto, the Regional Water Board will revise and modify this Order in accordance with such standards.
 - j. This Order may be reopened and modified, to revise effluent limitations as a result of the delisting of a pollutant from the 303(d) list.
 - k. This Order will be reopened and modified to revise any and all of the chronic toxicity testing provisions and effluent limitations, to the extent necessary, to be consistent with a revised Ocean Plan or a Toxicity Plan that is subsequently adopted by the State Water Board promptly after USEPA-approval of such plan.
 - l. This Order will be reopened and modified to the extent necessary, to be consistent with new policies, a new state-wide plan, new laws, or new regulations.
2. **Special Studies, Technical Reports and Additional Monitoring Requirements**
- a. **Toxicity Reduction Requirements**

The Discharger shall prepare and submit a copy of the Discharger's initial investigation Toxicity Reduction Evaluation (TRE) work plan in accordance with MRP section V.A.
 - b. **Treatment Plant Capacity**

The Discharger shall submit a written report to the Executive Officer of the Regional Water Board within 90 days after the "30-day (monthly) average" daily dry-weather flow for the Oxnard WTP equals or exceeds 75 percent of the design capacity (0.75 x 31.7 MGD = 23.8 MGD) . The Discharger's senior administrative officer shall sign a letter, which transmits that report and certifies that the discharger's policy-making body is adequately informed of the report's contents. The report shall include the following:

 - i. The average daily flow for the calendar month, the date on which the peak flow occurred, the rate of that peak flow, and the total flow for the day;
 - ii. The Discharger's best estimate of when the monthly average daily dry-weather flow rate will equal or exceed the design capacity of the POTW; and

- iii. A schedule for studies, design, and other steps needed to provide additional capacity for waste treatment and/or disposal facilities before the waste flow rate equals the capacity of present units.

This requirement is applicable to those facilities that have not reached 75 percent of capacity as of the effective date of this Order. For those facilities that have reached 75 percent of capacity by that date but for which no such report has been previously submitted, such report shall be filed within 90 days of the issuance of this Order.

3. Best Management Practices and Pollution Prevention

- a. Storm Water Pollution Prevention Program (SWPPP)

The OWTP is regulated under the State Water Board Water Quality Order No. 2014-0057-DWQ, NPDES General Permit No. CAS000001, General Permit for Storm Water Discharges Associated with Industrial Activities (Industrial General Permit).

- b. Spill Cleanup Contingency Plan (SCCP)

Within 90 days of the effective date of this Order, the Discharger is required to submit a SCCP. The SCCP shall describe the activities and protocols to address clean-up of spills, overflows, and bypasses of untreated wastewater from the Discharger's collection system or treatment facilities that reach water bodies including dry channels and beach sands. At a minimum, the plan shall include sections of spill clean-up and containment measures, public notifications, and monitoring. The Discharger shall review and amend the plan as appropriate after each spill from the Facility or in the service area of the Facility. The Discharger shall include a discussion in the annual summary report of any modifications to the plan and the application of the plan to all spills during the year.

- c. Pollutant Minimization Program (PMP)

Reporting protocols in the MRP describe sample results that are to be reported as Detected but Not Quantified (DNQ) or Not Detected (ND). Definitions for a reported ML and Method Detection Limit (MDL) are provided in the Ocean Plan. These reporting protocols and definitions are used in determining the need to conduct a PMP as follows:

The Discharger shall develop and conduct a PMP as further described below when there is evidence (e.g., sample results reported as DNQ, and when the effluent limitation is less than the MDL; sample results from analytical methods more sensitive than those methods required by this Order; presence of whole effluent toxicity; health advisories for fish consumption, or results of benthic or aquatic organism tissue sampling) that a pollutant is present in the effluent above an effluent limitation and either of the following is true:

- i. The concentration of the pollutant is reported as DNQ and the effluent limitation is less than the reported ML;
- ii. The concentration of the pollutant is reported as ND and the effluent limitation is less than the MDL, using definitions described in Attachment A and reporting protocols described in MRP section X.B.4.

The goal of the PMP shall be to reduce all potential sources of a pollutant through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Regional Water Board may consider cost-effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan (PPP), if required pursuant to CWC section 13263.3(d), shall be considered to fulfill the PMP requirements.

The PMP shall include, but not be limited to, the following actions and submittals acceptable to the Regional Water Board:

- i. An annual review and semi-annual monitoring of potential sources of the reportable pollutant(s), which may include fish tissue monitoring and other bio-uptake sampling;
- ii. Quarterly monitoring for the reportable pollutant(s) in the influent to the wastewater treatment system;
- iii. Submittal of a control strategy designed to proceed toward the goal of maintaining concentrations of the reportable pollutant(s) in the effluent at or below the effluent limitation;
- iv. Implementation of appropriate cost-effective control measures for the reportable pollutant(s), consistent with the control strategy; and
- v. An annual status report that shall be sent to the Regional Water Board including:
 - (a) All PMP monitoring results for the previous year;
 - (b) A list of potential sources of the reportable pollutant(s);
 - (c) A summary of all actions undertaken pursuant to the control strategy; and
 - (d) A description of actions to be taken in the following year.

4. Construction, Operation and Maintenance Specifications.

- a. Wastewater treatment facilities subject to this Order shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to CCR, title 23, division 3, chapter 26 (CWC sections 13625 – 13633).
- b. The Discharger shall maintain in good working order a sufficient alternate power source for operating the wastewater treatment and disposal facilities. All equipment shall be located to minimize failure due to moisture, liquid spray, flooding, and other physical phenomena. The alternate power source shall be designed to permit inspection and maintenance and shall provide for periodic testing. If such alternate power source is not in existence, the Discharger shall halt, reduce, or otherwise control all discharges upon the reduction, loss, or failure of the primary source of power.
- c. The Discharger shall provide standby or emergency power facilities and/or storage capacity or other means so that in the event of plant upset or outage due to power

failure or other cause, discharge of raw or inadequately treated sewage does not occur.

- d. The Discharger shall update as necessary, the "Operation and Maintenance Manual (O&M Manual)" which it has developed for the treatment facility to conform to latest plant changes and requirements. The O&M Manual shall be readily available to operating personnel onsite. The O&M Manual shall include the following:
 - i. Description of the treatment plant personnel organization and listing of emergency contacts.
 - ii. Detailed description of safe and effective operation and maintenance of treatment processes, process control instrumentation and equipment.
 - iii. Process and equipment inspection and maintenance schedules.
 - iv. Description of safeguards to assure that, should there be reduction, loss, or failure of electric power, the Discharger will be able to comply with requirements of this Order.
 - v. Reference to the most current SCCP.

5. Special Provisions for Publicly-Owned Treatment Works (POTWs).

a. Biosolids Disposal Requirements – Refer to Attachment H

- i. All biosolids generated at the wastewater treatment plant must be disposed of, treated, or applied to land in accordance with federal regulations contained in 40 Code of Federal Regulations (CFR) § 503. These requirements are enforceable by USEPA.

b. Pretreatment Requirements – Refer to Attachment I

- i. The Discharger has developed and implemented a Pretreatment Program that was previously submitted to this Regional Water Board and USEPA. This Order requires implementation of the approved Pretreatment Program. Any violation of the Pretreatment Program will be considered a violation of this Order.
- ii. Any change to the program shall be reported to the Regional Water Board and USEPA in writing and shall not become effective until approved by the Executive Officer in accordance with procedures established in 40 CFR § 403.18.
- iii. Applications for renewal or modification of this Order must contain information about industrial discharges to the POTW pursuant to 40 CFR § 122.21(j)(6). Pursuant to 40 CFR § 122.42(b) and provision VII.A of Attachment D, Standard Provisions, of this Order, the Discharger shall provide adequate notice of any new introduction of pollutants or substantial change in the volume or character of pollutants from industrial discharges which were not included in the permit application. Pursuant to 40 CFR § 122.44(j)(1), the Discharger shall annually identify and report, in terms of character and volume of pollutants, any Significant Industrial Users discharging to the POTW subject to Pretreatment Standards under section 307(b) of the CWA and 40 CFR § 403.

- iv. The Discharger shall evaluate whether its pretreatment local limits are adequate to meet the requirements of this Order and shall submit a written technical report as required under Attachment I. The Discharger shall submit revised local limits to the Regional Water Board and USEPA for approval, as necessary. In addition, the Discharger shall consider collection system overflow protection from such constituents as oil and grease, etc.
- v. The Discharger shall comply with requirements contained in Attachment I – Pretreatment Reporting Requirements.

6. Collection System Requirements.

The Discharger is subject to the requirements of, and must comply with State Water Resources Control Board (State Water Board) Order 2006-0003-DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, including monitoring and reporting requirements as amended by State Water Board Order WQ 2013-0058-EXEC and any subsequent order.

7. Spill Reporting Requirements for POTWs

a. Initial Notification

Although State and Regional Water Board staff does not have duties as first responders, this requirement is an appropriate mechanism to ensure that the agencies that do have first responder duties are notified in a timely manner in order to protect public health and beneficial uses. For certain spills, overflows and bypasses, the Discharger shall make notifications as required below:

- i. In accordance with the requirements of Health and Safety Code section 5411.5, the Discharger shall provide notification to the local health officer or the director of environmental health with jurisdiction over the affected water body of any unauthorized release of sewage or other waste that causes, or probably will cause, a discharge to any waters of the state as soon as possible, but no later than **two hours** after becoming aware of the release.
- ii. In accordance with the requirements of CWC section 13271, the Discharger shall provide notification to the California Office of Emergency Services (Cal OES) of the release of reportable amounts of hazardous substances or sewage that causes, or probably will cause, a discharge to any waters of the state as soon as possible, but not later than **two hours** after becoming aware of the release. The CCR, Title 23, section 2250, defines a reportable amount of sewage as being 1,000 gallons. The phone number for reporting these releases to the Cal OES is (800) 852-7550.
- iii. The Discharger shall notify the Regional Water Board of any unauthorized release of sewage from its POTW that causes, or probably will cause, a discharge to a water of the United States as soon as possible, but not later than **two hours** after becoming aware of the release. This initial notification does not need to be made if the Discharger has notified Cal OES and the local health officer or the director of environmental health with jurisdiction over the affected water body. The phone number for reporting these releases of sewage to the Regional Water Board is (213) 576-6657. The phone numbers for after hours and weekend reporting of releases of sewage to the Regional Water Board are (213) 305-2284 and (213) 305-2253.

At a minimum, the following information shall be provided to the Regional Water Board:

- (a) The location, date, and time of the release;
- (b) The route of the spill including the water body that received or will receive the discharge;
- (c) An estimate of the amount of sewage or other waste released and the amount that reached a surface water at the time of notification;
- (d) If ongoing, the estimated flow rate of the release at the time of the notification; and,
- (e) The name, organization, phone number and email address of the reporting representative.

b. Monitoring

For spills, overflows and bypasses reported under section VII.C.7.a, the Discharger shall monitor as required below:

To define the geographical extent of the spill's impact, the Discharger shall obtain grab samples from the receiving water for all spills, overflows or bypasses of any volume that reach any waters of the state (including surface and ground waters). If a grab sample cannot be obtained due to accessibility or safety concerns, the sample shall be obtained as soon as it becomes safe to do so. The Discharger shall analyze the samples for total coliform, fecal coliform, *Escherichia coli* (if fecal coliform tests positive), *Enterococcus*, and relevant pollutants of concern, upstream and downstream of the point of entry of the spill (if feasible, accessible, and safe). This monitoring shall be done on a daily basis from the time the spill is known until the results of two consecutive sets of bacteriological monitoring indicate the return to the background level or the Division of Drinking Water authorizes cessation of monitoring.

c. Reporting

The initial notification required under section VII.C.7.a shall be followed by:

- i. As soon as possible, but **not later than twenty-four (24)** hours after becoming aware of an unauthorized discharge of sewage or other waste from its wastewater treatment plant to a water of the state, the Discharger shall submit a statement to the Regional Water Board by email at augustine.anijelo@waterboards.ca.gov and to the USEPA by telephone at (415) 972-3577 or facsimile at (415) 947-3545. If the discharge is 1,000 gallons or more, this statement shall certify that Cal OES has been notified of the discharge in accordance with CWC section 13271. The statement shall also certify that the local health officer or director of environmental health with jurisdiction over the affected water bodies has been notified of the discharge in accordance with Health and Safety Code section 5411.5. The statement shall also include at a minimum the following information:
 - (a) Agency, NPDES No., Order No., and MRP CI No., if applicable;
 - (b) The location, date, and time of the discharge;
 - (c) The water body that received the discharge;

- (d) A description of the level of treatment of the sewage or other waste discharged;
 - (e) An initial estimate of the amount of sewage or other waste released and the amount that reached a surface water;
 - (f) The Cal OES control number and the date and time that notification of the incident was provided to Cal OES; and,
 - (g) The name of the local health officer or director of environmental health representative notified (if contacted directly); the date and time of notification; and the method of notification (e.g., phone, fax, email).
- ii. A written preliminary report five (5) working days after disclosure of the incident is required. Submission to the Regional Water Board of the California Integrated Water Quality System (CIWQS) Sanitary Sewer Overflow (SSO) event number shall satisfy this requirement. Within 30 days after submitting the preliminary report, the Discharger shall submit the final written report to this Regional Water Board. (A copy of the final written report, for a given incident, already submitted pursuant to a statewide General WDRs for Wastewater Collection System Agencies (SSO WDR) may be submitted to the Regional Water Board to satisfy this requirement.) The written report shall document the information required in paragraph d below, monitoring results and any other information required in provisions of the Standard Provisions document including corrective measures implemented or proposed to be implemented to prevent/minimize future occurrences. The Executive Officer, for just cause, can grant an extension for submittal of the final written report.
 - iii. The Discharger shall include a certification in the annual summary report (due according to the schedule in the MRP) that states that the sewer system emergency equipment, including alarm systems, backup pumps, standby power generators, and other critical emergency pump station components were maintained and tested in accordance with the Discharger's preventive maintenance plan. Any deviations from or modifications to the plan shall be discussed.

d. Records

The Discharger shall develop and maintain a record of all spills, overflows or bypasses of raw or partially treated sewage from its collection system or treatment plant. This record shall be made available to the Regional Water Board and USEPA upon request and a spill summary shall be included in the annual summary report. The records shall contain:

- i. The date and time of each spill, overflow, or bypass;
- ii. The location of each spill, overflow, or bypass;
- iii. The estimated volume of each spill, overflow, and bypass including gross volume, amount recovered and amount not recovered, monitoring results as required by section VII.C.7;
- iv. The cause of each spill, overflow, or bypass;

- v. Whether each spill, overflow, or bypass entered a receiving water and, if so, the name of the water body and whether it entered via storm drains or other man-made conveyances;
- vi. Any mitigation measures implemented;
- vii. Any corrective measures implemented or proposed to be implemented to prevent/minimize future occurrences; and
- viii. The mandatory information included in SSO online reporting for finalizing and certifying the SSO report for each spill, overflow, or bypass under the SSO WDR.

e. Activities Coordination

Although not required by this Order/Permit, the Regional Water Board expects that the POTW's owners/operators will coordinate their compliance activities for consistency and efficiency with other entities that have responsibilities to implement: (i) this NPDES permit, including the Pretreatment Program, (ii) a MS4 NPDES permit that may contain spill prevention, sewer maintenance, reporting requirements and (iii) the SSO WDR.

f. Consistency with Sanitary Sewer Overflow (SSO) WDRs

The CWA prohibits the discharge of pollutants from point sources to surface waters of the United States unless authorized under an NPDES permit. (33 United States Code (USC), sections 1311, 1342). The State Water Board adopted General Waste Discharge Requirements for Sanitary Sewer Systems, (WQ Order No. 2006-0003-DWQ; SSO WDR) on May 2, 2006, to provide a consistent, statewide regulatory approach to address sanitary sewer overflows. The SSO WDR requires public agencies that own or operate sanitary sewer systems to apply for coverage under the SSO WDR, develop and implement sewer system management plans, and report all SSOs to the State Water Board's online SSOs database. Regardless of the coverage obtained under the SSO WDR, the Discharger's collection system is part of the POTW that is subject to this NPDES permit. As such, pursuant to federal regulations, the Discharger must properly operate and maintain its collection system (40 CFR § 122.41 (e)), report any non-compliance (40 CFR § 122.41(1)(6) and (7)), and mitigate any discharge from the collection system in violation of this NPDES permit (40 CFR § 122.41(d)).

The requirements contained in this Order in sections VII.C.3.b (SCCP), VII.C.4 (Construction, Operation and Maintenance Specifications), and VII.C.7 (Spill Reporting Requirements) are intended to be consistent with the requirements of the SSO WDR. The Regional Water Board recognizes that there may be some overlap between these NPDES permit provisions and SSO WDR requirements, related to the collection systems. The requirements of the SSO WDR are considered the minimum thresholds (see finding 11 of State Water Board Order No. 2006-0003-DWQ). To encourage efficiency, the Regional Water Board will accept the documentation prepared by the Dischargers under the SSO WDR for compliance purposes as satisfying the requirements in sections VII.C.3.b, VII.C.4, and VII.C.7 provided the more stringent provisions contained in this NPDES permit are also addressed. Pursuant to SSO WDR, section D, provision 2(iii) and (iv), the

provisions of this NPDES permit supersede the SSO WDR, for all purposes, including enforcement, to the extent the requirements may be deemed duplicative.

8. Other Special Provisions – Not Applicable
9. Compliance Schedules – Not Applicable.

VII. COMPLIANCE DETERMINATION

Compliance with the effluent limitations contained in section IV of this Order will be determined as specified below:

A. General

Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined in the MRP and Attachment A of this Order. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL) or minimum level (ML).

B. Multiple Sample Data

When determining compliance with a measure of central tendency (arithmetic mean, geometric mean, median, etc.) of multiple sample analyses and the data set contains one or more reported determinations of DNQ or ND, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

1. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

C. Average Monthly Effluent Limitation (AMEL)

If the average (or when applicable, the median determined by subsection B above for multiple sample data) of daily discharges over a calendar month exceeds the AMEL for a given parameter, the Discharger will be considered out of compliance for the month and may be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). For those average monthly effluent limitations that are based on the 6-month median water quality objectives in the 2015 Ocean Plan, the daily value used to calculate these average monthly values for intermittent discharges, shall be considered to equal zero for days on which no discharge occurred. The Discharger will only be considered out of compliance for days when the discharge occurs.

For any one calendar month during which no sample (daily discharge) is collected, no compliance determination can be made for that calendar month with respect to the AMEL.

If the analytical result of a single sample, monitored monthly, quarterly, semiannually, or annually, does not exceed the AMEL for a given parameter, the Discharger will have demonstrated compliance with the AMEL for each day of that month for that parameter.

If the analytical result of any single sample, monitored monthly, quarterly, semiannually, or annually, exceeds the AMEL for any parameter, the Discharger may collect up to four additional samples within the same calendar month. All analytical results shall be reported in the monitoring report for that month. The concentration of pollutant (an arithmetic mean or a median) in these samples estimated from the "Multiple Sample Data Reduction" section above, will be used for compliance determination.

In the event of noncompliance with an AMEL, the sampling frequency for that parameter shall be increased to weekly and shall continue at this level until compliance with the AMEL has been demonstrated.

D. Average Weekly Effluent Limitation (AWEL)

If the average of daily discharges over a calendar week exceeds the AWEL for a given parameter, a potential violation will be flagged and the Discharger will be considered out of compliance for each day of that week for that parameter, resulting in 7 days of non-compliance. The average of daily discharges over the calendar week that exceeds the AWEL for a parameter will be considered out of compliance for that week only. If only a single sample is collected during the calendar week and the analytical result for that sample exceeds the AWEL, the Discharger will be considered out of compliance for that calendar week. For any one calendar week during which no sample (daily discharge) is collected, no compliance determination can be made for that calendar week with respect to the AWEL.

A calendar week will begin on Sunday and end on Saturday. Partial calendar weeks at the end of calendar month will be carried forward to the next month in order to calculate and report a consecutive seven-day average value on Saturday.

E. Maximum Daily Effluent Limitation (MDEL)

If a 24-hour composite sample exceeds the MDEL for a given parameter, a potential violation will be flagged and the Discharger will be considered out of compliance for that parameter for that one day only within the reporting period. If no sample (daily discharge) is taken over a calendar day, no compliance determination can be made for that day with respect to effluent violation determination, but compliance determination can be made for that day with respect to reporting violation determination.

F. Instantaneous Minimum Effluent Limitation

If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, a potential violation will be flagged and the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples collected within a calendar day that both are lower than the instantaneous minimum effluent limitation would result in two instances of non-compliance with the instantaneous minimum effluent limitation).

G. Instantaneous Maximum Effluent Limitation

If the analytical result of a single grab sample is higher than the instantaneous maximum effluent limitation for a parameter, a potential violation will be flagged and the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples collected

within a calendar day that both exceed the instantaneous maximum effluent limitation would result in two instances of non-compliance with the instantaneous maximum effluent limitation)

H. Six-month Median Effluent Limitation

If the median of daily discharges over any 180-day period exceeds the six-month median effluent limitation for a given parameter, a potential violation will be flagged and the Discharger will be considered out of compliance for each day of that 180-day period for that parameter. The next assessment of compliance will occur after the next sample is collected. If only a single sample is collected during a given 180-day period and the analytical result for that sample exceeds the six-month median, the Discharger will be considered out of compliance for the 180-day period. For any 180-period during which no sample is collected, no compliance determination can be made for the six-month median effluent limitation.

I. Annual Average Effluent Limitation

If the annual average of monthly discharges over a calendar year exceeds the annual average effluent limitation for a given parameter, a potential violation will be flagged and the Discharger will be considered out of compliance for each month of that year for that parameter. However, a potential violation of the annual average effluent limitation will be considered one violation for the purpose of assessing State mandatory minimum penalties. If no sample (daily discharge) is collected over a calendar year, no compliance determination can be made for that year with respect to effluent violation determination, but compliance determination can be made for that month with respect to reporting violation determination.

J. Chronic Toxicity

The discharge is subject to determination of "Pass" or "Fail" from a chronic toxicity test using the TST statistical t-test approach described in the National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (USEPA 833-R-10-003, 2010), Appendix A, Figure A-1, Table A-1, and Appendix B, Table B-1. The null hypothesis (H_0) for the TST statistical approach is: Mean discharge In-stream Waste Concentration (IWC) response $\leq 0.75 \times$ Mean control response. A test result that rejects this null hypothesis is reported as "Pass." A test result that does not reject this null hypothesis is reported as "Fail." This is a t-test (formally Student's t-test), a statistical analysis comparing two sets of replicate observations – in the case of a Whole Effluent Toxicity (WET) test, only two test concentrations (i.e. a control and IWC). The purpose of this statistical test is to determine if the means of the two sets of observations are different (i.e. if the IWC or receiving water concentration differs from the control (the test result is "Pass" or "Fail")). The Welch's t-test employed by the TST statistical approach is an adaptation of Student's t-test and is used with two samples having unequal variances.

The Maximum Daily Effluent Limitation (MDEL) 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 chronic toxicity MDEL is set at the IWC for the discharge and expressed in units of the TST statistical approach ("Pass" or "Fail"). All NPDES effluent compliance monitoring for the chronic toxicity MDEL shall be reported using only the IWC effluent concentration and negative control, expressed in units of the TST. The TST hypothesis (H_0) (see above) is statistically analyzed using the IWC and a negative control. Effluent toxicity tests shall be run 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). The Regional Water Board's review of reported toxicity test results will include review of concentration-response patterns as appropriate (see Fact Sheet discussion at V.C.6). As

described in the laboratory audit directives to the San Jose Creek Water Quality Laboratory from the State Water Resources Control Board dated August 07, 2014, and from USEPA dated December 24, 2013, the Percent Minimum Significant Difference (PMSD) criteria only apply to compliance reporting for the No Observed Effect Concentration (NOEC) and the sublethal statistical endpoints of the NOEC, and therefore are not used to interpret TST results. Standard Operating Procedures used by the toxicity testing laboratory to identify and report valid, invalid, anomalous, or inconclusive effluent (and receiving water) toxicity test measurement results from the TST statistical approach, including those that incorporate a consideration of concentration-response patterns, must be submitted to the Regional Water Board (40 CFR § 122.41(h)). The Regional Water Board will make a final determination as to whether a toxicity test result is valid, and may consult with the Discharger, USEPA, the State Water Board’s Quality Assurance Officer, or the State Water Board’s Environmental Laboratory Accreditation Program as needed.

K. Percent Removal

The average monthly percent removal is the removal efficiency expressed in percentage across a treatment plant for a given pollutant parameter, as determined from the 30-day average values of pollutant concentrations (C in mg/L) of influent and effluent samples collected at about the same time using the following equation:

$$\text{Percent Removal (\%)} = [1 - (C_{\text{Effluent}}/C_{\text{Influent}})] \times 100 \%$$

When preferred, the Discharger may substitute mass loadings and mass emissions for the concentrations.

L. Mass and Concentration Limitations

Compliance with mass and concentration effluent limitations for the same parameter shall be determined separately with their respective limitations. When the concentration of a constituent in an effluent sample is determined to be ND or DNQ, the corresponding mass emission rate determined from that sample concentration shall also be reported as ND or DNQ.

M. Compliance with Single Constituent Effluent Limitations

Dischargers may be considered out of compliance with the effluent limitation if the concentration of the pollutant (see section B “Multiple Sample Data Reduction” above) in the monitoring sample is greater than the effluent limitation and greater than or equal to the ML or RL.

N. Compliance with Effluent Limitations Expressed as a Sum of Several Constituents

Dischargers are out of compliance with an effluent limitation which applies to the sum of a group of chemicals (e.g., PCB’s) if the sum of the individual pollutant concentrations is greater than the effluent limitation. Individual pollutants of the group will be considered to have a concentration of zero if the constituent is reported as ND or DNQ.

O. Mass Emission Rate

The mass emission rate shall be obtained from the following calculation for any calendar day:

$$\text{Mass emission rate (lbs/day)} = \frac{8.34}{N} \sum_{i=1}^N Q_i C_i$$

$$\text{Mass emission rate (kg/day)} = \frac{3.79}{N} \sum_{i=1}^N Q_i C_i$$

in which 'N' is the number of samples analyzed in any calendar day. 'Qi' and 'Ci' are the flow rate (MGD) and the constituent concentration (mg/L), respectively, which are associated with each of the 'N' grab samples, which may be collected on any calendar day. If a composite sample is taken, 'Ci' is the concentration measured in the composite sample and 'Qi' is the average flow rate occurring during the period over which samples are composited.

The daily concentration of all constituents shall be determined from the flow-weighted average of the same constituents in the combined waste streams as follows:

$$\text{Daily concentration} = \frac{1}{Q_t} \sum_{i=1}^N Q_i C_i$$

in which 'N' is the number of component waste streams. 'Qi' and 'Ci' are the flow rate (MGD) and the constituent concentration (mg/L), respectively, which are associated with each of the 'N' waste streams. 'Qt' is the total flow rate of the combined waste streams.

P. Bacterial Standards and Analysis

1. The geometric mean used for determining compliance with bacterial standards is calculated with the following equation:

$$\text{Geometric Mean} = (C_1 \times C_2 \times \dots \times C_n)^{1/n}$$

- where n is the number of days samples were collected during the period and C is the concentration of bacteria (MPN/100 mL or CFU/100 mL) found on each day of sampling.
2. For bacterial analyses, sample dilutions should be performed so the expected range of values is bracketed (for example, with multiple tube fermentation method or membrane filtration method, 2 to 16,000 per 100 mL for total and fecal coliform, at a minimum, and 1 to 1000 per 100 mL for *Enterococcus*). The detection methods used for each analysis shall be reported with the results of the analyses.
 3. Detection methods used for coliforms (total and fecal) shall be those presented in Table 1A of 40 CFR § 136, unless alternate methods have been approved by USEPA pursuant to 40 CFR § 136, or improved methods have been determined by the Executive Officer and/or USEPA.
 4. Detection methods used for *Enterococcus* shall be those presented in Table 1A of 40 CFR § 136 or in the USEPA publication EPA 600/4-85/076, Test Methods for Escherichia coli and Enterococci in Water By Membrane Filter Procedure or any improved method determined by the Executive Officer and/or USEPA to be appropriate.
 5. The existing water quality objectives for bacteria may be superseded by the Ocean Plan Bacteria Amendment following completion of the adoption and approval processes.

Q. Single Operational Upset (SOU)

A SOU that leads to simultaneous violations 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:

1. A SOU is broadly defined as a single unusual event that temporarily disrupts the usually satisfactory operation of a system in such a way that it results in violation of multiple pollutant parameters.

2. A Discharger may assert SOU to limit liability only for those violations which the Discharger submitted notice of the upset as required in Provision V.E.2 (b) of Attachment D – Standard Provisions.
3. For purpose outside of CWC section 13385 subdivisions (h) and (i), determination of compliance and civil liability (including any more specific definition of SOU, the requirements for Dischargers to assert the SOU limitation of liability, and the manner of counting violations) shall be in accordance with USEPA Memorandum “Issuance of Guidance Interpreting Single Operational Upset” (September 27, 1989).
4. For purpose of CWC section 13385 (h) and (i), determination of compliance and civil liability (including any more specific definition of SOU, the requirements for Dischargers to assert the SOU limitation of liability, and the manner of counting violations) shall be in accordance with CWC section 13385 (f)(2).

A.

ATTACHMENT A – DEFINITIONS

Areas of Special Biological Significance (ASBS)

Those areas designated by the State Water Resources Control Board (State Water Board) as ocean areas requiring protection of species or biological communities to the extent that alteration of natural water quality is undesirable. All Areas of Special Biological Significance are also classified as a subset of STATE WATER QUALITY PROTECTION AREAS.

Arithmetic Mean (μ)

Also called the average, is the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

Arithmetic mean = $\mu = \Sigma x / n$ where: Σx is the sum of the measured ambient water concentrations, and n is the number of samples.

Average Monthly Effluent Limitation (AMEL)

The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Effluent Limitation (AWEL)

The highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Bioaccumulative

Those substances taken up by an organism from its surrounding medium through gill membranes, epithelial tissue, or from food and subsequently concentrated and retained in the body of the organism.

Biosolids

Sewage sludge that has been treated and tested and shown to be capable of being beneficially and legally used pursuant to federal and state regulators as a soil amendment for agricultural, silvicultural, horticultural, and land reclamation activities as specified under 40 CFR Part 503.

Carcinogenic

Pollutants are substances that are known to cause cancer in living organisms.

Chlordane

Shall mean the sum of chlordane-alpha, chlordane-gamma, chlordene-alpha, chlordene-gamma, nonachlor-alpha, nonachlor-gamma, and oxychlordane.

Coefficient of Variation (CV)

CV is a measure of the data variability and is calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

Composite Sample

For flow rate measurements, the arithmetic mean of no fewer than eight individual measurements taken at equal intervals for 24 hours or for the duration of discharge, whichever is shorter.

Composite sample, for other than flow rate measurements, means:

- a. No fewer than eight individual sample portions taken at equal time intervals for 24 hours, The volume of each individual sample portion shall be directly proportional to the discharge flow rate at the time of sampling; or,
- b. No fewer than eight individual sample portions taken of equal time volume taken over a 24 hour period. The time interval between each individual sample portion shall vary such that the volume of the discharge between each individual sample portion remains constant.

The compositing period shall equal the specified sampling period, or 24 hours, if no period is specified.

The composite sample result shall be reported for the calendar day during which composite sampling ends.

Daily Discharge

Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12:00 am through 11:59 pm) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

DDT

Shall mean the sum of 4,4'-DDT, 2,4'-DDT, 4,4'-DDE, 2,4'-DDE, 4,4'-DDD, and 2,4'-DDD.

Degrade

Degradation shall be determined by comparison of the waste field and reference site(s) for characteristic species diversity, population density, contamination, growth anomalies, debility, or supplanting of normal species by undesirable plant and animal species. Degradation occurs if there are significant differences in any of three major biotic groups, namely, demersal fish, benthic invertebrates, or attached algae. Other groups may be evaluated where benthic species are not affected, or are not the only ones affected.

Detected, but Not Quantified (DNQ)

Sample results that are less than the reported Minimum Level, but greater than or equal to the laboratory's MDL. Sample results reported as DNQ are estimated concentrations.

Dilution Credit

Dilution Credit is the amount of dilution granted to a discharge in the calculation of a water quality-based effluent limitation, based on the allowance of a specified mixing zone. It is calculated from the dilution ratio or determined through conducting a mixing zone study or modeling of the discharge and receiving water.

Dichlorobenzenes

The sum of 1,2- and 1,3-dichlorobenzene.

Downstream Ocean Waters

Waters downstream with respect to ocean currents.

Dredged Material

Any material excavated or dredged from the navigable waters of the United States, including material otherwise referred to as "spoil."

Enclosed Bays

Indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. This definition includes but is not limited to: Humboldt Bay, Bodega Harbor, Tomales Bay, Drakes Estero, San Francisco Bay, Morro Bay, Los Angeles Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay. Enclosed bays do not include inland surface waters or ocean waters.

Endosulfan

The sum of endosulfan-alpha and -beta and endosulfan sulfate.

Estimated Chemical Concentration

The estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

Estuaries and Coastal Lagoons

Estuaries and coastal lagoons are waters at the mouths of streams that serve as mixing zones for fresh and ocean waters during a major portion of the year. Mouths of streams that are temporarily separated from the ocean by sandbars shall be considered as estuaries. Estuarine waters will generally be considered to extend from a bay or the open ocean to the upstream limit of tidal action but may be considered to extend seaward if significant mixing of fresh and salt water occurs in the open coastal waters. The waters described by this definition include but are not limited to the Sacramento-San Joaquin Delta as defined by Section 12220 of the California Water Code (CWC), Suisun Bay, Carquinez Strait downstream to Carquinez Bridge, and appropriate areas of the Smith, Klamath, Mad, Eel, Noyo, and Russian Rivers.

Grab Sample

An individual sample collected during a period of time not to exceed 15 minutes. Grab samples shall be collected during normal peak loading conditions for the parameter of interest, which may or may not occur during hydraulic peaks.

Halomethanes

The sum of bromoform, bromomethane (methyl bromide) and chloromethane (methyl chloride).

HCH

The sum of the alpha, beta, gamma (lindane) and delta isomers of hexachlorocyclohexane.

Initial Dilution

The process that results in the rapid and irreversible turbulent mixing of wastewater with ocean water around the point of discharge.

For a submerged buoyant discharge, characteristic of most municipal and industrial wastes that are released from the submarine outfalls, the momentum of the discharge and its initial buoyancy act together to produce turbulent mixing. Initial dilution in this case is completed when the diluting wastewater ceases to rise in the water column and first begins to spread horizontally.

For shallow water submerged discharges, surface discharges, and non-buoyant discharges, characteristic of cooling water wastes and some individual discharges, turbulent mixing results primarily from the momentum of discharge. Initial dilution, in these cases, is considered to be completed when the momentum induced velocity of the discharge ceases to produce significant mixing of the waste, or the diluting plume reaches a fixed distance from the discharge to be specified by the Regional Water Board, whichever results in the lower estimate for initial dilution.

Instantaneous Maximum Effluent Limitation

The highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

Instantaneous Minimum Effluent Limitation

The lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

In-stream Waste Concentration (IWC)

The concentration of a toxicant or the parameter of toxicity in the receiving water after mixing

Kelp Beds

For purposes of the bacteriological standards of the Ocean Plan, are significant aggregations of marine algae of the genera *Macrocystis* and *Nereocystis*. Kelp beds include the total foliage canopy of *Macrocystis* and *Nereocystis* plants throughout the water column.

Mariculture

The culture of plants and animals in marine waters independent of any pollution source.

Material

(a) In common usage: (1) the substance or substances of which a thing is made or composed (2) substantial; (b) For purposes of the Ocean Plan relating to waste disposal, dredging and the disposal of dredged material and fill, MATERIAL means matter of any kind or description which is subject to regulation as waste, or any material dredged from the navigable waters of the United States. See also, DREDGED MATERIAL.

Maximum Daily Effluent Limitation (MDEL)

The highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

Median

The middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements (n) is odd, then the median = $X_{(n+1)/2}$. If n is even, then the median = $(X_{n/2} + X_{(n/2)+1})/2$ (i.e., the midpoint between the n/2 and n/2+1).

Method Detection Limit (MDL)

The minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in 40 CFR part 136, Attachment B.

Natural Light

Reduction of natural light may be determined by the Regional Water Board by measurement of light transmissivity or total irradiance, or both, according to the monitoring needs of the Regional Water Board.

Not Detected (ND)

Sample results which are less than the laboratory's MDL.

Ocean Waters

The territorial marine waters of the state as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. If a discharge outside the territorial waters of the state could affect the quality of the waters of the state, the discharge may be regulated to assure no violation of the Ocean Plan will occur in ocean waters.

PAHs (polycyclic aromatic hydrocarbons)

The sum of acenaphthylene, anthracene, 1,2-benzanthracene, 3,4-benzofluoranthene, benzo[k]fluoranthene, 1,12-benzoperylene, benzo[a]pyrene, chrysene, dibenzo[ah]anthracene, fluorene, indeno[1,2,3-cd]pyrene, phenanthrene and pyrene.

PCBs (polychlorinated biphenyls) as Aroclors

The sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254 and Aroclor-1260.

PCBs as Congeners

The sum of the following 41 individually quantified PCB congeners: PCB-18, 28, 37, 44, 49, 52, 66, 70, 74, 77, 81, 87, 99, 101, 105, 110, 114, 118, 119, 123, 126, 128, 138, 149, 151, 153, 156, 157, 158, 167, 168, 169, 170, 177, 180, 183, 187, 189, 194, 201, and 206.

PCBs, Total

For compliance with the final effluent limitations based on the TMDL WLAs, Total PCBs shall be PCBs as Aroclors or PCBs as congeners, whichever concentration is greater.

Persistent Pollutants

Persistent pollutants are substances for which degradation or decomposition in the environment is nonexistent or very slow.

Phenolic Compounds (chlorinated)

The sum of 2-chlorophenol, 2,4-dichlorophenol, 4-chloro-3-methylphenol, 2,4,6-trichlorophenol, and pentachlorophenol.

Phenolic Compounds (non-chlorinated)

The sum of 2,4-dimethylphenol, 2-nitrophenol, 4-nitrophenol, 2,4-dinitrophenol, 4,6-dinitro-2-methylphenol, and phenol.

Pollutant Minimization Program (PMP)

PMP means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of Ocean Plan Table 1 pollutants through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Regional Water Board may consider cost effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to CWC section 13263.3(d), shall be considered to fulfill the PMP requirements.

Pollution Prevention

Any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant that is discharged into water and includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as defined in CWC section 13263.3). Pollution prevention does not include actions that merely shift a pollutant in wastewater from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the State Water Resources Control Board (State Water Board), Regional Water Board, or USEPA.

Publicly Owned Treatment Works.

A treatment works as defined by section 212 of the CWA, which is owned by a State or municipality (as defined by section 502(4) of the Act). This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to a POTW Treatment Plant. The term also means the municipality which has jurisdiction over the Indirect Discharges to and the discharges from such treatment works. (40 CFR § 403.3(q).)

Reported Minimum Level

The reported ML (also known as the Reporting Level or RL) is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order, including an additional factor if applicable as discussed herein. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Regional Water Board either from Appendix II of the Ocean Plan in accordance with section III.C.5.a. of the Ocean Plan or established in accordance with section III.C.5.b. of the Ocean Plan. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the reported ML.

Satellite Collection System

The portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility that a sanitary sewer system is tributary to.

Shellfish

Organisms identified by the Division of Drinking Water as shellfish for public health purposes (i.e., mussels, clams and oysters).

Significant Difference

Statistically significant difference in the means of two distributions of sampling results at the 95 percent confidence level.

Six-Month Median Effluent Limitation

The highest allowable moving median of all “daily discharges” for any 180-day period.

Standard Deviation (σ)

Standard Deviation is a measure of variability that is calculated as follows:

$$\sigma = (\sum[(x - \mu)^2]/(n - 1))^{0.5}$$

where:

x is the observed value;

μ is the arithmetic mean of the observed values; and

n is the number of samples.

State Water Quality Protection Areas (SWQPAs)

Non-terrestrial marine or estuarine areas designated to protect marine species or biological communities from an undesirable alteration in natural water quality. All AREAS OF SPECIAL BIOLOGICAL SIGNIFICANCE (ASBS) that were previously designated by the State Water Board in Resolutions 74-28, 74-32, and 75-61 are now also classified as a subset of State Water Quality Protection Areas and require special protections afforded by the Ocean Plan.

TCDD Equivalents

The sum of the concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors, as shown in the table below.

Isomer Group	Toxicity Equivalence Factor
2,3,7,8-tetra CDD	1.0
2,3,7,8-penta CDD	0.5
2,3,7,8-hexa CDDs	0.1
2,3,7,8-hepta CDD	0.01
octa CDD	0.001
2,3,7,8 tetra CDF	0.1
1,2,3,7,8 penta CDF	0.05
2,3,4,7,8 penta CDF	0.5
2,3,7,8 hexa CDFs	0.1
2,3,7,8 hepta CDFs	0.01
octa CDF	0.001

Test of Significant Toxicity (TST)

A statistical approach used to analyze toxicity test data. The TST incorporates a restated null hypothesis, Welch’s t-test, and the biological effect thresholds for chronic and acute toxicity.

Toxicity Identification Evaluation (TIE)

Set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.

Toxicity Reduction Evaluation (TRE)

TRE is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an evaluation of Facility operations and maintenance practices, and best management practices. A TIE may be required as part of the TRE, if appropriate.

Waste

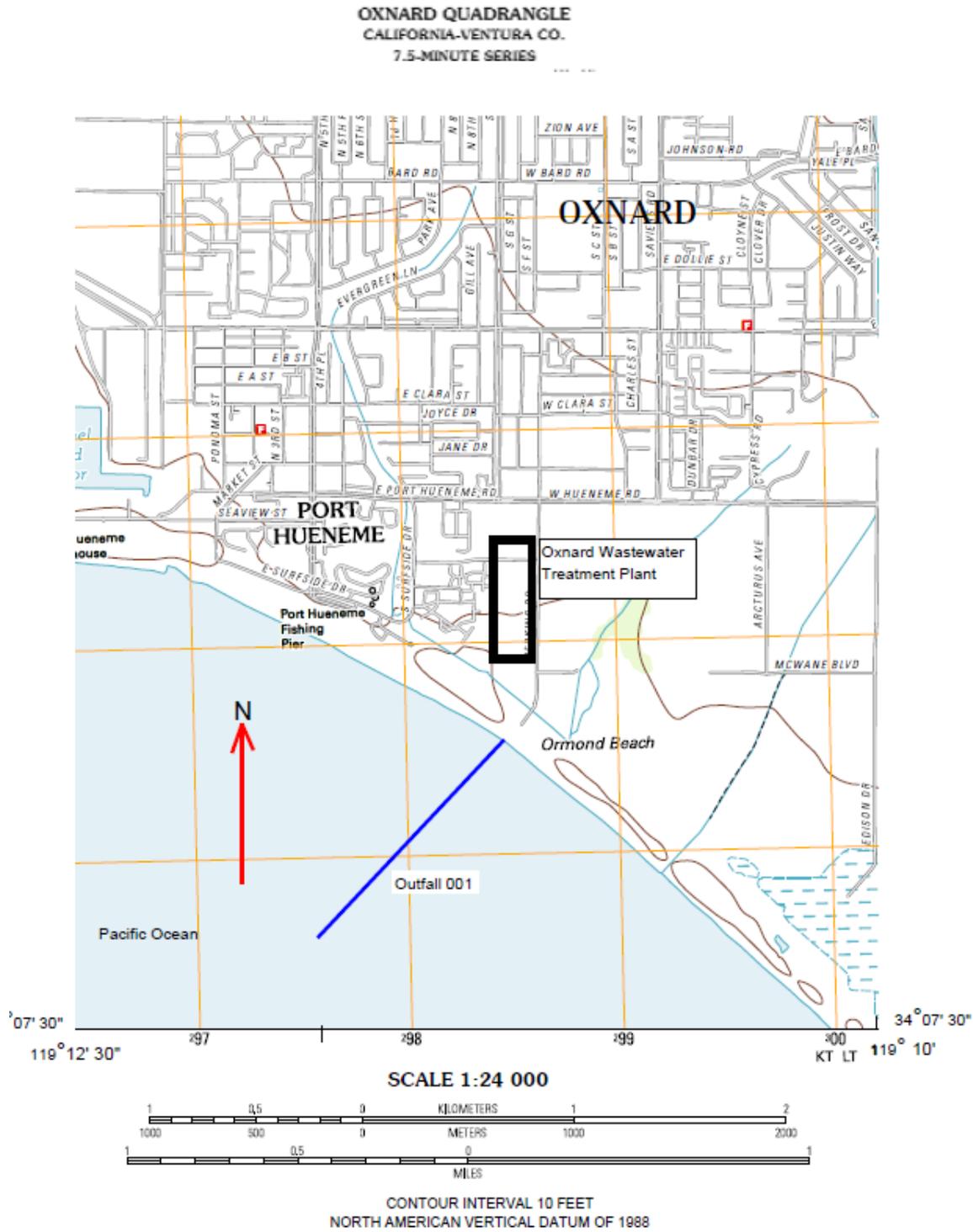
As used in the Ocean Plan, waste includes a Discharger's total discharge, of whatever origin, i.e., gross, not net, discharge.

Water Recycling

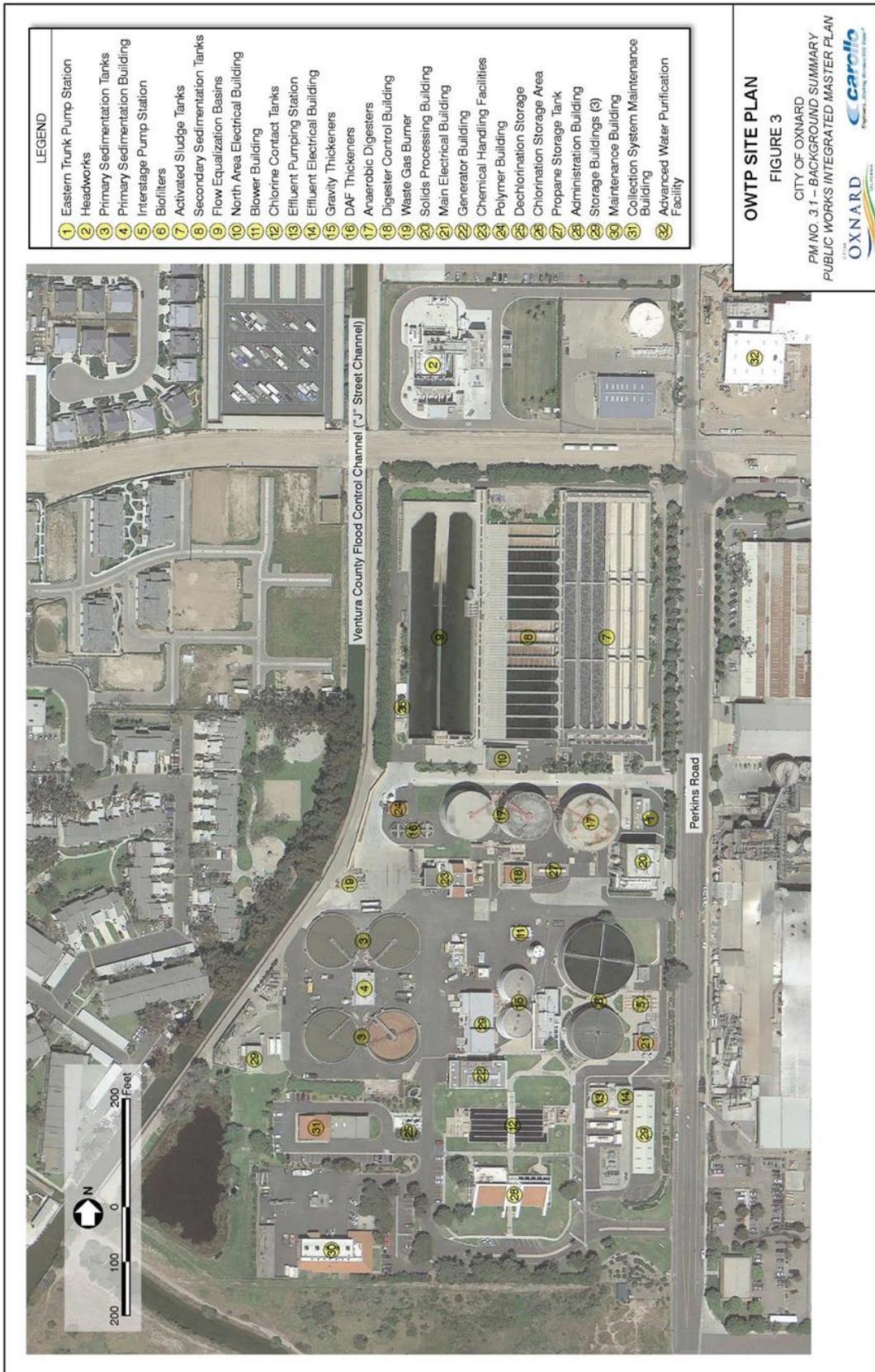
The treatment of wastewater to render it suitable for reuse, the transportation of treated wastewater to the place of use, and the actual use of treated wastewater for a direct beneficial use or controlled use that would not otherwise occur.

B.

ATTACHMENT B-1 OXNARD WASTEWATER TREATMENT PLANT LOCATION MAP



ATTACHMENT B-3 OXNARD WASTEWATER TREATMENT PLANT SITE PLAN



ATTACHMENT B-4 OFFSHORE WATER QUALITY MONITORING STATIONS



ATTACHMENT B-5 SEDIMENT TOXICITY MONITORING STATIONS



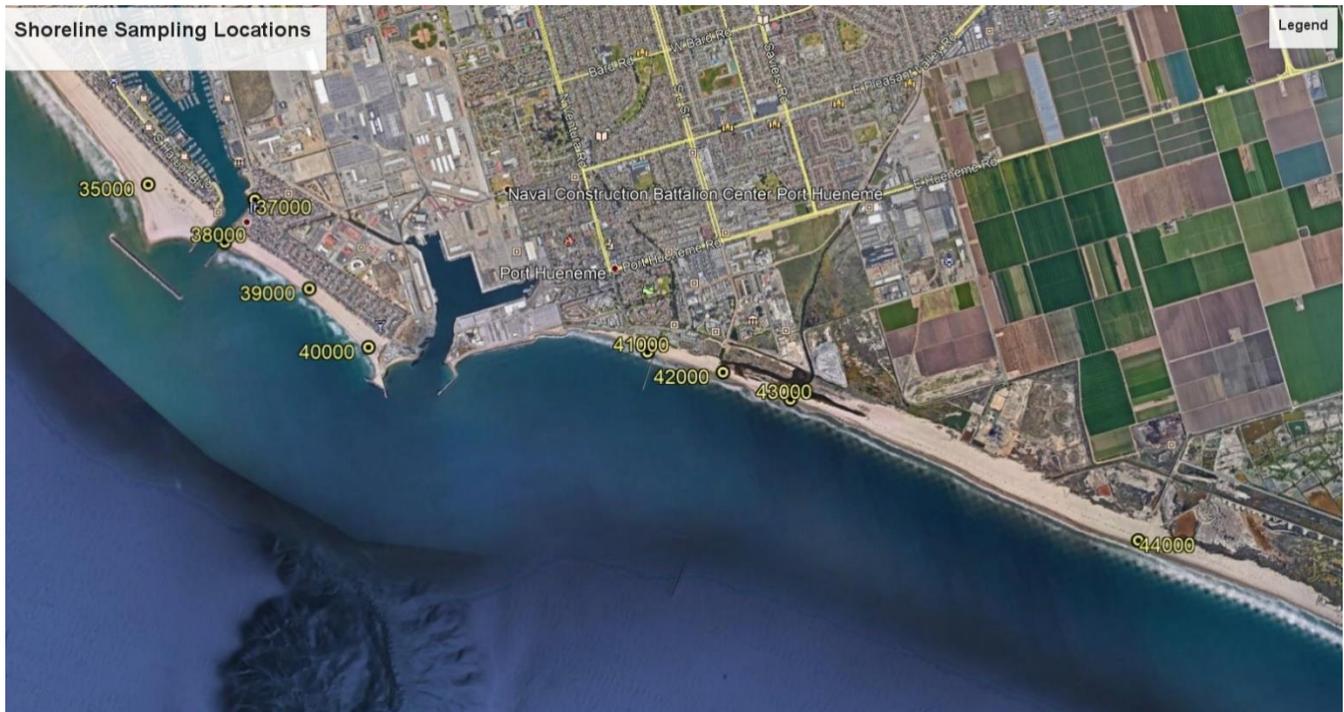
ATTACHMENT B-6 BAGGED MUSSEL MONITORING STATIONS



ATTACHMENT B-7 RECEIVING WATER TRAWL STATIONS



ATTACHMENT B-8 SHORELINE BACTERIOLOGICAL MONITORING STATIONS



D.

ATTACHMENT D – STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

1. The Discharger must comply with all of the terms, requirements, and conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code (CWC) and is grounds for enforcement action; permit termination, revocation and reissuance, or modification; denial of a permit renewal application; or a combination thereof. (40 Code of Federal Regulations (CFR) § 122.41(a); CWC, §§ 13261, 13263, 13265, 13268, 13000, 13001, 13304, 13350, 13385.)
2. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 CFR § 122.41(a)(1).)

B. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order. (40 CFR § 122.41(c).)

C. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge or biosolids use or disposal in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment. (40 CFR § 122.41(d).)

D. Proper Operation and Maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order. (40 CFR § 122.41(e).)

E. Property Rights

1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 CFR § 122.41(g).)
2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations. (40 CFR § 122.5(c).)

F. Inspection and Entry

The Discharger shall allow the Regional Water Board, State Water Board, USEPA, and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to (33 United States Code (USC) § 1318(a)(4)(b); 40 CFR § 122.41(i); CWC, §§ 13267, 13383):

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (33 USC § 1318(a)(4)(b)(i); 40 CFR § 122.41(i)(1); CWC, §§ 13267, 13383);
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (33 USC § 1318(a)(4)(b)(ii); 40 CFR § 122.41(i)(2); CWC, §§ 13267, 13383);
3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (33 USC § 1318(a)(4)(b)(ii); 40 CFR § 122.41(i)(3); CWC, §§ 13267, 13383); and
4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the CWC, any substances or parameters at any location. (33 USC § 1318(a)(4)(b); 40 CFR § 122.41(i)(4); CWC, §§ 13267, 13383.)

G. Bypass

1. Definitions
 - a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. (40 CFR § 122.41(m)(1)(i)).
 - b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 CFR § 122.41(m)(1)(ii)).
2. *Bypass not exceeding limitations.* The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below (40 CFR § 122.41(m)(2)).
3. *Prohibition of bypass.* Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless (40 CFR § 122.41(m)(4)(i)):
 - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 CFR § 122.41(m)(4)(i)(A)),
 - b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 CFR § 122.41(m)(4)(i)(B)), and:
 - c. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions–Permit Compliance I.G.5 below (40 CFR §122.41(m)(4)(i)(C)).
4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above (40 CFR § 122.41(m)(4)(ii)).

5. Notice

- a. *Anticipated bypass.* If the Discharger knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass. The notice shall be sent to the Regional Water Board. As of December 21, 2020, all notices must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting V.J below. Notices shall comply with 40 CFR. part 3, 40 CFR. section 122.22, and 40 C.F.R. part 127.
- b. *Unanticipated bypass.* The Discharger shall submit a notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). The notice shall be sent to the Regional Water Board. As of December 21, 2020, all notices must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting V.J below. Notices shall comply with 40 C.F.R. part 3, 40 CFR. section 122.22, and 40 CFR part 127. (40 CFR § 122.41(m)(3)(ii).)

H. Upset

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation (40 CFR § 122.41(n)(1)).

1. **Effect of an upset.** An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review (40 CFR § 122.41(n)(2)).
2. **Conditions necessary for a demonstration of upset.** A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 CFR § 122.41(n)(3)):
 - a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 CFR § 122.41(n)(3)(i));
 - b. The permitted facility was, at the time, being properly operated (40 CFR § 122.41(n)(3)(ii));
 - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) (40 CFR § 122.41(n)(3)(iii)); and
 - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 CFR § 122.41(n)(3)(iv)).
3. **Burden of proof.** In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 CFR § 122.41(n)(4)).

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a

notification of planned changes or anticipated noncompliance does not stay any Order condition (40 CFR § 122.41(f)).

B. Duty to Reapply

If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit (40 CFR § 122.41(b)).

C. Transfers

This Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the CWC (40 CFR §§ 122.41(l)(3), 122.61).

III. STANDARD PROVISIONS – MONITORING

A. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity (40 CFR § 122.41(j)(1)).

Monitoring must be conducted according to test procedures approved under 40 CFR part 136 for the analyses of pollutants unless another method is required under 40 CFR chapter 1, subchapters N or O. Monitoring must be conducted according to sufficiently sensitive test methods approved under 40 CFR part 136 for the analysis of pollutants or pollutant parameters or as required under 40 CFR chapter 1, subchapter N. For the purposes of this paragraph, a method is sufficiently sensitive when:

1. The method minimum level (ML) is at or below the level of the most stringent effluent limitation established in the permit for the measured pollutant or pollutant parameter, and either the method ML is at or below the level of the most stringent applicable water quality criterion for the measured pollutant or pollutant parameter or the method ML is above the applicable water quality criterion but the amount of the pollutant or pollutant parameter in the facility's discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge; or
2. The method has the lowest ML of the analytical methods approved under 40 CFR part 136 or required under 40 CFR chapter 1, subchapter N for the measured pollutant or pollutant parameter.

In the case of pollutants or pollutant parameters for which there are no approved methods under 40 CFR part 136 or otherwise required under 40 CFR chapter 1, subchapters N, monitoring must be conducted according to a test procedure specified in this Order for such pollutants or pollutant parameters. (40 CFR §§ 122.21(e)(3), 122.41(j)(4), 122.44(i)(1)(iv).)

IV. STANDARD PROVISIONS – RECORDS

A. The Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time (40 CFR § 122.41(j)(2)).

B. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements (40 CFR § 122.41(j)(3)(i));

2. The individual(s) who performed the sampling or measurements (40 CFR § 122.41(j)(3)(ii));
3. The date(s) analyses were performed (40 CFR § 122.41(j)(3)(iii));
4. The individual(s) who performed the analyses (40 CFR § 122.41(j)(3)(iv));
5. The analytical techniques or methods used (40 CFR § 122.41(j)(3)(v)); and
6. The results of such analyses (40 CFR § 122.41(j)(3)(vi)).

C. Claims of confidentiality for the following information will be denied (40 CFR § 122.7(b)):

1. The name and address of any permit applicant or Discharger (40 CFR § 122.7(b)(1)); and,
2. Permit applications and attachments, permits and effluent data (40 CFR § 122.7(b)(2)).

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

The Discharger shall furnish to the Regional Water Board, State Water Board, or USEPA within a reasonable time, any information which the Regional Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Regional Water Board, State Water Board, or USEPA copies of records required to be kept by this Order (40 CFR § 122.41(h); CWC, §§ 13267, 13383).

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below (40 CFR § 122.41(k)).
2. All permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA) (40 CFR § 122.22(a)(3)).
3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 CFR § 122.22(b)(1));
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 CFR § 122.22(b)(2)); and
 - c. The written authorization is submitted to the Regional Water Board and State Water Board (40 CFR § 122.22(b)(3)).

4. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the Regional Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative (40 CFR § 122.22(c)).
5. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above shall make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.” (40 CFR § 122.22(d)).

Any person providing the electronic signature for documents described in Standard Provisions – V.B.1, V.B.2, or V.B.3 that are submitted electronically shall meet all relevant requirements of Standard Provisions – Reporting V.B, and shall ensure that all relevant requirements of 40 CFR part 3 (Cross-Media Electronic Reporting) and 40 CFR part 127 (NPDES Electronic Reporting Requirements) are met for that submission. (40 CFR § 122.22(e)).

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the MRP (Attachment E) in this Order (40 CFR § 122.41(l)(4)).
2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board for reporting the results of monitoring, biosolids use, or disposal practices. As of December 21, 2016, all reports and forms must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting V.J and comply with 40 CFR part 3, 40 CFR section 122.22, and 40 CFR part 127 (40 CFR § 122.41(l)(4)(i)).
3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 CFR part 136, or another method required for an industry-specific waste stream under 40 CFR chapter 1, subchapters N or O, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or biosolids reporting form specified by the Regional Water Board (40 CFR § 122.41(l)(4)(ii)).
4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order (40 CFR § 122.41(l)(4)(iii)).

D. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be submitted no later than 14 days following each schedule date (40 CFR § 122.41(l)(5)).

E. Twenty-Four Hour Reporting

1. The Discharger shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A report shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports must include the data described above (with the exception of time of discovery) as well as the type of event (i.e., combined sewer overflow, sanitary sewer overflow, or bypass event), type of overflow structure (e.g., manhole, combined sewer overflow outfall), discharge volume untreated by the treatment works treating domestic sewage, types of human health and environmental impacts of the event, and whether the noncompliance was related to wet weather.

As of December 21, 2020, all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting V.J. The reports shall comply with 40 CFR part 3, 40 CFR section 122.22, and 40 CFR part 127. The Regional Water Board may also require the Discharger to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (40 CFR § 122.41(l)(6)(i)).

2. The following shall be included as information that must be reported within 24 hours:
 - a. Any unanticipated bypass that exceeds any effluent limitation in this Order (40 CFR § 122.41(l)(6)(ii)(A)).
 - b. Any upset that exceeds any effluent limitation in this Order (40 CFR § 122.41(l)(6)(ii)(B)).
3. The Regional Water Board may waive the above required written report on a case-by-case basis if an oral report has been received within 24 hours (40 CFR § 122.41(l)(6)(ii)(B)).

F. Planned Changes

The Discharger shall give notice to the Regional Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when (40 CFR § 122.41(l)(1)):

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) (40 CFR § 122.41(l)(1)(i)); or
2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in this Order nor to notification requirements under section

122.42(a)(1) (see Additional Provisions—Notification Levels VII.A.1). (40 CFR § 122.41(l)(1)(ii)).

3. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different or absent in the existing permit, including notification and additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan (40 CFR 122.41(l)(1)(iii)).

G. Anticipated Noncompliance

The Discharger shall give advance notice to the Regional Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with this Order's requirements (40 CFR § 122.41(l)(2)).

H. Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E above. For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports shall contain the information described in Standard Provision – Reporting V.E and the applicable required data in appendix A to 40 CFR part 127. The Regional Water Board may also require the Discharger to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section (40 CFR § 122.41(l)(7)).

I. Other Information

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board, State Water Board, or USEPA, the Discharger shall promptly submit such facts or information (40 CFR § 122.41(l)(8)).

J. Initial Recipient for Electronic Reporting Data

The owner, operator, or the duly authorized representative is required to electronically submit NPDES information specified in appendix A to 40 CFR part 127 to the initial recipient defined in 40 CFR section 127.2(b). USEPA will identify and publish the list of initial recipients on its website and in the Federal Register, by state and by NPDES data group [see 40 CFR section 127.2(c)]. USEPA will update and maintain this listing (40 CFR § 122.41(l)(9)).

VI. STANDARD PROVISIONS – ENFORCEMENT

- A.** The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the CWC, including, but not limited to, sections 13268, 13385, 13386, and 13387.
- B.** The CWA provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the CWA, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the CWA, is subject to a civil penalty not to exceed \$25,000 per day for each violation. The CWA provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the CWA, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the CWA, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the CWA, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than one year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties

of not more than \$50,000 per day of violation, or by imprisonment of not more than two years, or both. Any person who knowingly violates such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than three years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both. Any person who *knowingly* violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the CWA, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the CWA, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions (40 CFR § 122.41(a)(2); CWC section 13385 and 13387).

- C. Any person may be assessed an administrative penalty by the Administrator of USEPA, or an administrative civil liability by the Regional Water Board, or State Water Board for violating section 301, 302, 306, 307, 308, 318 or 405 of this CWA, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the CWA. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000 (40 CFR § 122.41(a)(3)).
- D. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than two years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four years, or both (40 CFR § 122.41(j)(5)).
- E. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation, or by both (40 CFR § 122.41(k)(2)).

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Publicly-Owned Treatment Works (POTWs)

All POTWs shall provide adequate notice to the Regional Water Board of the following (40 CFR § 122.42(b)):

1. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to sections 301 or 306 of the CWA if it were directly discharging those pollutants (40 CFR § 122.42(b)(1)); and
2. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of adoption of the Order (40 CFR § 122.42(b)(2)).

3. Adequate notice shall include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW (40 CFR § 122.42(b)(3)).

E.

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP CI 2022)

Section 308 of the federal Clean Water Act (CWA) and sections 122.41(h), (j)-(l), 122.44(i), and 122.48 of title 40 of the Code of Federal Regulations (40 CFR) require that all NPDES permits specify monitoring and reporting requirements. California Water Code (CWC) sections 13267 and 13383 also authorize the Regional Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. This MRP establishes monitoring, reporting, and recordkeeping requirements that implement the federal and California laws and/or regulations.

I. GENERAL MONITORING PROVISIONS

- A.** All samples shall be representative of the waste discharge under conditions of peak load. Quarterly effluent analyses shall be performed during the first quarter (January, February, and March), the second quarter (April, May, and June), the third quarter (July, August, and September), and the fourth quarter (October, November, and December). Semiannual analyses shall be performed during the first quarter (January, February, and March) and third quarter (July, August, and September). Annual analyses shall be performed during the third quarter (July, August, and September). Should there be instances when monitoring could not be performed during these specified months, the Discharger must notify the Regional Water Board and state the reason why monitoring could not be conducted, and obtain approval from the Executive Officer for an alternate schedule. Results of quarterly, semiannual, and annual analyses shall be reported by the due date specified in Table E-11 of the MRP.
- B.** Pollutants shall be analyzed using the analytical methods described in 40 CFR § 136.3, 136.4, and 136.5; or where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board. Laboratories analyzing effluent samples and receiving water samples shall be certified by the State Water Resources Control Board, Division of Drinking Water (DDW) Environmental Laboratory Accreditation Program (ELAP) or approved by the Executive Officer and must include quality assurance/quality control (QA/QC) data in their reports. A copy of the laboratory certification shall be provided in the Annual Report due to the Regional Water Board each time a new certification and/or renewal of the certification is obtained from ELAP.
- C.** Water/wastewater samples must be analyzed within allowable holding time limits as specified in 40 CFR § 136.3. All QA/QC analyses must be run on the same dates that samples are actually analyzed. The Discharger shall retain the QA/QC documentation in its files and make available for inspection and/or submit this documentation when requested by the Regional Water Board. Proper chain of custody procedures must be followed and a copy of this documentation shall be submitted with the monthly report.
- D.** The Discharger shall calibrate and perform maintenance procedures on all monitoring instruments to insure accuracy of measurements, or shall ensure that both equipment activities will be conducted.
- E.** For any analyses performed for which no procedure is specified in the United States Environmental Protection Agency (USEPA) guidelines, or in the MRP, the constituent or parameter analyzed and method or procedure used must be specified in the monitoring report.
- F.** Each monitoring report must affirm in writing that “all analyses were conducted at a laboratory certified for such analyses under the Environmental Laboratory Accreditation Program (ELAP), or approved by the Executive Officer and in accordance with current USEPA guideline procedures or as specified in this monitoring and reporting program.”

- G.** The monitoring report shall specify the USEPA analytical method used, the Method Detection Limit (MDL), and the Reporting Level (RL) [the applicable Minimum Level (ML) or Reported Minimum Level (RML)] for each pollutant. The MLs are those published by the State Water Board in Appendix II of the 2015 Ocean Plan. The ML represents the lowest quantifiable concentration in a sample based on the proper application of all method-based analytical procedures and the absence of any matrix interference. When all specific analytical steps are followed and after appropriate application of method specific factors, the ML also represents the lowest standard in the calibration curve for that specific analytical technique. When there is deviation from the analytical method for dilution or concentration of samples, other factors are applied to the ML depending on the sample preparation. The resulting value is the reported Minimum Level.
- H.** The Discharger shall select the analytical method that provides an ML lower than the effluent limitation or performance goal established for a given parameter or where no such requirement exists, the lowest applicable water quality objective in the Ocean Plan. If the effluent limitation, performance goal, or the lowest applicable water quality objective is lower than all the MLs in Appendix II of the 2015 Ocean Plan, the Discharger must select the method with the lowest ML for compliance purposes. The Discharger shall include in the annual summary reports a list of the analytical methods and MLs employed for each test.
- I.** The Discharger shall instruct its laboratories to establish calibration standards so that the ML (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lower calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.
- J.** The Discharger shall develop and maintain a record of all spills or bypasses of raw or partially treated sewage from its collection system or treatment plant according to the requirements in the WDR section of this Order. This record shall be made available to the Regional Water Board upon request and a spill summary shall be included in the annual summary report.
- K.** If the Discharger samples and performs analyses (other than for process/operational control, startup, research, or equipment testing) any influent, effluent, or receiving water constituent more frequently than required by this Order using approved analytical methods, the results of those analyses shall be included in the monitoring report. These results shall be reflected in the calculation of the average (or median) used in demonstrating compliance with limitations set forth in this Order.
- L.** For all bacterial analyses, sample dilutions should be performed so the expected range of values is bracketed (for example, with multiple tube fermentation method or membrane filtration method, 2 to 16,000 per 100 mL for total and fecal coliforms, at a minimum; and 1 to 1000 per 100 mL for *Enterococcus*). The detection methods used for each analysis shall be reported with the results of the analyses.

 - 1. Detection methods used for coliforms (total and fecal) shall be those presented in Table 1A of 40 CFR § 136, unless alternate methods have been approved in advance by the USEPA pursuant to 40 CFR § 136.
 - 2. Detection methods for *Escherichia coli* shall be those presented in Table 1A of 40 CFR § 136 or in the USEPA publication EPA 600/4-85/076, Test Methods for *Escherichia coli* and enterococci in Water By Membrane Filter Procedure, or any improved method determined by the Regional Water Board to be appropriate.
- M.** All receiving and ambient water monitoring conducted in compliance with the MRP must be comparable with the Quality Assurance requirements of the Surface Water Ambient Monitoring Program (SWAMP). The Discharger shall submit all receiving water monitoring data in accordance with the California Environmental Exchange Network (CEDEN).

- N.** NPDES compliance monitoring focuses on the effects of a specific point source discharge. Generally, it is not designed to assess impacts from other sources of pollution (e.g., nonpoint source runoff, aerial fallout) or to evaluate the current status of important ecological resources in the water body. The scale of existing compliance monitoring programs does not match the spatial and, to some extent, temporal boundaries of the important physical and biological processes in the ocean. In addition, the spatial coverage provided by compliance monitoring programs is less than ten percent of the nearshore ocean environment. Better technical information is needed about status and trends in ocean waters to guide management and regulatory decisions, to verify the effectiveness of existing programs, and to shape policy on marine environmental protection.
- O.** The Regional Water Board and USEPA, working with other groups, have developed a comprehensive basis for effluent and receiving water monitoring appropriate to large publicly owned treatment works (POTWs) discharging to waters of the Southern California Bight. This effort has culminated in the publication by the Southern California Coastal Water Research Project (SCCWRP) of the Model Monitoring Program guidance document (Schiff, K.C., J.S. Brown and S.B. Weisberg. 2001. *Model Monitoring Program for Large Ocean Dischargers in Southern California*. SCCWRP Tech. Rep. #357. Southern California Coastal Water Research Project, Westminster, CA. 101 pp.). This guidance provides the principles, framework and recommended design for effluent and receiving water monitoring elements that have guided development of the monitoring program described below.
- P.** In July 2000, the Santa Monica Bay Restoration Project (SMBRP) published "An Assessment of the Compliance Monitoring System in Santa Monica Bay" to set forth recommendations and priorities for compliance monitoring in Santa Monica Bay. This report reasoned that a reduced level of receiving water monitoring is justified for large POTWs discharging to Santa Monica Bay due to improvements in effluent quality and associated decreases in receiving water impacts. Like the Model Monitoring Plan developed by SCCWRP, SMBRP recommendations are focused on providing answers to management questions and allowing a reduction in POTW receiving water monitoring where discharge effects are well understood. Although the OWTS does not discharge into Santa Monica Bay, receiving water monitoring since 1999 has documented that marine conditions are consistent or superior at the City's outfall. OWTP has also participated in the Central Bight Water Quality Consortium (CALCOFI study), implemented by the NOAA and NMFS, to identify marine trends which extend beyond Santa Monica Bay. The monitoring plan set forth here has been guided by SMBRP recommendations.
- Q.** The conceptual framework for the Model Monitoring Program has three components that comprise a range of spatial and temporal scales: (1) core monitoring; (2) regional monitoring; and (3) special studies.
1. Core monitoring is local in nature and focused on monitoring trends in quality and effects of the point source discharge. This includes effluent monitoring as well as some aspects of receiving water monitoring. In the monitoring program described below, these core components are typically referred to as local monitoring.
 2. Regional monitoring is focused on questions that are best answered by a region-wide approach that incorporates coordinated survey design and sampling techniques. The major objective of regional monitoring is to collect information required to assess how safe it is to swim in the ocean, how safe it is to eat seafood from the ocean, and whether the marine ecosystem is being protected. Key components of regional monitoring include elements to address pollutant mass emission estimations, public health concerns, monitoring of trends in natural resources, assessment of regional impacts from all contaminant sources, and protection of beneficial uses. The final design of regional monitoring programs is developed by means of steering committees and technical

committees comprised of participating agencies and organizations and is not specified in this Order. Instead, for each regional component, the degree and nature of participation of the Discharger is specified. For this Order, these levels of effort are based upon past participation of the Discharger in regional monitoring programs.

3. Special studies are focused on refined questions regarding specific effects or development of monitoring techniques and are anticipated to be of short duration and/or small scale, although multiyear studies also may be needed. Questions regarding effluent or receiving water quality, discharge impacts, ocean processes in the area of the discharge, or development of techniques for monitoring the same, arising out of the results of core or regional monitoring, may be pursued through special studies. These studies are by nature ad hoc and cannot be typically anticipated in advance of the five-year permit cycle.

The Discharger and the Regional Water Board shall consult annually to determine the need for special studies. Each year, the Discharger shall submit proposals for any proposed special studies to the Regional Water Board by December 31st for the following year's monitoring effort (July through June). The following year, detailed scopes of work for proposals, including reporting schedules, shall be presented by the Discharger at a Spring Regional Water Board meeting, to obtain the Regional Water Board approval and to inform the public. Upon approval by the Regional Water Board, the Discharger shall implement its special study or studies.

- R. Discharger participation in regional monitoring programs is required as a condition of this Order.

1. Central Bight Water Quality Cooperative Program – The City of Oxnard has participated in coordinated monitoring conducted by the Orange County Sanitation District, County Sanitation Districts of Los Angeles County, and the City of Los Angeles through appropriate agencies for water quality monitoring as part of the federally funded Southern California Coastal Ocean Observing System (SCCOOS), which contributes to the national U.S. Integrated Ocean Observing System. This regionally coordinated survey provided integrated water quality surveys on a quarterly basis. These surveys cover 200 kilometers of coast in Ventura, Los Angeles, and Orange Counties, from the nearshore to approximately 10 kilometers offshore. This cooperative program contributes to a regional understanding of seasonal patterns in nearshore water column structure and provides context for determining the significance and potential causes of locally observed patterns in the area of wastewater outfalls. The study is also coordinated with the California Cooperative Oceanic Fisheries Investigations (CalCOFI) implemented by the National Oceanographic Atmospheric Administration (NOAA) and the California Department of Fish and Wildlife. Although monitoring as part of this program is no longer required, the City of Oxnard shall participate in planning or analysis activities as necessary to interpret the data collected over the previous 20 years.
2. The Central Region Kelp Survey Consortium was established with the support of the Regional Water Board to conduct regional kelp bed monitoring. This program is designed to require ocean dischargers in the Regional Water Board's jurisdiction to undertake a collaborative program, which include participation by Orange County ocean dischargers, to monitor kelp beds in the Southern California Bight, patterned after the successful program implemented by the San Diego Regional Water Board since 1985. Data collected in this regional survey is used to assess status and trends in kelp bed health and spatial extent. The regional nature of the survey allows the status of beds local to specific dischargers to be compared to regional trends. The regional kelp monitoring survey was initiated during 2003.

- 3. Southern California Bight Studies – Every five years SCCWRP coordinates regional monitoring within the Southern California Bight and compiles monitoring data collected by the dischargers and other participating entities. The fifth regional monitoring program (Bight '13) occurred primarily during summer 2013. The sixth regional monitoring program (Bight '18) is taking place during 2018. The next (seventh) regional monitoring program (Bight '23) is expected to take place during the summer of 2023. While participation in regional monitoring programs is required under this Order, revisions to the Discharger’s monitoring program at the direction of the Regional Water Board may be necessary to accomplish the goals of regional monitoring or to allow the performance of special studies to investigate regional or site-specific water issues of concern. These revisions may include a reduction or increase in the number of parameters to be monitored, the frequency of monitoring, or the number and size of samples to be collected. Such changes were and may be authorized by the Regional Water Board Executive Officer after written notification to the Discharger.
- S. This monitoring program for OWTP is comprised of requirements to demonstrate compliance with the conditions of the NPDES permit, ensure compliance with State water quality standards, and mandate participation in regional monitoring and/or area-wide studies.
- T. Laboratory Certification. Laboratories analyzing monitoring samples shall be certified by the State Water Resources Control Board (State Water Board), in accordance with the provision of Water Code section 13176, and must include quality assurance/quality control data with their reports.
- U. The Discharger shall ensure that the results of the Discharge Monitoring Report-Quality Assurance (DMR-QA) Study or the most recent Water Pollution Performance Evaluation Study are submitted annually to the State Water Board at the following address:
 State Water Resources Control Board
 Quality Assurance Program Officer
 Office of Information Management and Analysis
 1001 I Street, Sacramento, CA 95814

II. MONITORING LOCATIONS

- A. The Discharger shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order:

Table E-1. Influent and Effluent Monitoring

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
Influent Monitoring Station		
	INF-001	Sampling station shall be established at point of inflow to the sewage treatment plant where representative samples of the influent can be obtained.
Effluent Monitoring Stations		
001	EFF-001A	The effluent sampling station shall be located as seen in Attachment C-1, where a representative sample of the secondary-treated effluent before mixing with the brine waste can be obtained.
	EFF-001B	The effluent sampling station shall be located downstream of any in-plant return flows and after the brine waste produced from the AWPf has commingled with the final secondary effluent, where representative samples of the effluent can be obtained.

Table E-2. Local Receiving Water Quality Monitoring Station Locations

Core Receiving Water Monitoring Stations (Attachment B-4)					
Monitoring Point Name	Monitoring Location Description				
Water Column	A001	B001	C001	D001	E001
	A002	B002	C002	D002	E002
	A003	B003	C003	D003	E003
	A004	B004	C004	D004	E004
	A005	B005	C005	D005	E005
Latitude	34.138081	34.136325	34.132179	34.126674	34.120332
	34.132012	34.129138	34.124922	34.119997	34.114238
	34.125161	34.122454	34.117716	34.113029	34.107623
	34.117883	34.115150	34.110515	34.105505	34.100469
	34.110413	34.107873	34.103261	34.098363	34.093656
Longitude	-119.212132	-119.201523	-119.192064	-119.183273	-119.175354
	-119.218126	-119.208035	-119.198634	-119.189477	-119.181209
	-119.224458	-119.214308	-119.205188	-119.195943	-119.186815
	-119.231060	-119.220927	-119.211638	-119.202504	-119.193520
	-119.237707	-119.227089	-119.218082	-119.208956	-119.199672
Station Depth (m)	13	11	12	11	11
	32	15	16	16	16
	143	21	22	22	22
	219	64	28	29	31
	82	258	35	37	38
Distance from Outfall/Transect length (m)	2,000	1,000	0	1,000	2,000

Table E-3. Receiving Water Benthic, Trawl, Shoreline and Mussel Monitoring Station Locations

Monitoring Point Name	Monitoring Location Description						
Receiving Water Benthic Monitoring Stations (Attachment B-5)							
Benthic Monitoring Station	RWS-001	RWS-002	RWS_003	RWS-004	RWS-005	RWS-006	RWS-007
Latitude	34.13047	34.12655	34.12568	34.12578	34.12502	34.12328	34.1075
Longitude	-119.20887	-119.20025	-119.19831	-119.1979	-119.19643	-119.1934	-119.17017
Station Depth (m)	15.0	15.0	15.3	15.0	15.3	15.3	15.3
Dist. From Outfall Transect (m)	1000	150	18	18	150	500	4000
Bagged Mussel Stations (Attachment B-6)							
SS1	2.0 miles southeast of outfall			34.107496		-119.170076	
SS2	outfall			34.124061		-119.199514	
SS3	0.8 miles northwest of outfall			34.130546		-119.208852	

Monitoring Point Name	Monitoring Location Description		
Receiving Water Trawl Stations (Attachment B-7)			
Trawl Station	RWT-001	RWT-002	RWT-003
Latitude	34.13177	34.12308	34.11773
Longitude	-119.2063	-119.1906	-119.1833
Station Depth (m)	15.6	15.6	15.6
Distance from Outfall Transect (m)	380	380	4000
Monitoring Point Name	Monitoring Location Description		
Shoreline Bacteriological Monitoring Stations (Attachment B-8)			
Ventura County ID	Location	Latitude	Longitude
35000	Hollywood Beach, Los Robles St	34.1625	-119.2300
37000	Channel Islands Harbor Beach	34.1594	-119.2219
38000	Silverstrand Beach, San Nicholas Ave	34.1572	-119.2253
39000	Silverstrand Beach, Santa Paula Ave	34.1525	-119.2197
40000	Silverstrand Beach, Sawtell, Ave	34.1475	-119.2164
41000	Port Hueneme Beach Park	34.1417	-119.1944
42000	Ormond Beach, J Street Drain	34.1389	-119.1889
43000	Ormond Beach, Industrial Drain	34.1358	-119.1842
44000	Ormond Beach, Arnold Rd	34.1197	-119.1600

The North latitude and West longitude information in Table E-1 through E-3 are approximate for administrative purposes.

III. INFLUENT MONITORING REQUIREMENTS

Influent monitoring is required to determine compliance with NPDES permit conditions, to assess treatment plant performance and to assess effectiveness of the Pretreatment Program.

A. Monitoring Location INF-001

1. The Discharger shall monitor influent to the facility at INF-001 as follows. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding Minimum Level:

Table E-4. Influent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	MGD	Recorder/totalizer	continuous	1
Biochemical Oxygen Demand (BOD ₅ 20°C)	mg/L	24-hr composite	weekly	2
Total Suspended Solids (TSS)	mg/L	24-hr composite	weekly	2
pH	pH units	grab	weekly	2
Oil and Grease	mg/L	grab ³	weekly	2
Radioactivity (including gross alpha, gross, beta, combined radium-226 & radium-228, tritium, strontium-90 and uranium)	pCi/L	24-hr composite	quarterly	4
Benzidine	µg/L	grab	semiannually	2
Polychlorinated Biphenyls (PCBs)	µg/L	24-hr composite	semiannually	2
TCDD Equivalents	µg/L	24-hr composite	semiannually	5
Remaining pollutants in Table B of the 2015 Ocean Plan (excluding residual chlorine, chronic toxicity)	µg/L	grab	semiannually	2

IV. EFFLUENT MONITORING REQUIREMENTS

Effluent monitoring is required to determine compliance with NPDES permit conditions and water quality standards; assess and improve plant performance, and identify operational problems; provide information on wastewater characteristics and flows for use in interpreting water quality and biological data; and to conduct reasonable potential analyses for toxic pollutants.

A. Monitoring Location EFF-001A and EFF-001B

The Discharger shall monitor at effluent monitoring locations EFF-001A or EFF-001B for all parameters as follows. The samples for BOD and percent removal of BOD, TSS and percent removal of TSS and bacteria shall be collected at monitoring location EFF-001A and all remaining samples shall be collected at EFF-001B. Compliance with TSS percent removal at EFF-001B and Ocean Plan requirements (75%) is demonstrated by compliance at EFF-001A (85%).

¹When continuous monitoring of flow is required, total daily flow, monthly average flow, and instantaneous peak daily flow (24-hour basis) shall be reported. Actual monitored flow shall be reported (not design capacity).
² Pollutants shall be analyzed using the analytical methods described in 40 CFR § 136; or where no methods are specified for a given pollutant, by methods approved by this Regional Water Board, the State Water Board, and USEPA Region 9. For any pollutant whose effluent limitation is lower than all the MLs specified in Appendix II of the Ocean Plan, the analytical method with the lowest ML must be selected.
³ Oil and grease monitoring shall consist of a single grab sample at peak flow over a 24-hour period.
⁴ Analyze these radiochemicals by the following USEPA methods: method 900.0 for gross alpha and gross beta, method 903.0 or 903.1 for radium-226, method 904.0 for radium-228, method 906.0 for tritium, method 905.0 for strontium-90, and method 908.0 for uranium. Analysis for combined radium-226 & 228 shall be conducted only if gross alpha and gross beta results for the same sample exceed 15 pCi/L or 50 pCi/L, respectively. If radium-226 & 228 exceeds 5 pCi/L, then analyze for tritium, strontium-90, and uranium.
⁵ USEPA Method 1613 shall be used to analyze TCDD equivalents.

If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding Minimum Level:

Table E-5. Effluent Monitoring

Parameter	Units	Sample Type ⁶	Minimum Sampling Frequency ⁷	Required Analytical Test Method
Flow	MGD	recorder/totalizer	continuous	1
BOD ₅ 20°C ⁸	mg/L	24-hr composite	weekly	2
Suspended solids ⁸	mg/L	24-hr composite	weekly	2
pH	pH units	grab	weekly	2
Oil and grease	mg/L	grab ⁹	weekly	2
Temperature	°F	grab	weekly	2
Settleable solids	ml/L	grab	weekly	2
Total chlorine residual	mg/L	recorder/totalizer	continuous	2
Turbidity	NTU	recorder/totalizer	continuous	2
Total coliform ⁸	CFU/100 ml or MPN/100 ml	grab	daily	2
<i>Enterococcus</i> ⁸	CFU/100 ml or MPN/100 ml	grab	5 times/month	2
Fecal coliform ⁸	CFU/100 ml or MPN/100 ml	grab	5 times/month	2
Ammonia nitrogen	mg/L	24-hr composite	monthly	2
Toxicity, chronic ¹⁰	Pass or Fail, % Effect (TST)	24-hr composite	monthly	2
Nitrate nitrogen	mg/L	24-hr composite	monthly	2
Nitrite nitrogen	mg/L	24-hr composite	monthly	2
Organic nitrogen	mg/L	24-hr composite	monthly	2
Radioactivity	pCi/L	24-hr composite	quarterly	11

⁶ For discharge durations of less than 24 hours, individual grab samples may be substituted. A grab sample is an individual sample collected in less than 15 minutes.

⁷ For the influent and effluent, weekly and monthly sampling shall be arranged so that each day, Monday through Friday, is represented.

⁸ Sampling for BOD, TSS and bacteria is at EFF-001A. Weekly and Monthly Average BOD may be calculated from daily measurements. If the result of the weekly BOD analysis yields a value greater than the average monthly effluent limitation (AMEL), the frequency of analysis shall be increased to daily within one week of knowledge of the test result for at least 30 days and until compliance with the average weekly effluent limitation (AWEL) and AMEL BOD limits is demonstrated; after which the frequency shall revert to weekly.

⁹ Oil and grease monitoring shall consist of a single grab sample at peak flow over a 24-hour period.

¹⁰ Whole effluent toxicity monitoring is required for Discharge Point 001, using samples collected at EFF-001B, see section V. Whole Effluent Toxicity Testing Requirements.

¹¹ Analyze these radiochemicals by the following USEPA methods: method 900.0 for gross alpha and gross beta, method 903.0 or 903.1 for radium-226, method 904.0 for radium-228, method 906.0 for tritium, method 905.0 for strontium-90, and method 908.0 for uranium. Analysis for combined radium-226 & 228 shall be conducted

Parameter	Units	Sample Type ⁶	Minimum Sampling Frequency ⁷	Required Analytical Test Method
(Including gross alpha, gross beta, combined radium-226 and radium-228, tritium, strontium-90 and uranium)				
Arsenic	µg/L	24-hr composite	semiannually	2
Cadmium	µg/L	24-hr composite	semiannually	2
Chromium (VI)	µg/L	Grab	semiannually	2
Copper	µg/L	24-hr composite	semiannually	2
Lead	µg/L	24-hr composite	semiannually	2
Mercury	µg/L	24-hr composite	semiannually	2
Nickel	µg/L	24-hr composite	semiannually	2
Selenium	µg/L	24-hr composite	semiannually	2
Silver	µg/L	24-hr composite	semiannually	2
Zinc	µg/L	24-hr composite	semiannually	2
Cyanide	µg/L	grab	semiannually	2
Phenolic compounds (non-chlorinated) ¹²	µg/L	24-hr composite	semiannually	2
Phenolic compounds (chlorinated) ¹²	µg/L	24-hr composite	semiannually	2
Endosulfan	µg/L	24-hr composite	semiannually	2
Endrin	µg/L	24-hr composite	semiannually	2
HCH ¹²	µg/L	24-hr composite	semiannually	2
Acrolein	µg/L	grab	semiannually	2
Antimony	µg/L	24-hr composite	semiannually	2
Bis(2-chloroethoxy) methane	µg/L	24-hr composite	semiannually	2
Bis(2-chloroisopropyl) ether	µg/L	24-hr composite	semiannually	2
Chlorobenzene	µg/L	grab	semiannually	2
Chromium (III)	µg/L	grab	semiannually	2
Di-n-butyl phthalate	µg/L	24-hr composite	semiannually	2
Dichlorobenzenes	µg/L	24-hr composite	semiannually	2
Diethyl Phthalate	µg/L	24-hr composite	semiannually	2

only if gross alpha and gross beta results for the same sample exceed 15 pCi/L or 50 pCi/L, respectively. If radium-226 & 228 exceeds the stipulated criteria, then analyze for tritium, strontium-90, and uranium.

¹² See Attachment A for definition of terms

Parameter	Units	Sample Type ⁶	Minimum Sampling Frequency ⁷	Required Analytical Test Method
Dimethyl Phthalate	µg/L	24-hr composite	semiannually	2
4,6-dinitro-2-methylphenol	µg/L	24-hr composite	semiannually	2
2,4-dinitrophenol	µg/L	24-hr composite	semiannually	2
Ethylbenzene	µg/L	grab	semiannually	2
Fluoranthene	µg/L	24-hr composite	semiannually	2
Hexachlorocyclopentadiene	µg/L	24-hr composite	semiannually	2
Nitrobenzene	µg/L	24-hr composite	semiannually	2
Thallium	µg/L	24-hr composite	semiannually	2
Toluene	µg/L	grab	semiannually	2
Tributyltin	ng/L	24-hr composite	semiannually	2
1,1,1-Trichloroethane	µg/L	grab	semiannually	2
Acrylonitrile	µg/L	grab	semiannually	2
Aldrin	µg/L	24-hr composite	semiannually	2
Benzene	µg/L	grab	semiannually	2
Benzidine	µg/L	24-hr composite	semiannually	2
Beryllium	µg/L	24-hr composite	semiannually	2
Bis(2-chloroethyl) ether	µg/L	24-hr composite	semiannually	2
Bis(2-ethylhexyl) phthalate	µg/L	24-hr composite	semiannually	2
Carbon Tetrachloride	µg/L	grab	semiannually	2
Chlordane ¹²	µg/L	24-hr composite	semiannually	13
Chlorodibromomethane	µg/L	grab	semiannually	2
Chloroform	µg/L	grab	semiannually	2
DDT ¹²	µg/L	24-hr composite	semiannually	2
1,4-dichlorobenzene	µg/L	24-hr composite	semiannually	2
3,3'-dichlorobenzidine	µg/L	24-hr composite	semiannually	2
1,2-dichloroethane	µg/L	grab	semiannually	2
1,1-dichloroethylene	µg/L	grab	semiannually	2
Dichlorobromomethane	µg/L	grab	semiannually	2

¹³ The approved test procedures for Chlordane are methods: EPA 617, EPA 608.3 and EPA 625.1. In EPA 608.3, "In this revision to Method 608, Chlordane has been listed as the alpha- and gamma- isomers in Table 1. Reporting may be by the individual isomers, or as the sum of the concentrations of these isomers, as requested or required by a regulatory/control authority or in a permit." The 2015 Ocean Plan specifies that the sum shall be reported for compliance purposes.

Parameter	Units	Sample Type ⁶	Minimum Sampling Frequency ⁷	Required Analytical Test Method
Dichloromethane	µg/L	grab	semiannually	2
1,3-Dichloropropene	µg/L	grab	semiannually	2
Dieldrin	µg/L	24-hr composite	semiannually	2
2,4-dinitrotoluene	µg/L	24-hr composite	semiannually	2
1,2-diphenylhydrazine	µg/L	24-hr composite	semiannually	2
Halomethanes ¹²	µg/L	grab	semiannually	2
Heptachlor	µg/L	24-hr composite	semiannually	2
Heptachlor Epoxide	µg/L	24-hr composite	semiannually	2
Hexachlorobenzene	µg/L	24-hr composite	semiannually	2
Hexachlorobutadiene	µg/L	24-hr composite	semiannually	2
Hexachloroethane	µg/L	24-hr composite	semiannually	2
Isophorone	µg/L	24-hr composite	semiannually	2
N-Nitrosodimethylamine	µg/L	24-hr composite	semiannually	2
N-Nitrosodi-n-propylamine	µg/L	24-hr composite	semiannually	2
N-Nitrosodiphenylamine	µg/L	24-hr composite	semiannually	2
PAHs ¹²	µg/L	24-hr composite	semiannually	2
PCBs as Aroclors ¹²	µg/L	24-hr composite	quarterly	2
PCBs as Congeners ^{12,14,15}	µg/L	24-hr composite	quarterly	2
TCDD Equivalents ^{12,16}	µg/L	24-hr composite	quarterly	2
1,1,2,2-Tetrachloroethane	µg/L	grab	semiannually	2
Tetrachloroethylene	µg/L	grab	semiannually	2
Toxaphene	µg/L	24-hr composite	semiannually	2

¹⁴ PCBs as congeners shall be individually quantified (or quantified as mixtures of isomers of a single congener in co-elutions as appropriate) using USEPA proposed method 1668c. PCBs as congeners shall be analyzed using method EPA 1668c for three years and an alternate method may be used if none of the PCB congeners are detected for three years using method EPA 1668c.

USEPA recommends that until USEPA proposed method 1668c for PCBs is incorporated into 40 CFR § 136, Dischargers should use for discharge monitoring reports/State monitoring reports: (1) USEPA method 608 for monitoring data, reported as aroclor results, that will be used for assessing compliance with WQBELs (if applicable) and (2) USEPA proposed method 1668c for monitoring data, reported as 41 congener results, that will be used for informational purposes to help assess concentrations in the receiving water.

¹⁵ To facilitate interpretation of sediment/fish tissue data and TMDL development, PCB congeners whose analytical characteristics resemble those of PCB-18, 28, 37, 44, 49, 52, 66, 70, 74, 77, 81, 87, 99, 101, 105, 110, 114, 118, 119, 123, 126, 128, 138, 149, 151, 153, 156, 157, 158, 167, 168, 169, 170, 177, 180, 183, 187, 189, 194, 201, and 206 shall be reported as a sum and individually quantified (or quantified as mixtures of isomers of a single congener in co-elutions as appropriate).

¹⁶ USEPA Method 1613 shall be used to analyze TCDD equivalents.

Parameter	Units	Sample Type ⁶	Minimum Sampling Frequency ⁷	Required Analytical Test Method
Trichloroethylene	µg/L	grab	semiannually	2
1,1,2-Trichloroethane	µg/L	grab	semiannually	2
2,4,6-Trichlorophenol	µg/L	24-hr composite	semiannually	2
Vinyl chloride	µg/L	grab	semiannually	2
Methyl-tert-butyl-ether	µg/L	grab	semiannually	2

V. WHOLE EFFLUENT TOXICITY (WET) TESTING REQUIREMENTS

A. Chronic Toxicity Testing

1. Discharge In-stream Waste Concentration (IWC) for Chronic Toxicity

The chronic IWC is the concentration of a pollutant or the parameter toxicity in the receiving water after mixing. The chronic toxicity IWC for Discharge Point 001 is based on 1 part effluent to 108 parts seawater or 0.92 percent effluent.

2. Sample Volume and Holding Time

The total sample volume shall be determined by the specific toxicity test method used. Sufficient sample volume shall be collected to perform the required toxicity test. For the receiving water, sufficient sample volume shall also be collected during accelerated monitoring for subsequent TIE studies, if necessary, at each sampling event. All toxicity tests shall be conducted as soon as possible following sample collection. No more than 36 hours shall elapse before the conclusion of sample collection and test initiation.

3. Chronic Marine Species and Test Methods

If effluent samples are collected from outfalls discharging to receiving waters with salinity >1 ppt, the Discharger shall conduct the following chronic toxicity tests on effluent samples, at the in-stream waste concentration for the discharge, in accordance with species and test methods in 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). Artificial sea salts or hypersaline brine shall be used to increase sample salinity if needed. In no case shall these species be substituted with another test species unless written authorization from the Executive Officer is received.

- a. A static renewal toxicity test with the topsmelt, *Atherinops affinis* (Larval Survival and Growth Test Method 1006.0).
- b. A static non-renewal toxicity test with the red abalone, *Haliotis rufescens* (Larval Shell Development Test Method).
- c. A static non-renewal toxicity test with the giant kelp, *Macrocystis pyrifera* (Germination and Growth Test Method 1009.0).

4. Species Sensitivity Screening

Species sensitivity screening shall be conducted during this permit’s first required sample collection. The Discharger shall collect a single effluent sample to initiate and concurrently conduct three toxicity tests using the fish, an invertebrate, and the alga species previously referenced. This sample shall also be analyzed for the parameters required on a monthly frequency for the discharge, during that given month. As allowed

under the test method for the *Atherinops affinis*, a second and third sample may be collected for use as test solution renewal water as the seven-day toxicity test progresses. If the result of all three species is "Pass" and "Percent Effect" are less than or equal to 10, at the discharge IWC, then the Discharger may continue to test with the species chosen based on the most recent, previous species sensitivity rescreening, after consultation with and written direction from the Regional Water Board staff. If only one species fails, then that species shall be used for routine monitoring during the permit cycle. Likewise, if two or more species result in "Fail", then the species that exhibits the highest "Percent Effect" at the discharge IWC during the suite of species sensitivity screening shall be used for routine monitoring during the permit cycle, until such time as a rescreening is required.

Species sensitivity rescreening is required every 24 months if there has been discharge during dry weather conditions. If the discharge is intermittent and occurs only during wet weather, rescreening is not required. If rescreening is necessary, the Discharger shall rescreen with the marine vertebrate species, a marine invertebrate species, and the alga species previously referenced, and continue to monitor with the most sensitive species. If the first suite of rescreening tests demonstrates that the same species is the most sensitive then the rescreening does not need to include more than one suite of tests. If a different species is the most sensitive or if there is ambiguity, then the Discharger may proceed with suites of screening tests for a minimum of three, but not to exceed five suites.

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 MDEL.

5. Quality Assurance and Additional Requirements

Quality assurance measures, instructions, and other recommendations and requirements are found in the test methods manual previously referenced. Additional requirements are specified below.

- a. The discharge is subject to determination of "Pass" or "Fail" from a chronic toxicity test using the Test of Significant Toxicity statistical t-test approach described in the National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, 2010), Appendix A, Figure A-1, and Table A-1, and Appendix B, Table B-1. The null hypothesis (H_0) for the TST statistical approach is: Mean discharge IWC response $\leq 0.75 \times$ Mean control response. A test result that rejects this null hypothesis is reported as "Pass." A test result that does not reject this null hypothesis is reported as "Fail." The relative "Percent Effect" at the discharge IWC is defined and reported for each toxicity test as: $((\text{Mean control response} - \text{Mean discharge IWC response}) \div \text{Mean control response}) \times 100$. This is a t-test (formally Student's t-Test), a statistical analysis comparing two sets of replicate observations – in the case of WET, only two test concentrations (i.e. a control and IWC). The purpose of this statistical test is to determine if the means of the two sets of observations are different (i.e. if the IWC or receiving water concentration differs from the control (the test result is "Pass" or "Fail")). The Welch's t-test employed by the TST statistical approach is an adaptation of Student's t-test and is used with two samples having unequal variances.
- b. If the effluent toxicity test does not meet all test acceptability criteria (TAC) specified in the referenced test method 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) (see Table E-6, below), then the Discharger must re-sample and re-test within 14 days.

Table E-6. USEPA Test Methods and Test Acceptability Criteria

Species & USEPA Test Method Number	Test Acceptability Criteria (TAC)
Topsmelt, <i>Atherinops affinis</i> , Larval Survival and Growth Test Method 1006.01. (Table 3 of Test Method)	80% or greater survival in controls; average dry weight per surviving organism in control chambers equals or exceeds 0.85 mg. LC50 with copper must be ≤ 205 µg/L, <25% MSD for survival and <50% MSD for growth. If the test starts with 9 day old larvae, the mean weight per larva must exceed 0.85 milligrams in the reference and brine controls; the mean weight of preserved larvae must exceed 0.72 milligrams. (required)
Purple Sea Urchin, <i>Strongylocentrotus purpuratus</i> , and the Sand Dollar, <i>Dendraster excentricus</i> , Fertilization Test Method 1008.0 (Table 7 of Test Method)	70% or greater egg fertilization in controls, must achieve a MSD of <25%, and appropriate sperm counts. (required)
Red Abalone, <i>Haliotis rufescens</i> , Larval Shell Development Test Method (Table 3 of Test Method)	80% or greater normal shell development in the controls; must have statistical significant effect at 56 µg/L zinc and achieve a MSD of <20%. (required)
Giant Kelp, <i>Macrocystis pyrifera</i> , Germination and Growth Test Method 1009.0 (Table 3 of Test Method)	70% or greater germination in controls, ≥ 10 µm germ-tube length in controls, No Observed Effect Concentration (NOEC) must be below 35 µg/L in the reference toxicant test, and must achieve a MSD of <20% for both germination and germ-tube length in the reference toxicant. (required)

- c. Dilution water and control water, including brine controls, shall be 1-µm-filtered uncontaminated natural seawater, hypersaline brine prepared using uncontaminated natural seawater, or laboratory water prepared and used as specified in the test methods manual. If dilution water and control water is different from test organism culture water, then a second control using culture water shall also be used.
- d. Monthly reference toxicant testing is sufficient. All reference toxicant test results should be reviewed and reported using the EC25¹⁷.

¹⁷ EC25 is a point estimate of the toxicant concentration that would cause an observable adverse effect (e.g. death, immobilization, or serious incapacitation) in 25 percent of the test organisms.

- e. The Discharger shall perform toxicity tests on final effluent samples. Chlorine and ammonia shall not be removed from the effluent sample prior to toxicity testing, unless explicitly authorized under this section of the MRP and the rationale is explained in the Fact Sheet (Attachment F).

6. Preparation of an Initial Investigation Toxicity Reduction Evaluation (TRE) Work Plan

The Discharger shall prepare and submit a copy of the Discharger's initial investigation TRE work plan to the Executive Officer of the Regional Water Board for approval within 90 days of the effective date of this permit. If the Executive Officer does not disapprove the work plan within 60 days, the work plan shall become effective. The Discharger shall use USEPA manual EPA/833B-99/002 (municipal) as guidance, or the most current version. This work plan shall describe the steps that the Discharger intends to follow if toxicity is detected. At a minimum, the TRE Work Plan must contain the provisions in Attachment G. This work plan shall describe the steps that the Discharger intends to follow if toxicity is detected. At a minimum the work plan shall include:

- a. A description of the investigation and evaluation techniques that will be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency.
- b. A description of the Facility's methods of maximizing in-house treatment efficiency and good housekeeping practices, and a list of all chemicals used in the operation of the Facility; and,
- c. If a TIE is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor).

7. Accelerated Monitoring Schedule for Maximum Daily Single Result: "Fail."

The Maximum Daily single result shall be used to determine if accelerated testing needs to be conducted.

Once the Discharger becomes aware of this result, the Discharger shall implement an accelerated monitoring schedule within 5 calendar days of the receipt of the result. However, if the sample is contracted out to a commercial laboratory, the Discharger shall ensure that the first of four accelerated monitoring tests is initiated within seven calendar days of the Discharger becoming aware of the result. The accelerated monitoring schedule shall consist of four toxicity tests (including the discharge IWC), conducted at approximately two-week intervals, over an eight-week period; in preparation for the TRE process and associated reporting, these results shall also be reported using the EC25. If each of the accelerated toxicity tests results in "Pass," the Discharger shall return to routine monitoring for the next monitoring period. If one of the accelerated toxicity tests results in "Fail," the Discharger shall immediately implement the TRE Process conditions set forth below. During accelerated monitoring schedules, only TST results ("Pass" or "Fail") for chronic toxicity tests shall be reported as effluent compliance monitoring results for the chronic toxicity MDEL.

8. Toxicity Reduction Evaluation (TRE) Process

During the TRE Process, monthly effluent monitoring shall resume and TST results ("Pass" or "Fail") for chronic toxicity tests shall be reported as effluent compliance monitoring results for the chronic toxicity MDEL.

- a. Preparation and Implementation of Detailed TRE Work Plan. The Discharger shall immediately initiate a TRE using, according to the type of treatment facility, USEPA manual Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants (EPA/833/B-99/002, 1999) and, within 15 days, submit to the

Executive Officer a Detailed TRE Work Plan, which shall follow the generic Initial Investigation TRE Work Plan revised as appropriate for this toxicity event. It shall include the following information, and comply with additional conditions set by the Executive Officer:

- i. Further actions by the Discharger to investigate, identify, and correct the causes of toxicity.
 - ii. Actions the Discharger will take to mitigate the effects of the discharge and prevent the recurrence of toxicity.
 - iii. A schedule for these actions, progress reports, and the final report.
- b. TIE Implementation. The Discharger may initiate a TIE as part of a TRE to identify the causes of toxicity using the same species and test method and, as guidance, USEPA manuals: Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures (EPA/600/6-91/003, 1991); Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity (EPA/600/R-92/080, 1993); Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity (EPA/600/R-92/081, 1993); and Marine Toxicity Identification Evaluation (TIE): Phase I Guidance Document (EPA/600/R-96-054, 1996). The TIE should be conducted on the species demonstrating the most sensitive toxicity response.
- c. Many recommended TRE elements parallel required or recommended efforts for source control, pollution prevention, and storm water control programs. TRE efforts should be coordinated with such efforts. As toxic substances are identified or characterized, the Discharger shall continue the TRE by determining the sources and evaluating alternative strategies for reducing or eliminating the substances from the discharge. All reasonable steps shall be taken to reduce toxicity to levels consistent with toxicity evaluation parameters.
- d. The Discharger shall continue to conduct routine effluent monitoring for compliance determination purposes while the TIE and/or TRE is taking place. Additional accelerated monitoring and TRE work plans are not required once a TRE has begun.
- e. The Regional Water Board recognizes that toxicity may be episodic and identification of causes and reduction of sources of toxicity may not be successful in all cases. The TRE may be ended at any stage if monitoring finds there is no longer toxicity.

9. Reporting

The Self-Monitoring Report (SMR) shall include a full laboratory report for each toxicity test. This report shall be prepared using the format and content of the test methods manual chapter called Report Preparation, and shall include:

- a. The valid toxicity test results for the TST statistical approach, reported as "Pass" or "Fail" and "Percent Effect" at the chronic toxicity IWC for the discharge. All toxicity test results (whether identified as valid or otherwise) conducted during the calendar month shall be reported on the SMR due date specified in Table E-16.
- b. Summary water quality measurements for each toxicity test (e.g. pH, dissolved oxygen, temperature, conductivity, hardness, salinity, chlorine, ammonia).

- c. The statistical analysis used in National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, 2010) Appendix A, Figure A-1 and Table A-1, and Appendix B, Table B-1.
- d. TRE/TIE results. The Executive Officer shall be notified no later than 30 days from completion of each aspect of TRE/TIE analyses. Prior to completion of the final TIE/TRE report, the Discharger shall provide status updates in the monthly monitoring reports, indicating which TIE/TRE steps are underway and which steps have been completed.
- e. Statistical program (e.g., TST calculator, Comprehensive Environmental Toxicity Information System, etc.) output results, including graphical plots, for each toxicity test.
- f. Graphical plots and tabular data clearly showing the laboratory's performance of the reference toxicant, for each solution, for the previous 20 tests and the laboratory's performance of the control mean, control standard deviation, and control coefficient of variation, for each solution, for the previous 12-month period.
- g. Any additional QA/QC documentation or any additional chronic toxicity-related information, upon written request of the Regional Water Board Chief Deputy Executive Officer or Executive Officer.

B. Ammonia Removal

1. Except with prior approval from the Executive Officer of the Regional Water Board, ammonia shall not be removed from bioassay samples. The Discharger must demonstrate the effluent toxicity is caused by ammonia because of increasing test pH when conducting the toxicity test. It is important to distinguish the potential toxic effects of ammonia from other pH sensitive chemicals, such as certain heavy metals, sulfide, and cyanide.
 - a. The following may be steps to demonstrate that the toxicity is caused by ammonia and no other toxicants before the Executive Officer would allow for control of pH in the test. There is consistent toxicity in the effluent and the maximum pH in the toxicity test is in the range to cause toxicity due to increased pH.
 - b. Chronic ammonia concentrations in the effluent are greater than 4 mg/L total ammonia.
 - c. Conduct graduated pH tests as specified in the toxicity identification evaluation methods. For example, mortality should be higher at pH 8 and lower at pH 6.
 - d. Treat the effluent with a zeolite column to remove ammonia. Mortality in the zeolite treated effluent should be lower than the non-zeolite treated effluent. Then add ammonia back to the zeolite-treated samples to confirm toxicity due to ammonia.
2. When it has been demonstrated that toxicity is due to ammonia because of increasing test pH, pH may be controlled using appropriate procedures which do not significantly alter the nature of the effluent, after submitting a written request to the Regional Water Board, and receiving written permission expressing approval from the Executive Officer of the Regional Water Board.

C. Chlorine Removal

Chlorine may be removed from the OWTP effluent bioassay sampled from EFF-001B because there are no appropriate sampling locations that reflect dechlorinated conditions at the outfall.

VI. LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE

VII. RECYCLING REQUIREMENTS

The reuse of the reclaimed water is regulated under a separate WDRs and Water Recycling Requirements (WRRs) for City of Oxnard Groundwater Recovery, Enhancement, and Treatment Program – Non-Potable Reuse Phase 1 Project (GREAT Program – Phase 1 Project), Order No. R4-2008-0083 as amended by Order No. R4-2011-0079, Order No. R4-2011-0079-A01, and Order No. R4-2011-0079-A02, File No. 64-104 and File No. 08-070, CI-9456.

VIII. RECEIVING WATER MONITORING REQUIREMENTS

The City of Oxnard has been monitoring receiving water at Discharge Point 001 since 1999. Local receiving water trends over the 10-kilometer sample grid have generally remained steady and the 20-year record of data shows the Oxnard discharge plume is not sufficiently large to impact regional trends. Based on the most recent information from the federally-funded Southern California Coastal Ocean Observing System (SCCOOS), the Central Bight Cooperative Water Quality Survey is complete and no additional water quality monitoring is required at this time. Due to this reduction in regional water quality monitoring, this Order reduces the area sampled to improve information on the impact of the outfall and more accurately characterize the dilution which takes place at the outfall. However, the City of Oxnard shall continue to participate on the Central Bight Cooperative Water Quality Survey steering committee and provide assistance should this cooperative program undertake analysis of the collected data to contribute to a regional understanding of seasonal patterns in water column structure.

Receiving water shall continue to be monitored for local offshore water quality, shoreline bacteria, infaunal benthic community, sediment chemistry and toxicity, regional benthic health, local fish and macroinvertebrate population and tissue, regional fish and macroinvertebrate health, local seafood safety, regional seafood safety, and kelp bed health. If annual reporting and comparative studies identify unanticipated water quality trends at the smaller one-kilometer grid size, the wider sample grid may be reinstated. All receiving water stations shall be located by state-of-the-art navigational methods (e.g. Differential Global Positioning System or DGPS); other means (e.g. visual triangulation, fathometer readings) may be used to improve the accuracy of locating stations. Water quality measurements are made with a Conductivity, Temperature and Depth Instrument (CTD), which also measures other parameters such as pH and light transmissivity.

Table E-7. Schedule for Receiving Water Monitoring Requirements

Monitoring	Number	Type	R4-2013-0094 Frequency	R4-2018-0140 Frequency	Reporting
Local offshore water quality	25	CTD, ammonia, bacteria	--	Quarterly	Annually
Regional offshore water quality	48	CTD and SCCWRP support	Quarterly	---	--
Bacteria/ammonia offshore water quality	18/ three depths	Bacteria, ammonia	Quarterly	--	--
Shoreline	9	Bacteria	Quarterly	Quarterly	Annually

Monitoring	Number	Type	R4-2013-0094 Frequency	R4-2018-0140 Frequency	Reporting
Local Benthic Infaunal community	7	Community and population	Annually	Year two	Year three
Local Sediment chemistry	7	Chemistry	Annually	Year two	Year two
Sediment toxicity	2	Amphipod	Annually	Year two	Year two
Regional Benthic	SCCWRP support only		2013	2018, 2023	SCCWRP
Local fish macroinvertebrate	3	Population	Annually	Year two	Year two
Local fish macroinvertebrate	3	Tissue	Annually	Year two	Year two
Local bagged mussels	3	Tissue	Special Study	Year four	Year four
Regional fish and macroinvertebrate	SCCWRP support only		2013	2018, 2023	SCCWRP
Local seafood safety	5 species in 3 zones	Test against consumption advisories	Year one, three and five	Year four	Year four
Regional seafood safety	SCCWRP support only		2013	2018, 2023	SCCWRP
Kelp bed monitoring	SCCWRP support only		2013	2018, 2023	SCCWRP

A. Water Quality Monitoring

Water quality monitoring is designed to determine if Ocean Plan and Basin Plan objectives for physical and chemical parameters and bacteria are being met. Water quality data will be collected to provide the information necessary to demonstrate compliance with the water quality standards and to contribute to the Bight'18 and Bight'23 regional monitoring programs, led by SCCWRP. Sample collection for water quality monitoring shall follow protocols described in the most current edition of the *Field Operations Manual for Marine Water-Column, Benthic, and Trawl Monitoring in Southern California, SCCWRP*. Water quality data shall be analyzed to estimate spatial extent and movement of the wastewater plume over time. Changes in monitoring measurements shall be quantified each year, contrasted with the previous five years, and summarized annually.

1. Inshore/Offshore Monitoring - The Discharger shall monitor receiving water quality quarterly at 25 new core Receiving Water Column Monitoring Stations from A001 to E005 (Table E-2 and Attachment B-4) as follows.

Table E-8. Offshore Receiving Water Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Dissolved oxygen	mg/L	continuous profile	quarterly	2
Water temperature	°C	continuous profile	quarterly	2
Light transmittance	% transmittance	continuous profile	quarterly	18
Salinity	ppt	continuous profile	quarterly	2

¹⁸ Light transmittance (transmissivity) shall be measured with a transmissometer, using equipment and procedure similar to that described by L.V. Whitney [*Transmission of Solar Energy and the Scattering Produced by Suspensoids in Lake Waters*, Transactions of the Wisconsin Academy of Sciences, Arts, and Letters, Vol. 31 (1938)]. Results shall be expressed as the percent of light transmittance. Path length of transmissometer should be noted.

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
pH	pH units	continuous profile	quarterly	2
Chlorophyll a	µg/L	continuous profile	quarterly	2
Visual observations	---	---	quarterly	19
Total coliform	MPN or CFU/100 mL	grab, surface and mid-depth and near bottom ²⁰	quarterly	2
Fecal coliform	MPN or CFU/100 mL	grab, surface and mid-depth and near bottom ²⁰	quarterly	2
<i>Enterococcus</i>	MPN or CFU/100 mL	grab, surface and mid-depth and near bottom ²⁰	quarterly	2
Ammonia nitrogen	mg/L	grab, surface and mid-depth and near bottom ²⁰	quarterly	2

Concurrent with the CTD profiling survey, discrete samples shall be collected quarterly for ammonia and fecal coliform, total coliform and *Enterococcus* at the surface, mid depth and near the bottom (or as deep as practicable for those stations located in depths less than 45 m). Sampling for bacteria is necessary to ensure the bacteria discharged at the outfall do not survive marine conditions and do not contribute to the bacteria identified by shoreline monitoring.

2. Shoreline Monitoring - The Discharger shall monitor receiving water quality at nine Ventura County Shoreline Bacteriological Monitoring Stations listed in Attachment B-8 for the constituents that follow:

¹⁹ Observations of wind (direction and speed), weather (e.g., cloudy, sunny, or rainy), current (e.g., direction), and tidal conditions (e.g., high or low tide) shall be made and recorded (every four hours during offshore sampling) at the time samples of the waters of the Pacific Ocean (shore, nearshore, and all offshore stations) are collected.

Observations of water color, discoloration, oil and grease, turbidity, odor, materials of sewage origin in the water or on the beach, and unusual or abnormal amounts of floating or suspended matter in the water or on the beach, rocks and jetties, or beach structures shall also be made and recorded at stations or while in transit. The character and extent of such matter shall be described. The dates, times and depths of sampling and these observations shall also be reported.

²⁰ Bottom sampling shall be done 2.0 m (6.6 ft) above the seabed.

Table E-9. Shoreline Receiving Water Monitoring Requirements for Bacteria

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Total coliform	MPN or CFU/100 mL	grab	quarterly	2
Fecal coliform	MPN or CFU/100 mL	grab	quarterly	2
<i>Enterococcus</i>	MPN or CFU/100 mL	grab	quarterly	2

Visual observations shall be recorded when bacteriological samples are collected. Monitoring at these nine stations is conducted for the purposes of public health assessment and to ensure protection for public recreational use of coastal ocean waters, and the results are not intended for use as compliance sites for OWTP, unless offshore bacteria monitoring demonstrates the outfall bacteria persist to the shoreline. In the event of stormy weather that makes sampling hazardous or impractical, these samples can be rescheduled.

B. Benthic Monitoring

Benthic monitoring includes infauna and sediment sampling. The data collected are used for the regular assessment of trends in sediment contamination and biological response along a fixed grid of sites within the influence of the discharge.

1. Local Benthic Monitoring - This survey is designed to determine if benthic conditions under the influence of the discharge are changing over time.

The Discharger shall monitor infauna, sediment chemistry and sediment toxicity at 7 receiving water benthic monitoring stations of RWS-001 to RWS-007 in year two of the permit and report changes in the conditions as compared to the historic and the most recent receiving water reports (See Table E-3 and Attachment B-5) in the year three annual report.

- a. Infaunal Community Survey - These stations shall be sampled for benthic infauna²¹ during late summer (August/ September). Bottom samples for benthic infaunal analyses shall be taken at each benthic station prior to trawl sampling. The following determinations shall be made at each station, where appropriate;
 - i. Identification of all organisms to lowest possible taxon (usually species); and,
 - ii. Total biomass of:
 - (a) Mollusks;
 - (b) Echinoderms;
 - (c) Annelids/polychaetes;
 - (d) Crustaceans; and,
 - (e) All other macroinvertebrates.

²¹ These bottom samples shall be taken by means of a 0.1 m² (1.1 ft²) modified Van Veen sediment grab sampler. The entire contents of each sample shall be passed through a 1.0 mm (0.039 in.) mesh screen to retrieve the benthic organisms. These organisms shall be fixed in 10% buffered formalin and transferred to 70% ethanol within two to seven days for storage. All specimens retrieved shall be archived.

- iii. Community structure²² analysis for benthic infauna for each station and each replicate. Mean, median, range, standard deviation, and 95% confidence limits, if appropriate, for values determined above. The Discharger may use other statistical tools sufficient to determine temporal and spatial trends in the marine environment.
- b. Sediment Chemistry Survey -Testing shall be required for these parameters during late summer (August/ September). Bottom samples for sediment chemistry analyses shall be taken at each benthic station prior to trawl sampling. All benthic sediment samples shall be taken at each station by means of a 0.1 m² (1.1 ft²) modified Van Veen sediment grab sampler. Sub-samples (upper two centimeters) of sediment from each sample shall be collected and analyzed separately for the following parameters at each station:
 - i. Total organic carbon (TOC) (mg/kg dry wt);
 - ii. Dissolved sulfides (water soluble) (mg/kg dry wt);
 - iii. Total Kjeldahl nitrogen (mg/kg dry wt);
 - iv. Grain size (sufficiently detailed to calculate percent weight in relation to phi size); and,
 - v. Arsenic; Cadmium; Chromium (total); Copper; Lead; Mercury; Nickel; Silver; Zinc; Cyanide; Phenolic compounds (non-chlorinated); Phenolic compounds (chlorinated); Total halogenated organic compounds; Aldrin and Dieldrin; Endrin; HCH; Chlordane and related compounds; Total DDT; DDT derivatives; Total PCB; PCB derivatives; Toxaphene; Total PAH; PAH derivatives. The data for these parameters shall be expressed in µg/kg dry weight. Additional testing shall be conducted such that a full priority pollutant scans is performed on the sediment samples.
- c. Chronic Sediment Toxicity Survey - Sediment toxicity testing shall be conducted in August/September at the two receiving water sediment monitoring stations RWS-003 and RWS-007. Three replicate samples shall be collected for testing at each station. Sub-samples (upper two centimeters) shall be taken from each sediment sample and tested for chronic toxicity. Testing shall be conducted using one of the three amphipod species *Eohaustorius estuarius*, *Leptocheirus plumulosus*, and *Rhepoxynius abronius* in accordance with EPA 600/R-94/0925 (USEPA, 1994), *Methods for Assessing the Toxicity of Sediment-associated Contaminants with Estuarine and Marine Amphipods*, and the *Southern California Bight Project sediment toxicity testing guidelines* (Bight '18 Toxicology Committee, 2018). Test results shall be reported in percent survival, assessed for the presence of persistent toxicity, and included in the annual monitoring report. If persistent toxicity is observed at a sediment sampling location, a Phase I Toxicity Identification Evaluation (TIE) shall be conducted as defined in the *Sediment Toxicity Identification (TIE) Phase I, II, and III Guidance Document* (EPA/R-07/080). The Discharger shall submit a Sediment Toxicity TIE Work Plan within 90 days of the effective date of this

²² Community structure analysis of benthic infauna shall include number of species, number of individuals per species, total numerical abundance, species abundance per grab, species richness, species diversity (e.g., Shannon-Wiener), species evenness and dominance per station and replicate, similarity analyses (e.g., Bray-Curtis, Jaccard or Sorensen), cluster analyses (using unweighted pair-group method) or other appropriate multivariate statistical techniques approved by the Executive Officer of this Regional Water Board and the Infaunal Index.

Order. The work plan shall define persistent toxicity and outline the procedures that will take place if persistent toxicity is observed.

2. Regional Benthic Monitoring - This regional survey is designed to determine the extent, distribution, magnitude and trend of ecological change in soft-bottom benthic habitats within the Southern California Bight and the relationship between biological response and contaminant exposure. The data collected will be used to assess the condition of the sea-floor environment and the health of the biological resources within the Bight.

A regional survey of sediment chemistry and benthic infauna within the Southern California Bight took place in 2013 (Bight'13). The final survey design was determined cooperatively by the participants represented on the Regional Steering Committee. The Discharger provided support to the Bight'13 benthic surveys in the following ways:

- a. Participation on the Steering Committee
- b. Participation on the relevant Technical Committees (e.g., Information Management, Field Methods and Logistics, Benthos and Chemistry)
- c. Field sampling at sea
- d. Infaunal sample analysis
- e. Sediment chemistry analysis
- f. Data management

The Discharger's level of participation in previous Bight surveys has been consistent. The same level of participation is expected in Bight'18 and Bight'23 surveys.

C. Fish and Invertebrate Monitoring

1. Local Fish and Macroinvertebrate Survey – This survey is designed to determine how the health of demersal fish and epibenthic invertebrate communities near the discharge point is changing over time. The data collected will be used for regular assessment of temporal trends in community structure and bioaccumulation along an array of sites within the influence of the discharge. Trash and debris data will also be collected to contribute to the Santa Monica Bay Restoration Project's (SMBRP's) Sources and Loadings Program. The Discharger shall monitor fish and macroinvertebrate at three receiving water trawling stations RWT-001, RWT-002 and RWT-003 in year two (See Table E-3). Mussels will be deployed for three months (September to December) at three fixed locations for bioaccumulation (see Attachment B-7) in year four. The monitoring requirements are as follows:

- a. Local Fish and Macroinvertebrate Population Survey
 - i. Offshore trawling will occur in year two during August/September for demersal fish and epibenthic macroinvertebrates with trawl locations along sample lines A001 to A005 through E001 to E005 (see Table E-2 and Attachment B-7).
 - ii. Trawling methods shall follow the protocols described in the most current edition of the *Field Operations Manual for Marine Water-Column, Benthic, and Trawl Monitoring in Southern California, SCCWRP*.

- iii. Fish and macroinvertebrates collected by trawls shall be identified to the lowest taxon possible. At all stations and for each replicate, community structure analysis for fish and macroinvertebrates²³ shall be conducted for each station.
 - iv. Mean, range, standard deviation, and 95% confidence limits, if appropriate, shall be reported for the values determined in the community structure analysis. The Discharger may use other statistical tools to determine temporal and spatial trends in the fish and macroinvertebrate population in the marine environment.
 - v. Abnormalities and disease symptoms shall be described and recorded (e.g., fin erosion, external lesions, tumors, ectoparasites, and color anomalies). The frequency of abnormalities and incidence of disease shall be compared between the Zone of Initial Dilution (ZID) boundary and the reference station, and trends in these values shall be measured over time. The results of this comparison shall be included in the monitoring report.
- b. Bagged Mussel Tissue
- i. Bags of mussels will be deployed on anchored arrays, in replicate, at three locations (SS1, SS2 and SS3) in the vicinity of the outfall for a period of three months, from July to December in year four of the permit. A set of control mussels will be frozen at the beginning of the three month deployment, held for three months and then analyzed along with the field deployed mussels. The field deployed mussels will be retrieved after three months, dissected and analyzed for contaminants.
 - ii. All mussle tissue samples shall be analyzed for wet weight and percent lipid.
 - iii. Testing shall include analysis for: Arsenic; Cadmium; Chromium (total); Copper; Lead; Mercury; Nickel; Silver; Zinc; Cyanide; Phenolic compounds (non-chlorinated); Phenolic compounds (chlorinated); Total halogenated organic compounds; Aldrin and Dieldrin; Endrin; HCH; Chlordane and related compounds; Total DDT; DDT derivatives; Total PCB; PCB derivatives; Toxaphene; Total PAH; and PAH derivatives and all priority pollutants.
 - iv. The data for these parameters shall be expressed in $\mu\text{g}/\text{kg}$ dry weight.

2. Regional Fish and Macroinvertebrate Survey

This regional survey is designed to determine the extent, distribution, magnitude and trend of ecological change in demersal fish and epibenthic invertebrate communities within the Southern California Bight and the relationship between biological response and contaminant exposure. The data collected will be used to assess the condition of the seafloor environment and health of biological resources within the Bight.

²³ Community structure analysis of fish and macroinvertebrates shall include wet weight of fish and macroinvertebrate species (when combined weight of individuals of one species exceeds 0.2 kg), standard length of each individual, number of species, number of individuals per species, total numerical abundance per station, number of individuals in each 1-cm size class for each species of fish, species abundance per trawl and per station, species richness, species diversity (e.g., Shannon-Wiener), species evenness, similarity analyses (e.g., Bray-Curtis, Jaccard or Sorensen), cluster analyses (using unweighted pair-group method) or other appropriate multivariate statistical techniques approved by the Executive Officer of the Regional Water Board..

A regional survey of trawl-caught demersal fish and megabenthic invertebrates within the Southern California Bight took place in 2013 (Bight'13). The final survey design was determined cooperatively by the participants as represented on the Regional Steering Committee. The Discharger provided support to the Bight'13 surveys in the following ways:

- a. Participation on the Steering Committee;
- b. Participation on the relevant Technical Committees (e.g., Information Management, Field Methods and Logistics, Fish and Invertebrates);
- c. Field sampling at sea;
- d. Trawl sample analysis; and,
- e. Data management

The Discharger's level of participation in previous Bight surveys has been consistent. The same level of participation is expected in the Bight '18 and Bight '23 surveys.

D. Seafood Safety Monitoring

1. Local Seafood Safety Survey

This survey is designed to determine if tissue concentrations of contaminants exceed the Advisory Tissue Concentration (ATC) where seafood consumption advisories exist locally, and tissue contaminant trends relative to the ATC in other species and for other contaminants not currently subject to local consumption advisories. The data collected will be used to provide information necessary for the management of local seafood consumption advisories.

- a. One species from each of five groups of fish (rockfish, kelpbass, sandbass, surfperches and croakers) shall be sampled from each of the three zones, no later than year four of the permit. For rockfishes, scorpionfish (*Scorpaena guttata*) is the preferred species, followed by bocaccio (*Sebastes paucispinis*) and then by any other abundant and preferably benthic rockfish species. For surfperches, black surfperch (*Embiotoca jacksoni*) is the preferred species, followed by white surfperch (*Phanerodon furcatus*) and then by walleye surfperch (*Hyperprosopon argenteum*). For croakers, white croaker is the preferred species, followed by black croaker, and then by white seabass. If an insufficient number of croakers are collected and a significant effort has been made to collect the appropriate number of croakers, one of the following alternative species may be substituted: ocean whitefish (*Caulolatilus princeps*), opaleye (*Girella nigricans*), blacksmith (*Chromis punctipinnis*), or pacific mackerel (*Scomber japonicus*).
- b. For fish tissue analysis, one composite sample of ten individuals of each target shall be collected within each of the three zones. Sampling should take place in late summer/early fall and should focus upon a consistent size class of fish. All tissue samples shall be analyzed for:

Table E-10. Seafood Safety Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency
% moisture	%	composite of muscle tissue from 10 individuals of each of 5 species	No later than year 4
% lipid	%	composite of muscle tissue from 10 individuals of each of 5 species	No later than year 4
Arsenic	µg/kg	composite of muscle tissue from 10	No later than year 4

Parameter	Units	Sample Type	Minimum Sampling Frequency
		individuals of each of 5 species	
Mercury	µg/kg	composite of muscle tissue from 10 individuals of each of 5 species	No later than year 4
Selenium	µg/kg	composite of muscle tissue from 10 individuals of each of 5 species	No later than year 4
DDT	µg/kg	composite of muscle tissue from 10 individuals of each of 5 species	No later than year 4
PCB as aroclors	µg/kg	composite of muscle tissue from 10 individuals of each of 5 species	No later than year 4
PCB as congeners	µg/kg	composite of muscle tissue from 10 individuals of each of 5 species	No later than year 4

2. Regional Seafood Safety Survey

This regional survey is designed to determine if seafood tissue levels within the Southern California Bight are below levels that ensure public safety. The data collected will be used to assess levels of contaminants in the edible tissue of commercial or recreationally important fish within the Bight relative to Advisory Tissue Concentrations.

Sampling Design - A regional survey of edible tissue contaminant levels in fish within the Southern California Bight shall be conducted at least once every ten years, encompassing a broader set of sampling sites and target species than those addressed in the local seafood survey. The objective is to determine whether any unexpected increases or decreases in contaminant levels have occurred in non-target species and/or at unsampled sites. The final survey design may be determined cooperatively by participants represented on a Regional Steering Committee or by the State of California’s Office of Environmental Health and Hazard Assessment. The Discharger shall provide support to a Regional Seafood Safety Survey by participating in or performing the following the following activities:

- a. Participation on the Steering Committee;
- b. Participation on the relevant Technical Committees (e.g., Information Management, Field Methods and Logistics, Fish and Invertebrates, Chemistry);
- c. Tissue chemical analysis; and,
- d. Data management

This level of participation in the Bight’08 survey was consistent with that provided by the Discharger to the previous surveys. The next regional survey is expected to occur in 2018 and 2023, and the Discharger’s level of participation shall be consistent with that provided in previous surveys.

E. Kelp Bed Monitoring

This regional survey is designed to determine if the extent of kelp beds in the Southern California Bight is changing over time and if some beds are changing at rates different than others. The data collected in this regional survey will be used to assess the status and trends in kelp bed health and spatial extent.

The Discharger shall participate in the Central Region Kelp Survey Consortium (CRKSC) to conduct regional kelp bed monitoring in Southern California coastal waters. The CRKSC design is based upon quarterly measures of kelp canopy extent using aerial imaging. The

Discharger shall participate in the management and technical committee's responsibility for the final survey design and shall provide financial support to help fund the survey based upon the number of participants in the study in an amount not to exceed a maximum of \$10,000 per year. The information gained by the City through participation may be used to evaluate whether the discharge impacts kelp beds near the outfall.

IX. OTHER MONITORING REQUIREMENTS

A. Outfall and Diffuser Inspection

This survey is designed to ensure that the outfall structures are in serviceable condition and that they can continue to be operated safely. The data collected will be used for a periodic assessment of the integrity of the outfall pipe and ballasting system.

The ocean outfall (001) shall be inspected externally a minimum of once per year. Inspections shall include general observations and photographic/videographic records of the outfall pipe and adjacent ballast ocean bottom. The pipe shall be visually inspected by a diver, manned submarine, or remotely operated vehicle. A summary report shall be submitted by August 1 of each year for the previous year. This written report, augmented with videographic and/or photographic images, will provide a description of the observed condition of the outfall structure from shallow water to the termini.

B. Biosolids and Sludge Management

The Discharger must comply with all Clean Water Act and regulatory requirements of 40 CFR § 257, 258, 501, and 503, including all applicable monitoring, record keeping, and reporting requirements.

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.
2. If there is no discharge during any reporting period, the report shall so state.
3. Each monitoring report shall contain a separate section titled "Summary of Non-compliance" which discusses the compliance record and the corrective actions taken or planned that may be needed to bring the discharge into full compliance with waste discharge requirements. This section shall clearly list all non-compliance with discharge requirements as well as all excursions of effluent limitations.
4. The Discharger shall inform the Regional Water Board well in advance of any proposed construction or maintenance activity, or modification to the POTW that could potentially affect compliance with applicable requirements.
5. The date and time of sampling (as appropriate) shall be reported with the analytical values determined.
6. The laboratory conducting analyses shall be certified by the State Water Resources Control Board, Division of Drinking Water, Environmental Laboratory Accreditation Program (ELAP), in accordance with CWC section 13176, or approved by the Regional Water Board Executive Officer, in consultation with the State Water Board's Quality Assurance Program, and USEPA for that particular parameter and must include quality assurance/quality control (QA/QC) data in their reports. A copy of the laboratory certification shall be provided each time a new/renewal certification is obtained from ELAP and must be submitted with the annual summary report. Each monitoring report must affirm in writing that: "All analyses were conducted at a laboratory certified for such

- analyses by the the State Water Resources Control Board, Division of Drinking Water, Environmental Laboratory Accreditation Program (ELAP), or approved by the Regional Water Board Executive Officer (in consultation with the State Water Board's Quality Assurance Program), and in accordance with current USEPA guideline procedures or as specified in this MRP.”
7. Non-detect levels reported for the Oxnard Wastewater Treatment Plant effluent are generally higher than effluent limitations or water quality objectives for DDT, chlordane, PCBs and PAHs. Therefore, the Discharger shall strive for lower analytical detection levels than those specified in Appendix II of the 2015 Ocean Plan.
 8. Upon request by the Discharger, the Regional Water Board, in consultation with the State Water Board's Quality Assurance Program and/or USEPA, may establish an ML that is not contained in Appendix II of the 2015 Ocean Plan, to be included in the Discharger's NPDES permit, in any of the following situations:
 - a. When the pollutant under consideration is not included in Appendix II;
 - b. When the Discharger agrees to use a test method that is more sensitive than those specified in 40 CFR § 136 (most recent revision);
 - c. When the Discharger agrees to use an ML lower than those listed in Appendix II;
 - d. When the Discharger demonstrates that the calibration standard matrix is sufficiently different from that used to establish the ML in Appendix II and proposes an appropriate ML for their matrix; or
 - e. When the Discharger uses a method whose quantification practices are not consistent with the definition of an ML. Examples of such methods are the USEPA-approved method 1613 for dioxins and furans, method 1624 for volatile organic substances, and method 1625 for semi-volatile organic substances. In such cases, the Discharger, Regional Water Board, State Water Board and USEPA shall agree on a lowest quantifiable limit, and that limit will substitute for the ML for reporting and compliance determination purposes.
 9. Records and reports of marine monitoring surveys conducted to meet receiving water monitoring requirements shall include, at a minimum, the following information:
 - a. A description of climatic and receiving water characteristics at the time of sampling (weather observations, unusual or abnormal amounts of floating debris, discoloration, wind speed and direction, swell or wave action, time of sampling or measurements, tidal stage and height, etc.).
 - b. The date, exact place and description of sampling stations, including differences unique to each station (e.g., date, time, station location, depth, and sample type).
 - c. A list of the individuals participating in field collection of samples or data and description of the sample collection and preservation procedures used in the various surveys.
 - d. A description of the specific method used for laboratory analysis, the date(s) the analyses were performed and the individuals participating in these analyses.
 - e. An in-depth discussion of the results of the survey. All tabulations and computations shall be explained.
 10. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with this Order.

11. The Discharger shall attach a cover letter to the monitoring reports. The information contained in the cover letter shall clearly identify violations of the Order; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.

B. Self-Monitoring Reports (SMRs)

1. The Discharger shall electronically submit SMRs using the State Water Board’s California Integrated Water Quality System (CIWQS) Program website (http://www.waterboards.ca.gov/water_issues/programs/ciwqs/). The CIWQS website will provide additional information for SMR submittal in the event there will be a planned service interruption for electronic submittal.
2. The Discharger shall report in the SMR the results for all monitoring specified in this Order. The Discharger shall submit monthly, quarterly, semiannual, and annual SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. SMRs are to include all new monitoring results obtained since the last SMR was submitted. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule, except where specific monitoring periods and reporting dates are required elsewhere in the Order.

Table E-11. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins	Monitoring Period	SMR Due Date
Continuous	Permit effective date	All	Submit with monthly SMR
Daily	Permit effective date	(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.	Submit with monthly SMR
Weekly	Sunday following Permit effective date or on Permit effective date if on a Sunday	Sunday through Saturday	Submit with monthly SMR
Monthly	First day of calendar month following Permit effective date or on Permit effective date if that date is first day of the month	1 st day of calendar month through last day of calendar month	Submit with monthly SMR
Quarterly	Closest of January 1, April 1, July 1, or October 1 following (or on) Permit effective date	January 1 to March 31 April 1 to June 30 July 1 to September 30 October 1 to December 31	By the 15th day of the second month after the month of sampling
Semiannually	Closest of January 1 or July 1 following (or on) Permit effective date	January 1 to June 30 July 1 to December 31	May 15 November 15
Annually	January 1 following (or on) Permit effective date	January 1 through December 31	August 15

4. Reporting Protocols. The Discharger shall report with each sample result the applicable reported Minimum Level (reported ML, also known as the Reporting Level, or RL) and the current Method Detection Limit (MDL), as determined by the procedure in 40 CFR §136.

The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

- a. Sample results greater than or equal to the reported ML shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
- b. Sample results less than the reported ML, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.

For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ. The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (\pm a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

- c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.
 - d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.
5. Compliance Determination. Compliance with effluent limitations for reportable pollutants shall be determined using sample reporting protocols defined above and Attachment A of this Order. For purposes of reporting and administrative enforcement by the Regional Water Board and State Water Board, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the reportable pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported Minimum Level (ML).
 6. Multiple Sample Data. When determining compliance with a measure of central tendency (arithmetic mean, geometric mean, median, etc.) of multiple sample analyses and the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND), the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:
 - a. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
 - b. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.
 7. The Discharger shall submit SMRs in accordance with the following requirements:

The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the

submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.

8. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the waste discharge requirements; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.

C. Discharge Monitoring Reports (DMRs)

DMRs are USEPA reporting requirements. The Discharger shall electronically certify and submit DMRs together with SMRs using Electronic Self-Monitoring Reports module eSMR 2.5 or any upgraded version. Electronic DMR submittal shall be in addition to electronic SMR submittal. Information about electronic DMR submittal is available at the DMR website at: <http://www.waterboards.ca.gov/water_issues/programs/discharge_monitoring>.

D. Other Reports

1. Pretreatment Report

The Discharger shall submit annual pretreatment reports to the Regional Water Board, with copies to the State Water Board, and USEPA Region 9, describing the Discharger's pretreatment activities over the period. The annual reports shall contain, but not be limited to, the information required in the attached Pretreatment Reporting Requirements (Attachment I), or an approved revised version thereof. If the Discharger is not in compliance with any conditions or requirements of this Order, the Discharger shall include the reasons for noncompliance and shall state how and when the Discharger will comply with such conditions and requirements.

An Enhanced Source Control study was completed in 2017 and the results will be used to improve the pretreatment program when modifications to the recycled water program include Indirect Potable Reuse (IPR). Resulting modifications to the pretreatment program shall be reported in the annual report.

2. The Discharger shall report the results of any special studies, chronic toxicity testing, TRE/TIE, Pollutant Minimization Program (PMP), and Pollution Prevention Plan required by Special Provisions – section VIII.B. The Discharger shall submit reports in compliance with SMR reporting requirements described in subsection X.B. above.
3. Annual Summary Report

By August 15 of each year, the Discharger shall submit an annual report containing a discussion of the previous year's influent/effluent results (including the average and peak flow for the year), the date of the outfall inspection, and upgrades to the treatment plant's collection system, the treatment processes, or the outfall system. The Discharger shall submit annual reports to the Regional Water Board in accordance with the requirements described in subsection X.B.7. above.

Each annual monitoring report shall contain a separate section titled "Reasonable Potential Analysis" which discusses whether or not reasonable potential was triggered for pollutants which do not have a final effluent limitation in the NPDES permit. This section shall contain the following statement: "The analytical results for this sampling period did/did not trigger reasonable potential." If reasonable potential was triggered, then the following information should also be provided:

- a. A list of the pollutant(s) that triggered reasonable potential;
- b. The Ocean Plan criteria that was exceeded for each given pollutant;
- c. The concentration of the pollutant(s);
- d. The test method used to analyze the sample; and,
- e. The date and time of sample collection.

The Discharger shall submit to the Regional Water Board, together with the first monitoring report required by this permit, a list of all chemicals and proprietary additives which could affect this waste discharge, including quantities of each. Any subsequent changes in types and/or quantities shall be reported promptly.

4. Receiving Water Monitoring Report

An annual summary of the receiving water monitoring data collected during each sampling year (January-December) shall be prepared and submitted so that it is received by the Regional Water Board by August 15 of the following year. The annual summary shall include data tables and a description of receiving water data.

A detailed Receiving Water Monitoring Biennial Assessment Report of the data collected during the two previous calendar sampling years (January-December) shall be prepared and submitted so that it is received by the Regional Water Board by September of every other year. Any effluent compliance issues during that period shall also be discussed. This report shall include a description of the nearfield zone and an in-depth analysis of the biological and chemical data following the *Model Monitoring Program Guidance Document* (Schiff, K.C., J.S. Brown and S.B. Weisberg, 2001. *Model Monitoring Program for Large Ocean Dischargers in Southern California*. SCCWRP Tech. Rep #357. *Southern California Coastal Water Research Project*, Westminster, CA. 101 pp.). Data shall be tabulated, summarized, graphed where appropriate, analyzed, interpreted, and generally presented in such a way as to facilitate ready understanding of its significance. Spatial and temporal trends shall be examined and compared. The relationship of physical and chemical parameters shall be evaluated. See also Section VIII of this MRP. All receiving water monitoring data shall be submitted in accordance with the California Environmental Data Exchange Network (CEDEN), when the system accepts data such as bioassessment /taxonomic data and continuous data. The Discharger shall submit all receiving water monitoring data in accordance with CEDEN, when feasible. An electronic copy of the receiving water document shall also be submitted to the CIWQS, the state electronic data repository.

The first assessment report shall be due August 15, 2020, and cover the sampling periods of January-December 2018 and January-December 2019. Subsequent reports shall be due August 15, 2022, and August 15, 2024, to cover sampling periods of January 2020-December 2021 and January 2022-December 2023, respectively.

5. Outfall Inspection Report

By August 1 of each year, a summary report of the outfall inspection findings for the previous calendar year shall be prepared and submitted to the Regional Water Board. This written report, augmented with videographic and/or photographic images, shall provide a description of the observed external condition of the discharge pipes from shallow water to their respective termini.

The first summary report shall be due August 1, 2020, covering the monitoring period from January 2019 – December 2019.

6. Technical Report on Preventive and Contingency Plans

The Regional Water Board requires the Discharger to file with the Regional Water Board, within 90 days after the effective date of this Order, a technical report on its preventive (failsafe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events. The technical report should:

- a. Identify the possible sources of accidental loss, untreated waste bypass, and contaminated drainage. Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks, and pipes should be considered.
- b. Evaluate the effectiveness of present facilities and procedures and state when they become operational.
- c. Describe facilities and procedures needed for effective preventive and contingency plans.
- d. Predict the effectiveness of the proposed facilities and procedures and provide an implementation schedule contingent interim and final dates when they will be constructed, implemented, or operational

ATTACHMENT F – FACT SHEET

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ATTACHMENT F – FACT SHEET

As described in section I of this Order, the Regional Water Board incorporates this Fact Sheet as findings of the Regional Water Board supporting the issuance of this Order. This Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

This Order has been prepared under a standardized format to accommodate a broad range of discharge requirements for dischargers in California. Only those sections or subsections of this Order that are specifically identified as “not applicable” have been determined not to apply to this Discharger. Sections or subsections of this Order not specifically identified as “not applicable” are fully applicable to this Discharger.

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table F-1. Facility Information

WDID	4A560105001
Discharger	City of Oxnard Municipal Corporation
Name of Facility	Oxnard Wastewater Treatment Plant (OWTP)
Facility Address	6001 South Perkins Road
	Oxnard, CA 93033-9047
	Ventura County
Facility Contact, Title and Phone	Thien Ng, Assistant Public Works Director, (805) 432-3575
Authorized Person to Sign and Submit Reports	Vince Ines, Interim Operations Manager, (805) 271 2203, Cell (805) 797-7264
Mailing Address	SAME
Billing Address	SAME
Type of Facility	Publicly Owned Treatment Works
Major or Minor Facility	Major
Threat to Water Quality	1
Complexity	A
Pretreatment Program	Yes
Reclamation Requirements	Producer
Facility Permitted Flow	31.7 (million gallons per day)
Facility Design Flow	31.7 (million gallons per day)
Watershed	Ventura Coastal Stream Watershed Management Area
Receiving Water	Pacific Ocean
Receiving Water Type	Ocean waters

- A. The City of Oxnard (hereinafter City, Permittee or Discharger) is the owner and operator of the Oxnard Wastewater Treatment Plant (hereinafter OWTS or Facility or Plant), a Publicly-Owned Treatment Works (POTW). The Regional Water Board has classified the OWTS as a major discharger. It has a Threat to Water Quality and Complexity rating of 1-A pursuant to California Code of Regulations (CCR), Title 23, section 2200.

For the purposes of this Order, references to the “Discharger” or “Permittee” in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

The Facility discharges wastewater to the Pacific Ocean, a water of the United States. The discharge was previously regulated by Order R4-2013-0094 and National Pollutant Discharge Elimination System (NPDES) No. CA0054097, adopted on June 6, 2013, and expired on July 26, 2018 and which was administratively extended until the adoption of this Order. Attachment B provides a map of the area around the Facility. Attachment C provides a flow schematic of the Facility.

The Discharger filed a report of waste discharge (ROWD) and submitted an application for renewal of its WDRs and NPDES permit on January 25, 2018. Supplemental information was requested on January 30, 2018, and received on February 22, 2018. The application was deemed complete on March 16, 2018. A site visit was conducted on July 12, 2018 to observe operations and collect additional data to develop permit limitations and requirements for waste discharge.

The Discharger is authorized to discharge subject to waste discharge requirements in this Order at the discharge locations described in Table 2 of this Order. Treated effluent is also provided to the City of Oxnard’s Advanced Water Purification Facility (AWPF) for additional treatment and distribution as recycled water, with discharge regulated under Orders R4-2011-0079-A02 and R4-2008-0083-A01.

Regulations at 40 CFR section 122.46 limit the duration of NPDES permits to a fixed term not to exceed five years. Accordingly, Table 3 of this Order limits the duration of the discharge authorization. However, pursuant to CCR, title 23, section 2235.4, the terms and conditions of an expired permit are automatically continued pending reissuance of the permit if the Discharger complies with all federal NPDES requirements for continuation of expired permits.

- B. Dilution Credits.** On August 1, 2016, Regional Water Board reviewed the “July 25, 2016 Workplan for the City of Oxnard Diffuser Dilution Study” which described a work plan for an initial dilution study of the Ocean discharge from the Oxnard Wastewater Treatment Plant (OWTP) under Order R4-2013-0094. The final results were titled the “City of Oxnard Recycled Water Retrofit Program, Technical Memorandum Ocean Outfall Effluent Dilution Study Draft”, submitted on September 9, 2016. The City consulted with Regional Water Board staff between August 2016 and February 2017 on Cormix and Visual Plume initial dilution model assumptions and recommended an initial dilution ratio between 1:143 and 1:108. The existing dilution factor is 1:98. The ratio of 1:108 was selected as discussed below.

The secondary treated wastewater and brine waste from the AWPF is discharged to the Pacific Ocean through a diffuser at Discharge Point 001. The diffuser pipe is 4 feet in diameter and 1,016 feet long, terminating 5,950 feet offshore. All 170 of the 2-inch diameter diffuser ports are located along the spring line on both sides (opposite-one-another) of the pipe at 12-foot intervals. In addition, there is a single 6-1/4-inch diameter port on the end of the terminal pipe section. The diffuser lies at a minimum of 46 feet below the surface and the ports are angled to discharge at 90 degrees from the center line of the outfall. While the 2016 annual visual observation of the outfall pipe and supporting rip-rap showed a rocky reef community with macroinvertebrates, fish and algae, all lateral ports were flowing freely, with no evidence of external damage holes, cracks or leaks.

On behalf of the City, the consulting firm Exponent applied the USEPA-approved Visual Plumes UM3 model to the flow with the assumption that the ocean mixing need only be modeled on one side of the outfall pipe, with identical and mirror-image hydrodynamics on the opposite side of the centerline. Discharge data from 2009 to 2013 was used to define the

existing discharge conditions of effluent temperature, salinity, and average and maximum flows. Receiving water properties were characterized by the measurements taken between August 2012 and May 2016 at the City of Oxnard Regional Cooperative Offshore Water Quality Station 4392, at the end of the outfall, for each meter between one and 15 meters. Although the zone of initial dilution was defined in the absence of currents, current speeds were used to ensure models were constructed for the period when the least amount of water was available for dilution. Four model scenarios were completed; one for existing conditions and three for AWPf conditions of increasing brine production and flow diversion, up to a maximum flow of 12.5 MGD of finished recycled water.

Both Exponent and Staff completed several model simulations using another USEPA-approved ocean mixing model, CORMIX, which simulates the mixing of the right and left-directed port jets over the centerline of the outfall, under varying initial conditions. USEPA Region 9 reviewed the work plan and discussed the modeling results prepared by Staff and the City using both Cormix and the Visual Plumes models.

Due to the merging of the discharge plumes above the axis of the diffuser, the Regional Water Board prefer the Cormix model for this outfall. Since the operation of the Advanced Water Purification Facility (AWPF) has still not achieved a steady output of 6.5 MGD and the future flows are still not set, the approved modeling case is the baseline of current OWTP conditions with an initial dilution ratio of 1:108. The evidence supporting the calculated initial dilution ratio of 1:108 using the CORMIX Model, based on the City's dilution modelling data input files was transmitted to the City via email on February 17, 2017 and approved by letter from the Regional Board on June 8, 2017.

Additional modeling runs included 6.25 MGD of brine (Phase I), 9.38 MGD of brine (Phase IA) and 12.5 MGD of brine (Phase II). Once the operation of the AWPf is consistently generating brine, the dilution ratio may be revised upon approval from the Regional Water Board. Any modifications to the IWC due to an adjustment of the dilution ratio would require reopening the permit.

II. FACILITY DESCRIPTION

The Oxnard Wastewater Treatment Plant serves a population of 249,050 in the city of Oxnard, the city of Port Hueneme, the United States Naval Bases in Ventura County, and some unincorporated areas of Ventura County. The City of Port of Hueneme and the United States Navy operate separate collection systems, but each discharge to the City of Oxnard's treatment plant. Flow to the plant consists of domestic, commercial and industrial wastewater. For fiscal year 2017, industrial wastewater represented about 11% (low peak) and 21% (high peak) of the total flow to the Facility.

A. Description of Wastewater and Biosolids Treatment and Controls

The Discharger owns and operates the Oxnard Wastewater Treatment Plant, located at 6001 South Perkins Road in Oxnard, California. The OWTP has a total design treatment flow capacity of 31.7 million gallons per day (MGD) of secondary treated effluent. For the period from August 2013 to December 2017, secondary effluent discharge flow from OWTP averaged 18.5 MGD with a maximum daily flow of 29.8 MGD, as reported to the Regional Water Board¹. Variations in flow associated with the production of recycled water resulted in

¹ Recycled water production variations, driven by demand and operational limitations, result in daily variations in OWTS discharge flow. As a result, flow measurements given in EPA NPDES application Form 3510-2A, averaged over a short period, vary from that reported to the Regional Water Board, through CIWQS, averaged over longer periods.

wider variation in flow after 2016, with a minimum flow of 9.3 MGD and an average in the last two years of 14.8 MGD.

1. **Preliminary Treatment and Influent Pump Station:** Preliminary treatment at the headworks consists of an inlet junction structure, bar screens, screenings conveyance, grit removal, and grit conveyance. The influent junction box collects flow from the Southeast Interceptor Sewer and the Northwest Interceptor Sewer as well as tank drainage and return flows from the OWTP. From there, flow is routed to a total of six influent screen channels. Four of the screen channels have mechanical bar screens while the remaining two are equipped with manual bar screens. From there, flow is routed to one of two grit chambers to remove grit and other heavy material that is hauled to an offsite landfill for disposal. Finally, flow is gravity fed to the influent pump station wet well. The influent pump station includes six dry pit submersible pumps. During normal operations three of the six pumps are on duty.
2. **Primary Treatment:** Raw wastewater from the headworks flows to three of four primary sedimentation basins for primary treatment. Each sedimentation basin is 105 feet (ft) in diameter and has a designated sludge collector, sludge pump, and surface scum removal mechanism. The primary treatment process includes facilities for adding ferric chloride and polymer to enhance sedimentation. Ferric chloride destabilizes the suspended particles in the primary influent wastewater to promote flocculation. The addition of polymer after floc formation produces a much larger floc, enhancing the settling of suspended solids in the primary clarifiers.
3. **Secondary Treatment:** The secondary treatment system uses a fixed-film secondary treatment process followed by an air-activated sludge process that removes organic material (biochemical oxygen demand or BOD or BOD₅20°C) from primary effluent. The secondary treatment system is comprised of biotowers, activated sludge tanks (ASTs), and secondary sedimentation basins (SSTs). The primary effluent flows to an interstage pump station where it is pumped by four circulation pumps over the two existing biotowers. Flow is then pumped by three interstage feed pumps to the ASTs. The OWTP has two ASTs that can be operated in a step-feed configuration. Additionally, each AST has three channels that can be run in series or in parallel. Each pass has fixed fine bubble diffusers fed by five single-stage centrifugal blowers. Five centrifugal blowers supply air to the aeration basins to provide oxygen for the activated sludge microorganisms and mixing of the mixed liquor. Air drawn into the blowers is compressed, and then discharged through dedicated headers to the fine bubble diffusers. Each of the three channels in the ASTs is 450 ft long with a surface water depth of 17 feet.

Flow exiting the ASTs is collected in an effluent channel that flows to the SST inlet channel. This SST inlet channel runs along all eighteen rectangular SSTs to distribute flow. Each SST has plastic flight and chain sludge collectors that send sludge to a centralized return activated sludge (RAS) pump station consisting of a wet well and four mixed flow pumps. Secondary effluent leaving the SSTs flows in the secondary effluent channel that runs along all eighteen SSTs. This secondary effluent then flows by gravity to the Chlorine Contact Tank (CCT) and/or to the Advanced Water Purification Facility (AWPF) lift pump station wet well.

When flow exiting the SSTs is greater than 50 mgd, a portion of the flow is diverted and flows by gravity to two equalization basins (EQ Basin). Each EQ Basin is 2.5 million gallons. When peak flows subside, secondary effluent stored in the EQ basins is

pumped by three vertical mixed flow pumps out of the basins to the CCTs. The EQ basins are also routinely used to balance daily flow and stabilize effluent pump operation

4. **Effluent Disinfection:** Secondary effluent leaving the SSTs and/or EQ Basin flows by gravity or is pumped through a 48-inch secondary effluent line that discharges to the inlet of the CCT adjacent to the Administration Building. The OWTP has two three-pass CCTs. Each pass is 145 feet long. Chlorination using sodium hypochlorite and dechlorination using sodium bisulfite are the final liquid treatment processes at the OWTP. Chlorine contact tanks slow the flow and allow time for disinfection to occur before the chlorine residual is removed by adding sodium bisulfite solution. The reaction between the chlorine residual and sodium bisulfite is essentially immediate. Sodium hypochlorite is added at the secondary clarifier effluent channel located in the north area process tankage, upstream of the EQ basins. Sodium bisulfite is added to the chlorinated effluent at the CCT discharge end prior to final ocean disposal. Secondary uses for sodium hypochlorite in the plant include odor control at the influent manholes and at the secondary effluent feed tie-in to the AWPf.
5. **Effluent Pump Station and Outfall:** The effluent pump station and outfall dispose treated wastewater to the ocean. The system includes in-plant conveyance piping, a pump station with two engine driven pumps, two electric motor variable frequency drive (VFD) pumps, one additional motor driven pump and an outfall. The two engine driven pumps and two VFD pumps are located at the effluent pump station, while the one motor driven pump is located at the effluent end of the CCT. Typically, the motor driven pump is used during low flow conditions while the engine driven pumps are only used for peak flows.

The OWTP has a 6,800-foot outfall that was constructed around 1963 and modified in 1978. It discharges OWTP effluent into the Pacific Ocean through multi-port diffusers offshore of Ormond Beach. It has a capacity of 50 mgd.

6. **Oil and Grease Program:** Although the City is no longer providing oil & grease collection services, the City (Source Control) staff still conduct oil & grease inspection for all grease interceptors within the City collection area. Businesses are contracting with private haulers for oil & grease removal.
7. **Solids Handling:** The solids handling facilities at the OWTP consist of two gravity thickeners for primary sludge thickening, two dissolved air flotation thickeners (DAFTs) for waste activated sludge (WAS) thickening, three anaerobic digesters, and four belt filter presses (BFPs) for dewatering. Primary sludge and scum is pumped from the primary clarifiers to the gravity thickeners. The sludge feed is combined at the thickener feed junction box and discharged to the thickener influent well where it is evenly distributed to prevent short circuiting. Polymer is added to this sludge stream. The purpose of the gravity thickeners is to reduce the liquid content in the primary sludge sent to the digesters. WAS from the secondary clarifiers is pumped from the RAS/WAS pump stations to the DAFTs where polymer is used to improve the separation of the solids from the liquid in the WAS flow. The DAFTs utilize fine air bubbles to float the sludge particles to the surface, where it is then scraped off. Volume reduction from WAS thickening benefits the sludge digestion and dewatering processes by reducing the volume of sludge to be processed, quantity of chemicals required for sludge conditioning, and amount of heat required for digestion. The thickened solids are pumped to the digesters. The main purpose of anaerobic digestion is to biologically decompose organic material in primary and secondary scum and sludge to a stable form in compliance with regulatory requirements for final disposal. Anaerobic digestion also reduces the amount of solids to dewater, reduces the volume of sludge cake that is hauled to the landfill,

reduces pathogens in the sludge and produces digester gas that is high in methane and useful for fueling other equipment. The solids dewatering facility consists of the belt filter press (BFP) process in the Solids Processing Building east of the digesters. The BFP system is designed to concentrate the anaerobically digested sludge from a solids content of less than 3 percent to a range of 18 to 20 percent. Polymer is mixed with digested sludge upstream of the BFPs to promote flocculation and solids capture so that the solids will concentrate into cake form. BFP sludge cake is conveyed to hauling trucks for transport to an offsite landfill.

8. **Water Reclamation:** A portion of secondary effluent flows to the AWPf for advanced treatment that includes microfiltration (MF), reverse osmosis (RO), and ultraviolet/advanced oxidation process (UV/AOP). As previously mentioned, the AWPf finished water is produced for reuse and future recharge. Presently, the AWPf has equipment to produce 6.25 mgd of finished water. The MF backwash wastewater is returned to the OWTP's headworks, and the design flow of 1.55 MGD RO brine is commingled with the OTWP's secondary-treated effluent and discharged to the Pacific Ocean.

Recycled water is currently being distributed for non-potable Title 22 uses, primarily irrigation. The Discharger is seeking approval for a recycled water program that will inject advanced tertiary treated recycled water for later withdrawal and distribution for agricultural, industrial, commercial and domestic uses.

9. **Pretreatment:** The OWTP has an industrial wastewater Pretreatment Program which is approved by USEPA and the Regional Water Board. The City's staff manages a pretreatment program that consists of 654 nondomestic dischargers. Thirty-seven of those dischargers are classified and permitted as Significant Industrial Users (SIU), and 12 of the SIUs are Categorical Industrial Users (CIU). The City also regulates and regularly inspects nonsignificant nondomestic dischargers, including 2 ground water remediation sites, 114 discharging auto shops, and 500 food service establishments. The City issues temporary permits to ground water remediation sites and inspects and samples them annually. The auto shops and restaurants are permitted, inspected, and sampled every 2 years. The City does not accept hauled waste at the publicly owned treatment works.

Port Hueneme Water Agency (desalter brine), the Naval Base Ventura County Point Mugu, the Nava Base Ventura County Port Hueneme, and the City of Oxnard (desalter brine) all discharge to the City's wastewater treatment plant, and, with the nondomestic dischargers in this jurisdiction, are managed through the City's pretreatment program.

In October 2017, the City submitted a new local limits study which sets the criteria which industries must meet to ensure water quality objectives will be achieved at the outfall and, especially during the production of recycled water. The document was reviewed by USEPA and approved by the Regional Board on December 14, 2017.

B. Discharge Points and Receiving Waters

1. After chlorination, the secondary treated effluent is routed to a blending manifold and mixed with brine from the AWPf and then is discharged to the Pacific Ocean through the City of Oxnard's Ocean Outfall (Refer to the Flow Schematic, Attachment C).

Table F-2. Outfall Description

Discharge Point Number	001
Diameter of Pipe at Discharge Terminus (feet)	4
Outfall Distance Offshore (feet)	5,950 (including a 1,016-foot diffuser section)

Discharge Point Number	001
Discharge Depth Below Surface Water (feet)	50.5
Latitude	34.1261°
Longitude	-119.1906°

- The receiving water (Pacific Ocean) off Ormond Beach for the Oxnard WTP discharge is part of the open coastline of the Regional Water Board-designated Ventura Coastal Watershed Management Area.

C. Summary of Existing Requirements and Self-Monitoring Report (SMR) Data.

Effluent limitations contained in the existing Order (Order R4-2013-0094) for discharge from Discharge Point 001 (Monitoring Location EFF-001A and EFF-001B) and representative monitoring data from the term of the previous Order are as follows:

Table F-3. Historic Effluent Limitations and Monitoring Data (Conventional/Non-Conventional Pollutants)

Parameter	Units	Effluent Limitation in Order R4-2013-0094				Monitoring Data (From August 2013 –December 2017 ²)		
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Maximum	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
Biochemical Oxygen Demand (BOD ₅ 20°C)	mg/L	30	45	--	--	35	44	93
Total Suspended Solids (TSS)	mg/L	30	45	--	--	8.6	19	38
Oil & Grease	mg/L	25	40		75	5.5	5.5	5.5
Settleable Solids	mL/L	1.0	1.5		3.0	0.1	0.1	0.1
Nitrate-N	mg/L	--	--	--	--	1.9	--	1.9
Nitrite-N	mg/L	--	--	--	--	3.4	--	3.4
pH	pH Unit	6.0 (instantaneous minimum) – 9.0 (instantaneous maximum)				7.4	--	7.7
Temperature	°F	--	--	100	--	79	--	79
Turbidity	NTU	75	100	--	225	6.7	--	34.5

Order No R4-2013-0094 established effluent limitations for toxic pollutants based on water quality objectives in the Ocean Plan. A summary of existing effluent limitations and monitoring data of toxic pollutants for the period from August 2013 to December 2017 is shown below.

² Discharger effluent concentration data submitted with supplementary application information may vary from these values, which are calculated from daily data reported to CIWQS, because a shorter sampling period is represented in the Report of Waste Discharge.

Table F-4. Historic Effluent Limitations and Monitoring Data for Toxic Constituents

Parameter	Units	Effluent Limitation Order R4-2013-0094			Monitoring Data (From August 2013 –December 2017)		
		Average Monthly	Maximum Daily	Instan- taneous Maximum	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
Arsenic (As)	µg/L	--	--	--	1.6	--	1.6
Cadmium (Cd)	µg/L	--	--	--	<0.5	--	<0.5
Chromium VI(Cr)	µg/L	--	--	--	7.1	--	7.1
Copper (Cu)	µg/L	--	--	--	30	--	30
Lead (Pb)	µg/L	--	--	--	19	--	19
Mercury (Hg)	µg/L	--	--	--	0.38	--	0.38
Nickel (Ni)	µg/L	--	--	--	6.6	--	6.6
Selenium (Se)	µg/L	--	--	--	7.1	--	7.1
Silver (Ag)	µg/L	--	--	--	2.9	--	2.9
Zinc (Zn)	µg/L	--	--	--	35	--	35
Cyanide	µg/L	--	--	--	3.2	--	3.2
Residual Chlorine	mg/L	--	--	--	0.08	--	0.08
Ammonia-N	mg/L	--	--	--	49.13	--	49.13
Chronic Toxicity	TUc	--	99	--	25	--	25
Non-Chlorinated Phenolic Compounds	µg/L	--	--	--	25	--	25
Chlorinated Phenolic Compounds	µg/L	--	--	--	<0.58	--	<0.58
Endosulfan	µg/L	--	--	--	<1.99	--	<1.99
Endrin	µg/L	--	--	--	<0.08	--	<0.08
HCH	µg/L	--	--	--	<0.014	--	<0.014
Radioactivity		--	--	--	<0.05	--	<0.05
Gross alpha	pCi/L	--	15	--	10.2	--	10.2
Gross beta	pCi/L	--	50	--	94	--	94
Combined Radium-226 & Radium-228	pCi/L	--	5.0	--	<0.56	--	<0.56
Tritium	pCi/L	--	20,000	--	--	--	--
Strontium-90	pCi/L	--	8.0	--	--	--	--
Uranium	pCi/L	--	20	--	--	--	--
Acrolein	µg/L	--	--	--	<2.20	--	<2.20
Antimony	µg/L	--	--	--	5.4	--	5.4

Parameter	Units	Effluent Limitation Order R4-2013-0094			Monitoring Data (From August 2013 –December 2017)		
		Average Monthly	Maximum Daily	Instan- taneous Maximum	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
Bis (2-Chloroethoxy) methane	µg/L	--	--	--	<0.25	--	<0.25
Bis (2-Chloroisopropyl) ether	µg/L	--	--	--	<0.38	--	<0.38
Chlorobenzene	µg/L	--	--	--	<0.21	--	<0.21
Chromium III (Cr)(calculated)	µg/L	--	--	--	5.0	--	5.0
Di-n-Butyl Phthalate	µg/L	--	--	--	<0.24	--	<0.24
Dichlorobenzene	µg/L	--	--	--	<1.65	--	<1.65
Diethyl phthalate	µg/L	--	--	--	<0.15	--	<0.15
Dimethyl phthalate	µg/L	--	--	--	<0.18	--	<0.18
4,6-dinitro-2-methylphenol	µg/L	--	--	--	<0.50	--	<0.50
2,4-dinitrophenol	µg/L	--	--	--	<1.60	--	<1.60
Ethylbenzene	µg/L	--	--	--	<0.17	--	<0.17
Fluoranthene	µg/L	--	--	--	<0.22	--	<0.22
Hexachlorocyclopentadiene	µg/L	--	--	--	<1.5	--	<1.5
Nitrobenzene	µg/L	--	--	--	<0.36	--	<0.36
Thallium	µg/L	--	--	--	<2.00	--	<2.00
Toluene	µg/L	--	--	--	<0.22	--	<0.22
Tributyltin	µg/L	--	--	--	<0.01	--	<0.01
1,1,1-trichloroethane	µg/L	--	--	--	<0.38	--	<0.38
Acrylonitrile	µg/L	--	--	--	<1.8	--	<1.8
Aldrin	µg/L	--	--	--	<0.0075	--	<0.0075
Benzene	µg/L	--	--	--	<0.23	--	<0.23
Benzidine	µg/L	0.0068	--	--	<4.00	--	<4.00
Beryllium (Be)	µg/L	--	--	--	0.6	--	0.6
Bis (2-Chloroethyl) ether	µg/L	--	--	--	<0.27	--	<0.27

Parameter	Units	Effluent Limitation Order R4-2013-0094			Monitoring Data (From August 2013 –December 2017)		
		Average Monthly	Maximum Daily	Instan- taneous Maximum	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
Bis(2-ethylhexyl)- phthalate	µg/L	--	--	--	16	--	16
Carbon tetrachloride	µg/L	--	--	--	<0.33	--	<0.33
Chlordane	µg/L	--	--	--	<0.4	--	<0.4
Chlorodibromo- methane	µg/L	--	--	--	<0.38	--	<0.38
Chloroform	µg/L	--	--	--	5.9	--	5.9
DDT	µg/L	--	--	--	<0.19	--	<0.19
1,4- Dichlorobenzene	µg/L	--	--	--	<0.55	--	<0.55
3,3'- dichlorobenzidine	µg/L	--	--	--	<1.2	--	<1.2
1,2- dichloroethane	µg/L	--	--	--	<0.24	--	<0.24
1,1- dichloroethylene	µg/L	--	--	--	<0.39	--	<0.39
Dichlorobromo- thane	µg/L	--	--	--	<0.28	--	<0.28
Dichloromethane	µg/L	--	--	--	<0.25	--	<0.25
1,3- dichloropropene	µg/L	--	--	--	<0.26	--	<0.26
Dieldrin	µg/L	--	--	--	<0.01	--	<0.01
2,4- Dinitrotolulene	µg/L	--	--	--	<0.18	--	<0.18
1,2-Diphenyl- hydrazine	µg/L	--	--	--	<0.30	--	<0.30
Halomethanes	µg/L	--	--	--	<1.60	--	<1.60
Heptachlor	µg/L	--	--	--	<0.01	--	<0.01
Heptachlor epoxide	µg/L	0.002	--	--	<0.01	--	<0.01
Hexachloro- benzene	µg/L	--	--	--	<0.49	--	<0.49
Hexachloro- butadiene	µg/L	--	--	--	<0.47	--	<0.47
Hexachloroethane	µg/L	--	--	--	<0.52	--	<0.52
Isophorone	µg/L	--	--	--	<0.21	--	<0.21

Parameter	Units	Effluent Limitation Order R4-2013-0094			Monitoring Data (From August 2013 –December 2017)		
		Average Monthly	Maximum Daily	Instan- taneous Maximum	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
N-Nitrosodi- methylamine	µg/L	--	--	--	<0.14	--	<0.14
N-Nitrosodi-N- propylamine	µg/L	--	--	--	<0.26	--	<0.26
N-Nitrosodi- phenylamine	µg/L	--	--	--	<0.19	--	<0.19
Polycyclic Aromatic Hydrocarbons (PAH)	µg/L	--	--	--	<2.81	--	<2.81
Total Polychlorinated Biphenyls (PCBs)	µg/L	0.019	--	--	<3.5	--	<3.5
TCDD equivalents	µg/L	0.000000 39	--	--	<1E-8	--	<1E-8
1,1,2,2- tetrachloroethane	µg/L	--	--	--	<0.18	--	<0.18
Tetrachloro- ethylene	µg/L	--	--	--	<0.27	--	<0.27
Toxaphene	µg/L	--	--	--	<0.6	--	<0.6
Trichloroethylene	µg/L	--	--	--	<0.37	--	<0.37
1,1,2- trichloroethane	µg/L	--	--	--	<0.25	--	<0.25
2,4,6- Trichlorophenol	µg/L	--	--	--	0.74	--	0.74
Vinyl chloride	µg/L	--	--	--	<0.33	--	<0.33

D. Compliance Summary

Effluent violations for biochemical oxygen demand (BOD₅20°C) and radioactivity were reported between 2013 and 2017. Violations of the water quality objective are summarized in Table F-5 and a Notice of Violation was given to the Discharger for each. Facility upgrades to prevent future bypasses are described below under section F. Planned Changes.

1. Bypass

Four bypass events were reported to the Regional Water Board in accordance with the requirements of this Order. They are the subject of ongoing enforcement activity.

- a. **May 26, 2017:** less than 10 gallons of primary effluent were spilled when the shaft seal of biocirculation pump #1 failed. Sand bags were used to contain the spill, but fluid entered the gutter on Perkins Road where it was removed before it entered any catch basin or body of water.

- b. **July 16, 2017:** 325,380 gallons of primary effluent were released through the chlorine contact chamber to mingle with fully treated effluent during transport to the ocean outfall diffuser and discharge into the Ocean. The release was attributed to failure of the external power supply, intermittent operation of the emergency standby power generator, and failure of the emergency bypass tank and chlorinator. Flow over the bypass weir fluctuated until power restoration and manual operation of the pump re-established normal operation.
- c. **December 4, 2017:** 193,035 gallons of primary effluent were bypassed to the ocean outfall through the chlorine contact chambers. The release was attributed to failure of the external power supply during the high wind event and Thomas Fire, which burned north of the facility, and intermittent operation of the emergency standby power generator. Manual operation of sewer lift stations prevented additional releases in the collection system. Ormond Beach was closed as a preventative measure, but sampling in the vicinity of the outfall did not identify bacteria exceedances.
- d. **December 7, 2017:** 22 gallons of final effluent foam left the Final Effluent Pump Station Exhaust fan and entered Perkins Road. Sand bags were used to limit the spill, and the fluids were removed before it entered any catch basin or body of water.

Table F-5. Violations

Violation	Date
Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C) Monthly Average limit is 30 mg/L and reported value was 34 mg/L at EFF-001B.	11/30/2016
Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C) 30-Day Average limit is 30 mg/L and reported value was 30.6 mg/L at EFF-001B.	10/31/2016
Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C) 30-Day Average limit is 30 mg/L and reported value was 35 mg/L at EFF-001B.	5/31/2015
Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C) 30-Day Average limit is 30 mg/l and reported value was 35 mg/l at EFF-001B.	3/31/2015
Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C) 30-Day Average limit is 30 mg/L and reported value was 31 mg/L at EFF-001B.	2/28/2015
Radiation, Gross Beta Daily Maximum limit is 50 PCi/L and reported value was 94 PCi/L at EFF-001A.	8/4/2014

E. Receiving Water Description

The OWTP discharges into the Ocean at a one-mile outfall, which lies south of the towns of Ventura and Port Hueneme, north of Mugu lagoon, and offshore of Ormond Beach. The City has monitored the marine conditions since at least 1999 and has annually described the receiving water. The vicinity of the outfall consists of a silty-sandy plain that is generally uninterrupted between Hueneme and Mugu Submarine Canyons, located upcoast and downcoast, respectively, of the outfall. Fish tissue studies confirmed DDT and PCB are present in some species above method detection limits, especially White Croaker. DDT and PCB concentrations in fish tissue are lower than consumption thresholds and those measured in other parts of Santa Monica Bay. Sediment concentrations of DDT rose from 2005 through 2010, and then decreased to at or below method detection limits in 2012 to 2016. PAH

showed similar variability in sediment sampling. PCB concentrations are below detection in sediment across the study periods.

F. Planned Changes

1. **Wastewater effluent sampling location modification** – In 2015 the City of Oxnard began taking samples at EFF-001B in accordance with the NPDES Permit No. CA0054097, Order No. R4-2013-0094. Previously, effluent samples were taken at the Chlorine Contact Tank Location (EFF-001A). The new effluent sampling location (EFF-001B) consists of a mixing tank where proportionate sample flow from secondary effluent and Reverse Osmosis (RO) concentrate from the Advanced Water Purification Facility (AWPF) are blended. Violations of BOD and elevated bacteria counts have been traced to regrowth in the sample tubing between the last chlorination point in OWTS and the sampling point. Due to this problem, this Order allows a separate sampling point for Biochemical Oxygen Demand, bacteria and TSS, as requested by the Discharger on June 9, 2017, at EFF-001A.
2. **Operation of the Advanced Water Purification Facility (AWPF)** – In 2015, the City began delivering recycled water from its AWPF for recycled uses. Depending on the demand for recycled water, approximately 4 MGD to 16 MGD of secondary effluent is diverted through the AWPF, which is capable of producing up to 12.5 MGD of advanced treated recycled water with a maximum brine flow rate of 3.1 MGD. The future final production of the AWPF is 25 MGD expected to result in commensurate changes in brine production and concentration.
3. **Enhanced primary settling** – Before 2018, Oxnard used polymer to enhance primary settling of solids in the primary clarifiers. Presently, the City has stopped using polymer in the primary clarifiers, but has plans to install permanent polymer equipment as part of the primary clarifier rehabilitation project
4. **Spill Prevention** - The City of Oxnard has experienced spills of primary effluent since 2013. The most recent occurred in December 2017. The following is a list of corrective measures underway to prevent future occurrences:
 - a. **Operation and Maintenance Activities**
 - i. One Primary Clarifier will be kept off line and used, if necessary, to hold flow in the event that the interstage pumping system fails.
 - ii. The B-2 breaker was re-installed and the co-generator has been made operational.
 - iii. Chlorine contact tank (CCT) emergency chlorinator solenoid was replaced.
 - iv. Bio-Circulation Pump #1 is being rebuild. Once installed, the pump will be used during Interstage failures.
 - v. The power distribution control system installation is complete and the system is operational.
 - b. **Capital Improvement Activities**
 - i. The existing main electrical building and switchgears will be replaced through the City's 2-year capital improvements program.

- ii. The existing emergency standby generator will be replaced through the City's 5-year capital improvements program.
- c. Training Activities
 - i. Staff are being trained to utilize the influent pump station during loss of inter-stage pumping capabilities.
 - ii. Staff are being trained to utilize tie-breaker operations during loss of co-generation power production.
 - iii. Staff are being trained to utilize and follow the City's Primary Effluent Bypass Contingency Plan and Reporting Procedures

A summary of facility improvements is provided in Table F-6.

Table F-6. Planned Changes

Item	Project Schedule
Headworks Odor Control System	2017-2020
Primary Clarifier, Biotowers, Activated Sludge Tank Rehabilitation	2017-2018
Replace Belt Filter Presses and Conveyors	2017-2021
Interstage, Effluent pump rehabilitation	2019-2022
Cogenerators rehabilitations	2017-2020
Plant Motor Control Center/Transformers/Emergency Standby Generator Replacement	2020-2022
Rehabilitate Central Trunk (47), Harbor Blvd (12), Pleasant Valley (14) and Redwood Tributary (38) existing manholes	2018-2020
Install new 24-inch Rice Avenue Sewer	2020-2022

5. **Pretreatment:** On November 17-18, 2014, an explosion and fire at the Santa Clara Waste Water facility, located at 815 Mission Rock Road, resulted in property damage and injury. The facility was permitted by the City of Oxnard under the pretreatment requirements of R4-2013-0094 and the OWTS accepted waste water from the facility for treatment. The City's permit for Santa Clara Waste Water Facility was under review at the time of the accident as an effluent violation for Gross Beta radioactivity was measured on August 4, 2014. The facility was ultimately identified as the source of the radioactive waste, possibly associated with oil field pumping fluids, and the pretreatment permit was revoked. No other violations of water quality objectives were directly related to the operation of the facility. The USEPA coordinated enforcement actions concerning the fire and chemical releases and then led an additional review of the pretreatment program at Oxnard. Pretreatment upgrades include a revision of the Local Limits and Sewer Use Ordinance and adoption of a new Enforcement Response Plan granting additional authority to investigate and respond to instances of industrial user noncompliance. The new ordinance is scheduled to be heard by the City Council in

February 2019. Additional staffing, training, tracking, and permit revision are all underway.

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS.

The requirements contained in this Order are based on the requirements and authorities described in this section.

A. Legal Authorities

This Order serves as WDRs pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260). This Order is also issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the USEPA and chapter 5.5, division 7 of the Water Code (commencing with section 13370). It shall serve as an NPDES permit authorizing the Discharger to discharge into waters of the United States at the discharge location described in Table 2 subject to the WDRs in this Order.

B. California Environmental Quality Act (CEQA)

Under Water Code section 13389, this action to adopt an NPDES permit is exempt from CEQA. See also *County of Los Angeles v. State Water Resources Control Board (2006) 143 Cal.App.4th 985, 1007.*

C. State and Federal Laws, Regulations, Policies, and Plans

- 1. Water Quality Control Plan.** The Regional Water Board adopted a Water Quality Control Plan for the Los Angeles Region (Basin Plan) on June 13, 1994 that has been occasionally amended and designates beneficial uses, establishes water quality objectives (WQOs), establishes prohibitions, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Requirements in this Order implement the Basin Plan including its subsequent amendments. Beneficial uses applicable to the Pacific Ocean are as follows:

Table F-7. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Ormond Beach	<u>Existing:</u> Industrial water supply (IND); navigation (NAV); hydropower generation (POW); water contact recreation (REC-1); non-contact water recreation (REC-2); commercial and sport fishing (COMM); marine habitat (MAR); wildlife habitat (WILD); rare, threatened or endangered species (RARE); and, shellfish harvesting (SHELL). <u>Potential:</u> Spawning, reproduction, and/or early development (SPWN).
001	Pacific Ocean Nearshore	<u>Existing:</u> IND, NAV, REC-1, REC-2, COMM, MAR, WILD, preservation of biological habitats (BIOL), RARE, migration of aquatic organisms (MIGR), SPWN, and SHELL. <u>Potential:</u> None.
001	Pacific Ocean Offshore	<u>Existing:</u> NAV, REC-1, REC-2, COMM, MAR, WILD, RARE, MIGR, SPWN, and SHELL. <u>Potential:</u> None.

2. **Thermal Plan.** The State Water Board adopted the Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California (Thermal Plan), on January 7, 1971, and amended this plan on September 18, 1975. This plan contains temperature objectives for coastal and inland surface waters. Requirements of this Order implement the Thermal Plan. The limit was changed from maximum daily to instantaneous maximum to comply with the thermal plan.
3. **Ocean Plan.** The State Water Board adopted the Water Quality Control Plan for Ocean Waters of California, California Ocean Plan (Ocean Plan) in 1972 and amended it in 1978, 1983, 1988, 1990, 1997, 2000, 2005, 2009, 2012, and 2015. The State Water Board adopted the latest Ocean Plan amendment, to incorporate a Desalination Amendment, on May 6, 2015, and it became effective on January 28, 2016. The Ocean Plan is applicable, in its entirety, to point source discharges to the ocean. The Ocean Plan identifies beneficial uses of ocean waters of the state to be protected as summarized below.

Table F-8. Ocean Plan Beneficial Uses

Discharge Point	Receiving Water	Beneficial Uses
Outfall 001	Pacific Ocean	Industrial water supply; water contact and non-contact recreation, including aesthetic enjoyment; navigation; commercial and sport fishing; mariculture; rare and endangered species; marine habitat; fish migration; fish spawning; and shellfish harvesting. preservation and enhancement of designated Areas of Special Biological Significance (ASBS) ³ .

4. **Santa Monica Bay Restoration Plan.** The OWTP discharges to the Ocean where predominant currents flow south to Santa Monica Bay, one of the most heavily used recreational areas in California. Recognizing the importance of the Bay as a national resource, the State of California and USEPA nominated Santa Monica Bay in the National Estuary Program, and Congress subsequently included Santa Monica Bay in the program. The USEPA, with support from the Santa Monica Bay Restoration Commission, developed the Bay Restoration Plan (BRP), which serves as a blueprint for restoring and enhancing the Bay. The Regional Water Board plays a lead role in the implementation of the BRP. One of the proposed priorities of the BRP are reduction of pollutants of concern at the source (including municipal wastewater treatment plants) and implementation of the mass emission approach for discharges of pollutants to the Bay.
5. **Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes (40 CFR part 131.21, 65 Federal Register 24641 (April 27, 2000)). Under the revised regulation (also known as the Alaska Rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and

³ There is no ASBS designated area in the vicinity of this discharge.

submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.

6. **Stringency of Requirements for Individual Pollutants.** This Order contains restrictions on individual pollutants that are no more stringent than required by the federal CWA and California Ocean Plan. Individual pollutant restrictions consist of technology-based effluent limitations (TBELs) and water quality-based effluent limitations (WQBELs). The TBELs consist of restrictions on BOD₅20°C, TSS, pH, and percent removal of BOD₅20°C and TSS, which implement the minimum applicable federal technology-based requirements for POTWs. In addition, effluent limitations more stringent than federal technology-based requirements consisting of restrictions on oil and grease, settleable solids, and turbidity are necessary to implement state treatment standards in Table 2 of the Ocean Plan. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements. WQBELs for radionuclides, benzidine, PCBs, and TCDD equivalents have been scientifically derived to implement WQOs that protect beneficial uses. Both the beneficial uses and the water quality objectives are approved pursuant to federal law and are the applicable federal water quality standards. All beneficial uses and water quality objectives contained in the Basin Plan and the Ocean Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to 40 CFR part 131.21(c)(1). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.
7. **Antidegradation Policy.** Federal regulation 40 CFR section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution 68-16 ("Statement of Policy with Respect to Maintaining High Quality of Waters in California"). Resolution 68-16 is deemed to incorporate the federal antidegradation policy where the federal policy applies under federal law. Resolution 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. The discharges permitted in this Order are consistent with the antidegradation provisions of 40 CFR § 131.12 and State Water Board Resolution 68-16 and is described in further detail in section IV.D.2. of this Fact Sheet.
8. **Anti-Backsliding Requirements.** Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 CFR section 122.44(l) restrict backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed. The applicability of these requirements to the order is discussed in detail in section IV.D.1. of the Fact Sheet.

The accompanying monitoring and reporting program requires continued data collection and if monitoring data show reasonable potential for a constituent to cause or contribute to an exceedance of water quality standards, the Order will be reopened to incorporate WQBELs. Such an approach ensures that the discharge will adequately protect water quality standards for designated beneficial uses and conform to antidegradation policies and anti-backsliding provisions.
9. **Endangered Species Act (ESA) Requirements.** This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now

prohibited, or becomes prohibited in the future, under the California ESA (Fish and Wildlife Code, sections 2050 to 2097). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state. The Discharger is responsible for meeting all requirements of the applicable ESA.

10. **Monitoring and Reporting.** 40 CFR § 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. CWC sections 13267 and 13383 authorize the Regional Water Board to require technical and monitoring reports. The MRP establishes monitoring and reporting requirements to implement federal and state requirements. This MRP is provided in Attachment E.
11. **Water Recycling.** State Water Board Resolution 2009-0011, Adoption of a Policy for Water Quality Control for Recycled Water (Revised January 22, 2013, effective April 25, 2013) directs the Regional Water Board to encourage recycling. Consistent with this policy, the Discharger shall submit a feasibility report evaluating the feasibility of additional recycling efforts to reduce the amount of treated effluent discharged as authorized in this Order, and a recycled water progress report describing any updates to the development of increased recycled water production and/or distribution. These reports shall be included in the annual report submittal, as described in the monitoring and reporting program (MRP).
12. **Standard and Special Provisions.** Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR § 122.41, and additional conditions applicable to POTWs in accordance with 40 CFR § 122.42, are provided in Attachment D. The Regional Water Board has also included in this Order Special Provisions applicable to the Discharger. The rationale for the Special Provisions contained in this Order is provided in this Fact Sheet.

D. Impaired Water Bodies on the CWA section 303(d) List

The State Water Board proposed the California 2014-16 Integrated Report from a compilation of the adopted Regional Water Boards' Integrated Reports containing CWA section 303(d) List of Impaired Waters and section 305(b) Reports following recommendations from the Regional Water Boards and information solicited from the public and other interested persons.. On April 06, 2018, the 2014-2016 Integrated Report Section 303(d) List of Impaired Waters was approved by USEPA. The CWA section 303(d) list can be viewed at the following link:

https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2014_2016.shtml

The Ocean off Ormond Beach is not on the 303(d) list for pollutants/stressors from point and non-point sources. The coast and bay shoreline at Point Mugu Beach and Port Hueneme Beach Park are on the 2014-2016 for indicator bacteria. The back basins in Port Hueneme Harbor are listed for arsenic, DDT, dieldrin, PAH, and PCB and the Port Hueneme Pier is listed for PCBs. The bay and harbor at Ventura Harbor/Ventura Keys are listed for arsenic, coliform and indicator bacteria, dieldrin, and PCBs. The Ventura Marina Jetties, coastal bay and shoreline, are listed for DDT and PCB. The Regional Water Board has adopted a TMDL to monitor legacy pesticides in McGrath Lake, which can drain into the Ocean north of the outfall under high groundwater conditions.

E. Other Plans, Polices and Regulations

1. **Secondary Treatment Regulations.** 40 CFR § 133 establishes the minimum levels of effluent quality to be achieved by secondary treatment. These limitations, established by

USEPA, are incorporated into this Order, except where more stringent limitations are required by other applicable plans, policies, or regulations or to prevent backsliding.

2. **Storm Water.** CWA section 402(p), as amended by the Water Quality Act of 1987, requires NPDES permits for storm water discharges. Pursuant to this requirement, in 1990, USEPA promulgated 40 CFR § 122.26 that established requirements for storm water discharges under an NPDES program. To facilitate compliance with federal regulations, on November 1991, the State Water Board issued a statewide general permit, General NPDES Permit No. CAS000001 and Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities. This permit was amended in September 1992 and reissued on April 17, 1997 in State Water Board Order No. 97-03-DWQ, and superseded by Order No. 2014-0057-DWQ on April 1, 2014 to regulate storm water discharges associated with industrial activity.

The OWTP is subject to the requirements of California's General Permit for Storm Water Discharges Associated with Industrial Activities NPDES No. CAS000001, Water Quality Order No. 2014-0057-DWQ (Industrial General Permit). The Discharger submitted a Notice of Intent (WDID 4 56I027080) to comply with the requirements of the Industrial General Permit, which became effective July 1, 2015.

The Discharger developed and currently implements a Storm Water Pollution Prevention Plan (SWPPP) to comply with the requirements of the State Water Board's Industrial General Permit.

3. **Sanitary Sewer Overflows (SSOs).** The CWA prohibits the discharge of pollutants from point sources to surface waters of the United States unless authorized under an NPDES permit. (33 USC sections 1311 and 1342). The State Water Board adopted General WDRs for Sanitary Sewer Systems, (Water Quality Order No. 2006-0003-DWQ; SSO WDR) on May 2, 2006, as amended, to provide a consistent, statewide regulatory approach to address SSOs. The SSO WDR requires public agencies that own or operate sanitary sewer systems with greater than one mile of pipes and sewer lines to apply for coverage under the SSO WDR, develop and implement sewer system management plans, and report all SSOs to the State Water Board's online SSO database. Regardless of the coverage obtained under the SSO WDR, the Discharger's collection system is part of the POTW that is subject to this NPDES permit. As such, pursuant to federal regulations, the Discharger must properly operate and maintain its collection system (40 CFR § 122.41 (e)), report any non-compliance (40 CFR § 122.41(1)(6) and (7)), and mitigate any discharge from the collection system in violation of this NPDES permit (40 CFR § 122.41(d)).

The requirements contained in this Order sections VII.C.3.b (Spill Cleanup Contingency Plan section), VII.C.4 (Construction, Operation and Maintenance Specifications section), and VII.C.6 (Spill Reporting Requirements section) are intended to be consistent with the requirements of the SSO WDR. The Regional Water Board and USEPA recognizes that there may be some overlap between these NPDES permit provisions and SSO WDR requirements, related to the collection systems. The requirements of the SSO WDR are considered the minimum thresholds (see Finding 11 of State Water Board Order No. 2006-0003-DWQ). To encourage efficiency, the Regional Water Board and USEPA will accept the documentation prepared by the Dischargers under the SSO WDR for compliance purposes as satisfying the requirements in sections VII.C.3.b, VII.C.4, and VII.C.6, provided the more stringent provisions contained in this NPDES permit are also addressed. Pursuant to SSO WDR, section D, provision 2(iii) and (iv), the provisions of

this NPDES permit supersede the SSO WDR, for all purposes, including enforcement, to the extent the requirements may be deemed duplicative.

4. **Pretreatment.** Section 402 of the CWA and implementing regulations at 40 CFR § 403 establish pretreatment requirements for POTWs which receive pollutants from non-domestic users. This Order contains pretreatment program requirements pursuant to 40 CFR § 403 that are applicable to the Discharger.
5. **Sewage Sludge/Biosolids Requirements.** Section 405 of the CWA and implementing regulations at 40 CFR § 503 require that producers of sewage sludge/biosolids meet certain reporting, handling, and use or disposal requirements. The State has not been delegated the authority to implement this program; therefore, USEPA is the implementing agency. This Order contains sewage sludge/biosolids requirements pursuant to 40 CFR § 503 that are applicable to the Discharger.
6. **Watershed Management.** This Regional Water Board has been implementing a Watershed Management Approach (WMA) to address water quality protection in the Los Angeles Region, as detailed in the Watershed Management Initiative (WMI). The WMI is designed to integrate various surface and ground water regulatory programs while promoting cooperative, collaborative efforts within a watershed. It is also designed to focus limited resources on key issues and use sound science. Information about watersheds in the region can be obtained at the Regional Water Board's website at http://www.waterboards.ca.gov/losangeles/water_issues/programs/regional_program/watershed/index.shtml. The WMA emphasizes cooperative relationships between regulatory agencies, the regulated community, environmental groups, and other stakeholders in the watershed to achieve the greatest environmental improvements with the resources available.

The Regional Water Board has prepared and periodically updates its Watershed Management Initiative Chapter and the latest version was updated April 2018. This document contains a summary of the region's approach to watershed management. It addresses each watershed and the associated water quality problems and issues. It describes the background and history of each watershed, current and future activities, and addresses TMDL development. The information can be accessed on the Regional Water Board's website: <http://www.waterboards.ca.gov/losangeles>.

This Order and the accompanying Monitoring and Reporting Program (Attachment E) fosters implementation of this approach. The Monitoring and Reporting Program requires the discharger to participate in regional monitoring programs in the Southern California Bight.

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATION.

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the Code of Federal Regulations: 40 CFR section 122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 CFR section 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where numeric water quality objectives have not been established, 40 CFR § 122.44(d) specifies that WQBELs may be established using USEPA criteria guidance under CWA section 304(a); proposed State criteria or a State policy interpreting narrative criteria supplemented with other relevant information may be used; or an indicator parameter may be established.

A. Discharge Prohibitions.

This permit implements discharge prohibitions that are applicable under sections III.I.1.a, III.I.3.a, and III.I.4.a of the California Ocean Plan.

B. Technology-Based Effluent Limitations.

1. Scope and Authority.

Technology-based effluent limitations require a minimum level of treatment for industrial/municipal point sources based on currently available treatment technologies while allowing the Discharger to use any available control techniques to meet the effluent limits. The 1972 CWA required POTWs to meet performance requirements based on available wastewater treatment technology. Section 301 of the CWA established a required performance level--referred to as "secondary treatment" --that all POTWs were required to meet by July 1, 1977. More specifically, section 301(b)(1)(B) of the CWA required that USEPA develop secondary treatment standards for POTWs as defined in section 304(d)(1). Based on this statutory requirement, USEPA developed national secondary treatment regulations which are specified in 40 CFR § 133. These technology- based regulations apply to all POTWs and identify the minimum level of effluent quality to be attained by secondary treatment in terms of BOD₅20°C, TSS, and pH.

2. Applicable Technology-Based Effluent Limitations

Section 301(b) of the CWA and implementing USEPA permit regulations at 40 CFR § 122.44 require that permits include conditions meeting applicable technology-based requirements at a minimum, and more stringent effluent limitations necessary to meet minimum federal technology-based requirements based on Secondary Standards at 40 CFR § 133 and Best Professional Judgment (BPJ) in accordance with 40 CFR § 125.3. Secondary treatment is defined in terms of three parameters – BOD₅20°C, TSS, and pH.

The following summarizes the technology-based requirements for secondary treatment, which are applicable to the Facility:

Table F-9. Summary of TBELs in 40 CFR part 133.102

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Percent Removal ⁴
BOD ₅ 20°C	mg/L	30 mg/L	45 mg/L	85
TSS	mg/L	30 mg/L	45 mg/L	85
pH	6.0 to 9.0 pH Units			

Also, Table 2 of the 2015 Ocean Plan establishes the following TBELs for POTWs, which are applicable to the Plant:

Table F-10. Summary of TBELs for POTWs established by the 2015 Ocean Plan

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Instantaneous Maximum
Oil & Grease	mg/L	25	40	75

⁴ Percent removal limit does not apply to the AWPf influent.

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Instantaneous Maximum
TSS	mg/L	5		
Settleable Solids	mL/L	1.0	1.5	3.0
Turbidity	NTU	75	100	225
Removal Efficiency for TSS	%	75 ⁵	--	--
pH	6.0 to 9.0 pH units			

All TBELs from Order No. R4-2013-0094 for BOD₅20°C, TSS, oil and grease, settleable solids, pH, and turbidity, are retained by this Order. All TBELs are independent of the dilution ratio for the discharge outfall. In addition to the concentration-based effluent limitations, mass-based effluent limitations based on the flow rate of 31.7 MGD used in Order R4-2013-0094, are also included.

The following table summarizes the TBELs for the discharge from the Facility.

Table F-11. Summary of TBELs for Discharge Point 001

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum ⁶ Daily	Instantaneous Minimum	Instantaneous Maximum ⁷
BOD ₅ 20°C ⁸	mg/L	30	45	--	--	--
	lbs/day ⁹	7,960	11,900	--	--	--
	% removal	85	--	--	--	--
Total Suspended Solids	mg/L	30	45	--	--	--
	lbs/day ⁹	7,960	11,900	--	--	--
	% removal	85	--	--	--	--
Oil and Grease	mg/L	25	40	--	--	75
	lbs/day ⁹	6,630	10,600	--	--	19,900
Settleable Solids	ml/L	1.0	1.5	--	--	3.0

⁵ Dischargers shall, as a 30-day average, remove 75% of TSS from the influent stream before discharging wastewater to the ocean, except that the effluent limitation to be met shall not be lower than 60 mg/L.

⁶ The maximum daily effluent limitations shall apply to flow weighted 24-hour composite samples

⁷ The instantaneous maximum effluent limitations shall apply to grab samples.

⁸ Compliance for BOD percent removal is at EFF-001A. Weekly Average and Monthly may be calculated from daily measurements.

⁹ The mass emission rates are based on the design flow of 31.7 MGD, and are calculated as follows: Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day. During wet-weather storm events in which the flow exceeds the design capacity, the mass discharge rate limitations shall not apply, and concentration limitations will provide the only applicable effluent limitations.

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum ⁶ Daily	Instantaneous Minimum	Instantaneous Maximum ⁷
Turbidity	NTU	75	100	--	--	225
pH	pH unit	Within the limit of 6.0 - 9.0 at all times				

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority.

Section 301(b) of the CWA and 40 CFR § 122.44(d) require that permits include limitations more stringent than applicable technology-based requirements where necessary to achieve water quality standards and State requirements. 40 CFR § 122.44(d)(1)(i) requires that permits include WQBELs for all pollutants which are or may be discharged at levels having the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives or criteria within a standard. USEPA has applied CWA section 403(c) and 40 CFR § 125, Subpart M, following 40 CFR § 122. Where reasonable potential has been established for a pollutant to cause, or contribute to an excursion above a narrative criterion within an applicable State water quality standard, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state’s narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi).

The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria that are contained in other state plans and policies, or any applicable water quality criteria contained in the Ocean Plan.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

The Basin Plan and Ocean Plan establish the beneficial uses and Water Quality Objectives for ocean waters of the State. The beneficial uses of the receiving waters affected by the discharge have been described previously in this Fact Sheet. The Basin Plan contains Water Quality Objectives for bacteria for water bodies designated for water contact recreation and the Ocean Plan contains water quality objectives for bacterial, physical, chemical, and biological characteristics, and radioactivity. The Water Quality Objectives from the Ocean Plan and Basin Plan were incorporated into this Order as either final effluent limitations (based on reasonable potential) or receiving water limitations.

3. Expression of WQBELs

Pursuant to 40 CFR § 122.45(d)(2), for POTW continuous discharges, all permit effluent limitations, standards, and prohibitions, including those necessary to achieve water quality standards, shall, unless impracticable, be stated as average weekly and average monthly discharge limitations. It is impracticable to include only average weekly and average monthly effluent limitations in the Order because a single daily discharge of certain pollutants, in excess amounts, can cause violations of water quality objectives.

The effects of pollutants on aquatic organisms are often rapid. For many pollutants, an average weekly or average monthly effluent limitation alone is not sufficiently protective of beneficial uses. As a result, maximum daily effluent limitations, as referenced in 40 CFR § 122.45(d), are included in the Order for certain constituents.

The WQBELs for marine aquatic life toxics contained in this Order are based on Table 1 water quality objectives contained in the 2015 Ocean Plan that are expressed as six-month median, daily maximum, and instantaneous maximum water quality objectives. However, in the existing Order (Order No. R4-2013-0094), the calculated effluent limitations based on 6-month median objectives for marine aquatic life toxics in the 2009 Ocean Plan were prescribed as average monthly limitations. Applying the antibacksliding regulations, this Order retains the same approach and sets effluent limitations derived from six-month median water quality objectives for marine aquatic life toxics in the 2015 Ocean Plan as average monthly limitations. In addition, the 2015 Ocean Plan specifies that for the six-month median for intermittent discharges, the daily value shall be considered to equal zero for days on which no discharge occurred.

4. **Determining the Need for WQBELs**

Order No. R4-2013-0094 contains effluent limitations for the conventional, non-conventional and toxic pollutant parameters in Table 1 of the Ocean Plan. For this Order, the need for effluent limitations based on water quality objectives in Table 1 of the 2015 Ocean Plan was reevaluated in accordance with the Reasonable Potential Analysis (RPA) procedures contained in Appendix VI of the 2015 Ocean Plan. This statistical RPA method (RPcalc version 2.2) accounts for the averaging period of the water quality objective, accounts for and captures the long-term variability of the pollutant in the effluent, accounts for limitations associated with sparse data sets, accounts for uncertainty associated with censored data sets, and assumes a lognormal distribution of the facility-specific effluent data. The program calculates the upper confidence bound (UCB) of an effluent population percentile after complete mixing. In the evaluation employed in this Order, the UCB is calculated as the one-sided, upper 95th percent confidence bound for the 95th percentile of the effluent distribution after complete mixing. The calculated UCB95/95 is then compared to the appropriate objective to determine the potential for an exceedance of that objective and the need for an effluent limitation. For constituents that have an insufficient number of monitoring data or a substantial number of non-detected data with a reporting limit higher than the respective water quality objective, the RPA result is likely to be inconclusive. The Ocean Plan requires that existing effluent limitations for these constituents are retained in the new Order, and the permit shall include a reopener clause to allow for subsequent modification of the permit to include an effluent limitation if monitoring establishes that the discharge causes, has the reasonable potential to cause, or contributes to an excursion above a water quality objective. WQBELs were calculated using monitoring data collected between August 2013 and December 2017, and through July 2018 for ammonia, where concentrations are changing more rapidly.

In general, for constituents that have been determined to have no reasonable potential to cause, or contribute to, excursions of water quality objectives, no numerical limits are prescribed; instead a narrative statement to comply with all Ocean Plan requirements is provided and the Discharger is required to monitor for these constituents to gather data for use in RPAs for future Order renewals and/or updates.

For Discharge Point 001, inconclusive results were reported for cyanide, acrolein, chlorobenzene, ethylbenzene, toluene, tributyltin, 1,1,1-trichloroethane, acrylonitrile, benzene, benzidine, carbon tetrachloride, chlordane, chlorodibromomethane, DDT, 3,3'-dichlorobenzidine, 1,2 dichloroethane, dichlorobromomethane, dichloromethane, 1,3-

dichloropropene, halomethanes, hexachlorobenzene, PAH, PCBs, TCDD, 1,1,2,2,-tetrachloroethane, tetrachloroethane, toxaphene, trichloroethylene, 1,2,3 trichloroethane and vinyl chloride. For benzidine, PCB and TCDD equivalents limits from the previous permit have been met with the existing treatment system and were applied in this Order, even though the results of the reasonable potential analysis were inconclusive. For each of the other constituents listed as inconclusive, less than 20% of the measurements included a detection, and for most, no detections were made. For the pollutants that have not been detected in the final effluent, the Discharger has made, and continues to make, an effort to achieve lower detection limits than are required in the 2015 Ocean Plan or 40 CFR 136. The permit includes a reopener to incorporate a new limit or performance goal based on an updated reasonable potential analysis. The MRP (Attachment E) of this Order also requires the Discharger to continue to monitor these constituents.

Bacteria were not found to have a reasonable potential to cause or exceed water quality criteria and no WQBELs for bacteria are proposed. Bacteria sampling is required at EFF-001A to demonstrate successful disinfection has resulted from secondary treatment. The 2015 Ocean Plan includes limits for bacteria in the public contact zones bounded by the shoreline and a distance of 1,000 feet. The State Water Resource Control Board Division of Drinking Water sets minimum protective bacteriological standards in the areas designated by the Los Angeles Regional Water Quality Control Plan (Basin Plan) for water-contact sport areas (REC-1) and shell-fish harvesting (SHELL), although these standards may not apply during a wet weather events. Compliance with bacteria criteria is demonstrated in this Order by receiving water monitoring between the outfall and the shoreline. The majority of measurements for fecal indicator bacteria, collected in the ocean near the Oxnard outfall between 2015 and 2017, were below the method detection limit (<2 MPN/100 mL). Indicator bacteria, including total and fecal coliforms, and enterococcus bacteria were not detected at the surface and or at depth further than 1000 feet from the zone of initial dilution. In all cases, indicator bacteria concentrations were below Basin Plan standards. Where bacteria standards have been routinely exceeded at the shore-line in this Region, this monitoring practice allows the development of a regulatory device such as the Santa Monica Bay Beaches Wet Weather Bacteria Total Maximum Daily Load Resolution No. 2006-005, which identified wet weather overland flow as the source of the bacteria, and successfully reduced beach bacteria through the control of storm water discharge.

5. **WQBEL Calculations**

From the Table 1 water quality objectives of the Ocean Plan, WQBELs are calculated according to the following equation for all pollutants, except for acute toxicity (if applicable) and radioactivity:

$$C_e = C_o + D_m (C_o - C_s)$$

Where

C_e = the effluent limitation ($\mu\text{g/L}$)

C_o = the water quality objective to be met at the completion of initial dilution ($\mu\text{g/L}$)

C_s = background seawater concentration ($\mu\text{g/L}$) (see Table F-13 below)

D_m = minimum probable initial dilution expressed as parts seawater per part wastewater

Initial dilution is the process that results in the rapid and irreversible turbulent mixing of wastewater with ocean water around the point of discharge. For a submerged buoyant

discharge, characteristic of most municipal and industrial wastes that are released from the submarine outfalls, the momentum of the discharge and its initial buoyancy act together to produce turbulent mixing. Initial dilution in this case is completed when the diluting wastewater ceases to rise in the water column and first begins to spread horizontally.

A 2017 dilution study confirmed the initial dilution factor (Dm) of 1:108 can apply. The value of Dm is described in detail in section I.B. of this Fact Sheet. Based on Table 3 of the 2015 Ocean Plan, Cs is equal to zero for all pollutants except the following:

Table F-12. Pollutants with Background Seawater Concentration

Constituent	Background Seawater Concentration (Cs)
Arsenic	3 µg/L
Copper	2 µg/L
Mercury	0.0005 µg/L
Silver	0.16 µg/L
Zinc	8 µg/L

Although a reasonable potential to cause or contribute to the exceedance of a water quality objective was not identified for chlorine residual or ammonia at Discharge Point 001, the calculations of the WQBELs are provided as an example.

Table F-13. Ocean Plan Water Quality Objectives (Co)

Constituents	6-Month Median	Daily Maximum	Instantaneous Maximum
Chlorine Residual	2 µg/L	8 µg/L	60 µg/L
Ammonia	0.60 mg/L	2.4 mg/L	6 mg/L

Using the equation, **Ce=Co + Dm (Co-Cs)**, effluent limitations would be calculated as follows, before rounding to two significant digits, for discharge through Discharge Point 001, with a dilution ratio (Dm) of 1:108.

Chlorine Residual

$C_e = 2 + 108(2-0) = 218 \mu\text{g/L}$ (6 Month Median and Monthly Average)

$C_e = 8 + 108(8-0) = 872 \mu\text{g/L}$ (Daily Maximum)

$C_e = 60 + 108(60-0) = 6,540 \mu\text{g/L}$ (Instantaneous Maximum)

Chlorine residual shows no reasonable potential to cause or contribute to an exceedance of the Ocean Plan water quality objective of 2 µg/L. While wastewater disinfection with chlorine usually produces the chlorine residual and the byproducts of chlorination are highly toxic to aquatic life, the maximum monthly chlorine residual at EFF-001B was 0.08 mg/L and below the 2013 Performance Goal (PG) of 0.1 µg/L, so no limit was applied. Retention of the PG from the 2013 Order will ensure chlorine residual effluent concentration will remain lower than if the limit of 218 µg/L was imposed as an average monthly average. The final PG for chlorine residual is 0.1 µg/L.

Ammonia

$C_e = 0.6 + 108(0.6-0) = 65 \text{ mg/L}$ (6 Month Median and Monthly Average)

$C_e = 2.4 + 108(2.4-0) = 262 \text{ mg/L}$ (Daily Maximum)

$C_e = 6 + 108(6-0) = 654 \text{ mg/L}$ (Instantaneous Maximum)

Ammonia shows no reasonable potential to cause or contribute to an exceedance of the Ocean Plan water quality objective of 0.60 mg/L. The maximum monthly effluent concentration for ammonia of 49.1 mg/L remains lower than the six-month median and monthly average limit based on the Ocean Plan of 65 mg/L. The ammonia limits calculated here are not incorporated into this Order. The Performance Goal (PG) was calculated to be 51.8 mg/L using EFF-001B monitoring data collected between January 2016 and July 2018.

Radioactivity:

The water quality objective for radioactivity in the 2015 California Ocean Plan states the value is not to exceed limits specified in Title 17, Division 1, Chapter 5, Subchapter 4, Group 3, Article 3, section 30253 of the California Code of Regulations and future changes to incorporate provisions of federal law as the changes take effect. This regulation does not establish a numerical effluent limit for radionuclides. During the preparation of R4-2013-0094, Regional Water Board staff used Best Professional Judgment (BPJ) to establish radioactivity limits based on maximum effluent concentrations of 10.2 pCi/L for gross alpha and 50 for gross beta radioactivity. These limits are maintained because the existing limit of 50 pCi/L for gross beta was exceeded with a measure of 94 pCi/L. The Discharger conducted additional analysis of radium 226 and 228 as required by R4-2013-0094, and confirmed that no additional radionuclides were present at levels above the minimum detection levels. The Discharger determined that the exceedance of gross beta of 94, as a maximum monthly average in August 2014, could be attributed to discharge from a single industrial source, the Santa Clara Wastewater facility. While the industry no longer discharges to the collection system and compliance is expected, the limits are retained should the City wish to retain their discretion to accept new industries which treat radioactive oil field waste.

Based on the implementing procedures described above, effluent limitations were evaluated for Table 1 pollutants (excluding acute toxicity and radioactivity) from the 2015 Ocean Plan. No new limits have been incorporated into this Order. The proposed WQBELs in Table F-14 are all retained from the previous Order because there is insufficient evidence to determine there is no reasonable potential that the discharge will cause or contribute to the exceedance of some water quality objectives, and, in the case of radioactivity, because future sources could be permitted.

Table F-14. Proposed Water Quality Objectives (Ce)

Constituents	Units	Average Monthly	Instantaneous Maximum Daily ⁵
Gross alpha	pCi/L		15
Gross beta	pCi/L		50
Combined radium 226-228	pCi/L		5
Tritium	pCi/L		20,000
Strontium 90	pCi/L		8
Uranium	pCi/L		20
Benzidine	µg/L	.0068	
PCB	µg/L	.0019	
TCDD	µg/L	.00000039	

6. Whole Effluent Toxicity (WET).

Whole effluent toxicity (WET) testing protects receiving waters from the aggregate toxic effect of a mixture of pollutants in the effluent or pollutants that are not typically monitored. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a short or a longer period of time and may measure a sublethal endpoint such as reproduction or growth in addition to mortality. A constituent present at low concentrations may exhibit a chronic effect; however, a higher concentration of the same constituent may be required to produce an acute effect. Because of the nature of industrial discharges into the POTW sewershed, toxic constituents (or a mixture of constituents exhibiting toxic effects) may be present in the OWTP effluent.

A total of 108 chronic toxicity tests were conducted on OWTP final effluent between August 2013 and December 2017. None exceeded the 99 TUc maximum daily final effluent limitation for chronic toxicity. The discharge did not exhibit reasonable potential to exceed the water quality objectives for chronic toxicity at the discharge point based on 2015 Ocean Plan procedures for calculating reasonable potential.

The Ocean Plan addresses the application of chronic and acute toxicity requirements based on minimum probable dilutions (Dm) for ocean discharges. Following the 2015 Ocean Plan, dischargers are required to conduct chronic toxicity monitoring for ocean discharges with Dm factors ranging from 99 to 349 and Regional Water Boards may require acute toxicity monitoring in addition to chronic toxicity monitoring. Dischargers with Dm factors below 99 are required to conduct only chronic toxicity testing. The Dm for Discharge Point 001 is 108. The Dm is more than 99 for the outfall, even though the discharge does not exhibit reasonable potential to exceed the water quality objectives for chronic toxicity, the chronic toxicity final effluent limitation is maintained to ensure increases in brine concentration with process modification of the AWPf do not result in toxicity. No acute toxicity final effluent limitations have been assigned to the discharge since it is not required for this discharge point based on the requirements in the 2015 Ocean Plan and since the discharge did not exhibit reasonable potential to exceed the water quality objectives for acute toxicity.

The Ocean Plan establishes a daily maximum chronic toxicity objective of $1.0 \text{ TUc} = 100/(\text{No Observed Effect Concentration (NOEC)})$, using a 5-concentration hypothesis test, and a daily maximum acute toxicity objective of $0.3 \text{ TUa} = 100/\text{LC50}$, using a point estimate model. This Order/Permit includes final effluent limitations using the Test of Significant Toxicity (TST) hypothesis testing approach. This statistical approach is consistent with the Ocean Plan in that it provides maximum protection to the environment since it more reliably identifies acute and chronic toxicity than the current NOEC hypothesis-testing approach (See *2015 California Ocean Plan, section III.F and Appendix I*).

On July 07, 2014, the Chief Deputy of the Water Quality Division announced that the State Water Board would be releasing a revised version of the Chronic Toxicity Plan for public comment within a few weeks. Regional Water Board staff awaits its release. Nevertheless, this Order/Permit contains a reopener to allow the Regional Water Board to modify the permit in the future, if necessary, to make it consistent with any new policy, plan, law, or regulation.

For this permit, chronic toxicity in the discharge is evaluated using a maximum daily effluent limitation that utilizes USEPA's 2010 TST hypothesis testing approach. The

chronic toxicity effluent limitations are expressed as “Pass” for each maximum daily individual result.

In January 2010, USEPA published a guidance document titled EPA Regions 8, 9 and 10 Toxicity Training Tool, which among other things discusses permit limit expression for chronic toxicity. The document acknowledges that NPDES regulations at 40 CFR § 122.45(d) require that all permit limits be expressed, unless impracticable, as an Average Weekly Effluent Limitation (AWEL) and an Average Monthly Effluent Limitation (AMEL) for POTWs. Following section 5.2.3 of the Technical Support Document (TSD), the use of an AWEL is not appropriate for WET. In lieu of an AWEL for POTWs, USEPA recommends establishing a Maximum Daily Effluent Limitation (MDEL) for toxic pollutants and pollutants in water quality permitting, including WET. For an ocean discharge, this is appropriate because the 2015 Ocean Plan only requires a MDEL and does not include Average Monthly or Average Weekly Effluent Limitations for chronic toxicity (See 2015 California Ocean Plan, section II.D.7.).

The MDEL is the highest allowable value for the discharge measured during a calendar day or 24-hour period representing a calendar day. The AMEL is the highest allowable value for the average of daily discharges obtained over a calendar month. For WET, this is the average of individual WET test results for that calendar month. In June 2010, USEPA published another guidance document titled *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, June 2010), in which they recommend the following: “Permitting authorities should consider adding the TST approach to their implementation procedures for analyzing valid WET data for their current NPDES WET Program.” The TST approach is another statistical option for analyzing valid WET test data. Use of the TST approach does not result in any changes to EPA’s WET test methods. Section 9.4.1.2 of USEPA’s *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (EPA/600/R-95/0136,1995), recognizes that, “the statistical methods recommended in this manual are not the only possible methods of statistical analysis.” The TST approach can be applied to acute (survival) and chronic (sublethal) endpoints and is appropriate to use for both freshwater and marine EPA WET test methods.

The interpretation of the measurement result from USEPA’s TST statistical approach (Pass/Fail) for effluent and receiving water samples is, by design, independent from the concentration-response patterns of the toxicity tests for samples when it is required. Therefore, when using the TST statistical approach, application of USEPA’s 2000 guidance on effluent and receiving waters concentration-response patterns will not improve the appropriate interpretation of TST results as long as all Test Acceptability Criteria and other test review procedures – including those related to Quality Assurance for effluent and receiving water toxicity tests, reference toxicant tests, and control performance (mean, standard deviation, and coefficient of variation) – described by the WET test methods manual and TST guidance, are followed. The 2000 guidance may be used to identify reliable, anomalous, or inconclusive concentration-response patterns and associated statistical results to the extent that the guidance recommends review of test procedures and laboratory performance already recommended in the WET test methods manual. The guidance does not apply to single concentration (IWC) and control statistical t-tests and does not apply to the statistical assumptions on which the TST is based. The Regional Water Board and USEPA will not consider a concentration-response pattern as a sufficient basis to determine that a TST t-test result for a toxicity test is anything other than valid, absent other evidence. In a toxicity laboratory, unexpected concentration-response patterns should not occur with any regular frequency

and consistent reports of anomalous or inconclusive concentration-response patterns or test results that are not valid will require an investigation of laboratory practices.

Any Data Quality Objectives or Standard Operating Procedure used by the toxicity testing laboratory to identify and report valid, invalid, anomalous, or inconclusive effluent or receiving water toxicity test measurement results from the TST statistical approach, which include a consideration of concentration-response patterns and/or Percent Minimum Significant Differences (PMSD)s, must be submitted for review by the Regional Water Board, in consultation with USEPA and the State Water Board's Quality Assurance Officer and Environmental Laboratory Accreditations Program (40 CFR § 122.44(h)). The PMSD criteria only apply to compliance for NOEC and the sublethal endpoints of the NOEC, and therefore are not used to interpret TST results.

D. Final Effluent Limitation Considerations

1. Anti-Backsliding Requirements.

The final effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order, No. R4-2013-0094. Section 402(o)(2) of the CWA provides statutory exceptions to the general prohibition of backsliding contained in CWA section 402(o)(1).

The final effluent limitations for heptachlor epoxide for Discharge Point 001 were removed because new monitoring data indicated that the effluent did not have reasonable potential to cause or contribute to an exceedance of the applicable water quality objectives. The original limit had been applied in the absence of reliable effluent data because the analytical method detection level approximated the limit. The removal of the final effluent limitations for heptachlor epoxide will therefore not authorize a change in the mass emission rates or a relaxation in the treatment of the discharge and meets the backsliding exception under CWA section 303(d)(4)(B).

The dilution ratio for Discharge Point 001 increased from 1:98 to 1:108 based on the results of the 2017 dilution study, but no water quality based effluent limits were changed as a result, and technically based effluent limits do not vary with the dilution. However, the chronic toxicity final effluent limitations for Discharge Point 001 were revised based on a new dilution ratio. The resulting IWC for chronic toxicity decreased slightly from 1.02% effluent in the 2013 permit to 0.93% effluent (see section IV.C.6.) in this Order. The treatment process is maintained and all constituents are discharged at concentrations below Ocean Plan limits after dilution, so the change continues to be consistent with the Ocean Plan Water Quality Objectives and will not unreasonably affect present and anticipated beneficial uses of the Pacific Ocean in the vicinity of Ormond Beach. This is consistent with the antidegradation policy and therefore meets the backsliding exception under CWA section 402(o)(1)/303(d)(4).

The accompanying monitoring and reporting program requires continued data collection and if monitoring data show reasonable potential for a constituent to cause or contribute to an exceedance of water quality standards, the Order will be reopened to incorporate WQBELs. Such an approach ensures that the discharge will adequately protect water quality standards for designated beneficial uses and conform with antidegradation policies and antibacksliding provisions.

2. Antidegradation Policies

This Order includes both narrative and numeric final effluent limitations, receiving water limitations, performance goals, and mass emission benchmarks to maintain the chemical, physical, and biological characteristics, and to protect the beneficial uses of the receiving water. These requirements ensure that all water quality objectives are

being met outside the zone of initial dilution, thereby maintaining the beneficial uses. The Ocean Plan allows for minimal degradation within the zone of initial dilution as long as the water quality objectives are maintained just outside the zone of initial dilution. The minimal degradation permitted by the Ocean Plan is consistent with the antidegradation policy because it maintains maximum benefit to the people of the State, it will not unreasonably affect the present and anticipated beneficial uses, and it will not result in water quality less than that prescribed in the policies.

The final effluent limitations from the previous order have been retained in this Order/Permit, except for heptachlor epoxide. Under CWA sections 402(o)(1)/303(d)(4)(B) for waters in attainment, removal of the final effluent limitations for heptachlor epoxide for the Discharge Point 001 is consistent with the antidegradation provisions of 40 CFR part 131.12 and State Water Board Resolution No. 68-16 because the constituent has no reasonable potential to cause or contribute to an exceedance of a water quality objective and so the discharge at this outfall will not degrade existing high-quality water.

The mass-based final effluent limitations continue to be based on the design flow rate of 31.7 MGD.

3. Stringency of Requirements for Individual Pollutants

This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based effluent limitations consist of restrictions on BOD₅20°C, TSS, turbidity, oil and grease and pH. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

Water quality-based effluent limitations have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and the applicable federal water quality standards. The scientific procedures for calculating the individual water quality-based effluent limitations are based on the Ocean Plan, which was approved by the USEPA on February 14, 2006 and has since been further amended. Most beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by the USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to 40 CFR section 131.21(c)(1). The remaining water quality objectives and beneficial uses implemented by this Order were approved by USEPA and are applicable water quality standards pursuant to section 131.21(c)(2). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

Table F-15. Summary of Final Effluent Limitations for Discharge Point 001

Parameter	Units	Effluent Limitations ¹⁰				Performance Goals ¹¹	Basis
		Average Monthly ¹²	Average Weekly ¹³	Maximum Daily ¹⁴	Instantaneous Maximum ¹⁵		
BOD ₅ 20°C ¹⁶	mg/L	30	45	--	--	--	Secondary Treatment
	lbs/day ¹⁷	7,960	11,900	--	--	--	
	% removal	85	--	--	--	--	
TSS	mg/L	30	45	--	--	--	Secondary Treatment/ Ocean Plan
	lbs/day ¹⁷	7,960	11,900	--	--	--	
	% removal	85	--	--	--	--	
pH	pH unit	6.0(instantaneous minimum)- 9.0(instantaneous maximum)					Secondary Treatment/ Ocean Plan
Oil and Grease	mg/L	25	40		75	--	Secondary Treatment/ Ocean Plan
	lbs/day ¹⁷	6,630	10,600		19,900	--	
Settleable Solids	ml/L	1.0	1.5		3.0		Secondary Treatment/ Ocean Plan
Turbidity	NTU	75	100		225		Secondary Treatment/ Ocean Plan
Temperature	°F				100		Thermal Plan

¹⁰ The minimum dilution ratio used to calculate effluent limitations for nonconventional and toxic pollutants for Discharge Point 001 is 1: 108 for all (i.e., 108 parts sea water to one-part effluent)

¹¹ The performance goals are based upon the actual performance data of the Oxnard Wastewater Treatment Plant and are specified only as an indication of the treatment efficiency of the plant. They are not considered effluent limitations or standards for the treatment plant. The Discharger shall make best efforts to maintain, if not improve, the effluent quality at the level of these performance goals. The Executive Officer of the Regional Water Board may modify any of the performance goals if the Discharger requests and has demonstrated that the change is warranted. See Procedures for the determination of performance goals at section V. of Fact Sheet.

¹² Average monthly effluent limitations for benzidine, PCBs, and TCDD equivalents at Discharge Point 001 are based on the 6-month median water quality objectives in the 2015 Ocean Plan.

¹³ For intermittent discharges, the daily value used to calculate the average monthly values shall be considered to equal zero for days on which no discharge occurred.

¹⁴ The maximum daily, average weekly and average monthly effluent limitations shall apply to flow weighted 24-hour composite samples. They may apply to grab samples if the collection of composite samples for those constituents is not appropriate because of the instability of the constituents.

¹⁵ The instantaneous maximum effluent limitations shall apply to grab samples.

¹⁶ Average Weekly and Monthly values may be calculated from daily measurements. Compliance with BOD and TSS, and BOD and TSS % removal at EFF-001A.

¹⁷ The mass emission rates are based on the existing plant design flow rate of 31.7 MGD plus the brine waste, and are calculated as follows: Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day.

Parameter	Units	Effluent Limitations ¹⁰				Performance Goals ¹¹	Basis
		Average Monthly ¹²	Average Weekly ¹³	Maximum Daily ¹⁴	Instantaneous Maximum ¹⁵		
Arsenic	µg/L	--	--	--	--	2 ¹⁸	No RP
Cadmium	µg/L	--	--	--	--	1 ¹⁹	No RP
Chromium (VI) ²⁰	µg/L	--	--	--	--	8	No RP
Copper	µg/L	--	--	--	--	30	No RP
Lead	µg/L	--	--	--	--	23	No RP
Mercury	µg/L	--	--	--	--	0.3	No RP
Nickel	µg/L	--	--	--	--	8	No RP
Silver	µg/L	--	--	--	--	2.5	No RP
Selenium	µg/L	--	--	--	--	6.4	No RP
Zinc	µg/L	--	--	--	--	35	No RP
Cyanide	µg/L	--	--	--	--	25	No RP
Chlorine Residual	µg/L	--	--	--	--	0.13	No RP
Ammonia as N	mg/L	--	--	--	--	51.8	No RP
Phenolic compounds non-chlorinated	µg/L	--	--	--	--	5	No RP
Phenolic compounds chlorinated	µg/L	--	--	--	--	0.42	No RP
Endosulfan	µg/L	--	--	--	--	0.05	No RP
HCH	µg/L	--	--	--	--	0.1	No RP
Endrin	µg/L	--	--	--	--	0.05	No RP
Chronic toxicity (TST)²¹	Pass or Fail	--	--	Pass	--	--	Ocean Plan

¹⁸ The existing performance goal is carried forward based on best professional judgement because new information would otherwise call for a relaxation of the PG.

¹⁹ When conclusive but nonparametric finding of no reasonable potential is found, best professional judgement is used to retain existing PG.

²⁰ See Attachment A for definitions of terms.

²¹ The Chronic Toxicity final effluent limitation is protective of both the numeric acute and chronic toxicity 2015 Ocean Plan water quality objectives. The final 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) (http://water.epa.gov/polwaste/npdes/basics/upload/wet_final_tst_implementation2010.pdf) and *EPA Regions 8, 9, and 10, Toxicity Training Tool (January 2010)*. The Maximum Daily Effluent Limitation (MDEL) shall be reported as "Pass" or "Fail." (Also % Effect (percent effect) shall be reported.) See the MRP

Parameter	Units	Effluent Limitations ¹⁰				Performance Goals ¹¹	Basis
		Average Monthly ¹²	Average Weekly ¹³	Maximum Daily ¹⁴	Instantaneous Maximum ¹⁵		
Radioactivity ²²							
Gross alpha	pCi/L	--	--	--	15	--	No RP, BPJ
Gross beta	pCi/L	--	--	--	50	--	No RP, BPJ
Combined Radium 226 and 228	pCi/L	--	--	--	5	--	No RP, BPJ
Tritium	pCi/L	--	--	--	20,000	--	No RP, BPJ
Strontium 90	pCi/L	--	--	--	8	--	No RP, BPJ
Uranium	pCi/L	--	--	--	20	--	No RP, BPJ
Human Health Toxicants – Non-Carcinogens							
Acrolein	µg/L	--	--	--	--	10	No RP
Antimony	µg/L	--	--	--	--	2.5	No RP
Bis (2-chloroethoxy) methane	µg/L	--	--	--	--	25	No RP
Bis (2-chloroisopropyl) ether	µg/L	--	--	--	--	10	No RP
Chloro-benzene	µg/L	--	--	--	--	2.5	No RP
Chromium III	µg/L	--	--	--	--	8	No RP
Di-n-butyl-phthalate	µg/L	--	--	--	--	0.33	No RP
Dichloro-benzenes	µg/L	--	--	--	--	2.5	No RP
Diethyl phthalate	µg/L	--	--	--	--	0.25	No RP
Dimethyl phthalate	µg/L	--	--	--	--	10	No RP
2-Methyl-4,6-dinitrophenol	µg/L	--	--	--	--	25	No RP
2,4-Dinitrophenol	µg/L	--	--	--	--	25	No RP
Ethyl benzene	µg/L	--	--	--	--	2.5	No RP
Fluoranthene	µg/L	--	--	--	--	0.25	No RP
Hexachloro-cyclopentadine	µg/L	--	--	--	--	25	No RP
Nitro-benzene	µg/L	--	--	--	--	5	No RP
Thallium	µg/L	--	--	--	--	5	No RP

²² Radioactivity: As noted in the 2015 California Ocean Plan: Not to exceed limits specified in Title 17, division 1, chapter 5, subchapter 4, group 3, article 3, section 30253 of the California Code of Regulations (CCR). Reference to section 30253 is prospective, including future changes to any incorporated provisions of federal law, as the changes take effect.

Parameter	Units	Effluent Limitations ¹⁰				Performance Goals ¹¹	Basis
		Average Monthly ¹²	Average Weekly ¹³	Maximum Daily ¹⁴	Instantaneous Maximum ¹⁵		
Toluene	µg/L	--	--	--	--	0.6	No RP
Tributyltin	µg/L	--	--	--	--	0.0263	No RP
1,1,1-Trichloroethane	µg/L	--	--	--	--	2.5	No RP
Human Health Toxicants – Carcinogens							
Acrylonitrile	µg/L	--	--	--	--	10	No RP
Aldrin	µg/L	--	--	--	--	0.025	No RP
Benzene	µg/L	--	--	--	--	2.5	No RP
Benzidine	µg/L	0.0068	--	--	--	--	Inconclusive RP, Existing Limit
	lbs/day ¹⁷	0.0018	--	--	--		
Beryllium	µg/L	--	--	--	--	2.5	No RP
Bis (2-chloroethyl) ether	µg/L	--	--	--	--	5	No RP
Bis (2-ethylhexyl) phthalate	µg/L	--	--	--	--	15	No RP
Carbon tetrachloride	µg/L	--	--	--	--	2.5	No RP
Chlordane	µg/L	--	--	--	--	0.5	No RP
Chloro-dibromo-methane	µg/L	--	--	--	--	1.3	No RP
Chloroform	µg/L	--	--	--	--	1.2	No RP
DDT ²⁰	µg/L	--	--	--	--	0.25	No RP
1,4-Dichlorobenzene	µg/L	--	--	--	--	3	No RP
3,3'dichlorobenzidine	µg/L	--	--	--	--	25	No RP
1,2-Dichloroethane	µg/L	--	--	--	--	2.5	No RP
1,1-Dichloroethylene	µg/L	--	--	--	--	2.5	No RP
Bromodichloroethane	µg/L	--	--	--	--	2.5	No RP
Dichloromethane	µg/L	--	--	--	--	2.5	No RP
1,3-Dichloropropene	µg/L	--	--	--	--	2.5	No RP
Dieldrin	µg/L	--	--	--	--	0.05	No RP
2,4-Dinitrotoluene	µg/L	--	--	--	--	25	No RP

Parameter	Units	Effluent Limitations ¹⁰				Performance Goals ¹¹	Basis
		Average Monthly ¹²	Average Weekly ¹³	Maximum Daily ¹⁴	Instantaneous Maximum ¹⁵		
1,2-Diphenylhydrazine	µg/L	--	--	--	--	5	No RP
Halomethanes ²⁰	µg/L	--	--	--	--	4.4	No RP
Heptachlor	µg/L	--	--	--	--	0.05	No RP
Heptachlor epoxide	µg/L	--	--	--	--	0.05 ²³	No RP
Hexachlorobenzene	µg/L	--	--	--	--	5	No RP
Hexachlorobutadiene	µg/L	--	--	--	--	5	No RP
Hexachloroethane	µg/L	--	--	--	--	5	No RP
Isophorone	µg/L	--	--	--	--	5	No RP
N-Nitrosodimethylamine	µg/L	--	--	--	--	25	No RP
N-Nitrosodi-N-propylamine	µg/L	--	--	--	--	25	No RP
N-Nitrosodiphenylamine	µg/L	--	--	--	--	5	No RP
PAHs ²⁰	µg/L	--	--	--	--	0.097	No RP
PCBs ²⁰	µg/L	0.0019	--	--	--	--	Inconclusive RP, Existing Limit
	lbs/day ¹⁷	0.0005	--	--	--	--	
TCDD equivalents ²⁰	µg/L	0.00000039	--	--	--		Inconclusive RP, Existing Limit
	lbs/day ¹⁷	0.0000001					
1,1,2,2-Tetrachloroethane	µg/L	--	--	--	--	2.5	No RP
Tetrachloroethylene	µg/L	--	--	--	--	2.5	No RP
Toxaphene	µg/L	--	--	--	--	2.5	No RP
Trichloroethylene	µg/L	--	--	--	--	2.5	No RP
1,1,2-Trichloroethane	µg/L	--	--	--	--	2.5	No RP
2,4,6-Trichlorophenol	µg/L	--	--	--	--	0.74	No RP
Vinyl chloride	µg/L	--	--	--	--	2.5	No RP

²³ A non paramateric RPA analysis concluded there was no need to maintain the limit in R4-2013-0094, as no detections were found. A value five times the minimum level in the 2015 Ocean Plan is used as the PG.

- E. Interim Effluent Limitations – Not Applicable**
- F. Land Discharge Specifications – Not Applicable**
- G. Recycling Specifications – Not Applicable**

V. PERFORMANCE GOALS

Section III.F.1, of the 2015 Ocean Plan allows the Regional Water Board to establish more restrictive water quality objectives and effluent limitations than those set forth in the 2015 Ocean Plan as necessary for the protection of the beneficial uses of ocean waters.

Pursuant to this provision and to implement the recommendation of the Water Quality Advisory Task Force (*Working Together for an Affordable Clean Water Environment, A final report presented to the California Water Quality Control Board, Los Angeles Region by Water Quality Advisory Task Force, September 30, 1993*) that was adopted by the Regional Water Board on November 1, 1993, performance goals that are more stringent than those based on Ocean Plan objectives are prescribed in this Order. This approach is consistent with the antidegradation policy in that it requires the Discharger to maintain its treatment level and effluent quality, recognizing normal variations in treatment efficiency and sampling and analytical techniques. However, this approach does not address substantial changes in treatment plant operations that could significantly affect the quality of the treated effluent.

While performance goals were previously placed in many POTW permits in the Region, they have been discontinued for inland surface water discharges. For inland surface waters, the California Toxics Rule (40 CFR § 131.38) has resulted in effluent limitations as stringent as many performance goals. However, the Ocean Plan allows for significant dilution, and the continued use of performance goals serves to maintain existing treatment levels and effluent quality and supports State and federal antidegradation policies.

The performance goals are based upon the actual performance of the OWTP and are specified only as an indication of the treatment efficiency of the Facility. Performance goals are intended to minimize pollutant loading (primarily for toxics), while maintaining the incentive for future voluntary improvement of water quality whenever feasible, without the imposition of more stringent limits based on improved performance. They are not considered enforceable limitations or standards for the regulation of the discharge from the treatment facility. The Executive Officer may modify any of the performance goals if the Discharger requests and has demonstrated that the change is warranted.

A. Procedures for the Determination of Performance Goals

For constituents that have been routinely detected in the effluent (at least 20 percent detectable data), performance goals are based on the one-sided, upper 95 percent confidence bound for the 95th percentile of the effluent performance data (UCB95/95) from August 2013 through December 2017 using the RPA protocol contained in the 2015 Ocean Plan. Effluent data are assumed log normally distributed. Performance goals are calculated according to the equation $PG = Co + Dm (Co - Cs)$ and setting $Co = UCB95/95$. The calculation of the performance goal for ammonia used the upper 99th percent confidence bound to optimize recycled water production.

1. If the maximum detected effluent concentration (MEC) is greater than the calculated performance goal, then the calculated performance goal is used as the performance goal;
2. If the maximum detected effluent concentration is less than the calculated performance goal, then the MEC is used as the performance goal, or;
3. If the performance goal determined in part 1 or 2 is greater than the WQO in the 2015 Ocean Plan after considering dilution, then the WQO is used as the performance goal.

For example, a performance goal for arsenic at Discharge Point 001 is calculated as follows:

Arsenic

$$C_o = \text{UCB}_{95/95} = 2.9835; D_m = 108; C_s = 3$$

$$C_{PG} = \text{Performance Goal} = 2.9835 + 108(2.9835 - 3) = 1.2015 \mu\text{g/L}$$

The existing PG in R4-2013-0094 is 2 $\mu\text{g/L}$ and given that the overall system process will change to expand recycled water production, resulting in comingled discharges of concentrated brine, the existing PG is maintained where the data would otherwise lead to a reduction of the Performance Goal. The final arsenic PG is 2 $\mu\text{g/L}$.

In some cases where monitoring data might otherwise trigger a much higher Performance Goal (PG), the existing PG is maintained to continue or improve current performance. An example is hexavalent chromium, where the new Maximum Effluent Concentration (MEC) remains below the existing performance goal and insufficient data is present to develop a PG more refined than a high value of 25 $\mu\text{g/L}$, calculated from a multiple of the minimum level. The existing PG of 8 $\mu\text{g/L}$ is maintained. The existing PG for trivalent chromium is also carried forward at 8 $\mu\text{g/L}$. Another example is mercury, where a higher performance goal was considered because the MEC of 0.38 $\mu\text{g/L}$ exceeded the existing PG of 0.3, but the calculated higher PG of 2.5 $\mu\text{g/L}$ was judged too large an increase in concentration to be allowed without triggering additional investigation into the source of the mercury given the 2014-2016 303(d) listing for historic mercury in the adjacent Santa Monica Bay.

For constituents where monitoring data have consistently shown nondetectable levels (less than 20 percent detectable data), the existing performance goals are maintained or set at 5 times the minimum level (ML) given in the 2015 Ocean Plan. If the maximum detected effluent concentration is less than the calculated value based on ML, then the MEC is used as the performance goal. In some cases where monitoring data might otherwise trigger a much higher Performance Goal (PG), the existing PG is maintained to continue or improve current performance. Examples are Di-n-Butyl Phthalate, Diethyl phthalate, Fluoranthene, Toluene, Tributyltin, and Chlorodibromomethane.

For nickel, where the MEC is below the performance goal of 8, the improved performance means the PG would go down. The existing value is maintained as the brine concentration change could result in increased levels, but still result in additional recycled water production and protection of marine aquatic life. Similarly, falling effluent concentrations for residual chlorine would otherwise result in a reduced PG, but the use of chlorine for disinfection during multiple treatment steps to optimize the production of recycled water increases the need for flexibility in performance. The existing residual chlorine value is used.

For lead, the existing PG of 23 $\mu\text{g/l}$ is maintained and is above the detection of 19 $\mu\text{g/L}$. Detections of 5.7, 11.8 and 13.9 $\mu\text{g/L}$ demonstrate that the metal is present in the effluent with some consistency. The data would result in a very small calculated performance goal of 2.5 $\mu\text{g/L}$, which could not be attained, but would lead to additional study about the source of the metal. In this case, existing lead concentration is known to be sourced by the collection system's historic piping, which is being replaced with construction upgrades. Maintaining the

performance goal will ensure this activity continues and protects against the introduction of new sources of lead.

The limit for heptachlor epoxide is no longer needed because monitoring data is present and no reasonable potential is present. The PG would be higher than the existing limit of 0.002 µg/L, so a PG of 0.05 is applied because there is no need to maintain continued performance at the lower level in the absence of reasonable potential to cause or contribute to the exceedance of a water quality objective.

Performance goals for Discharge Point 001 are prescribed in this Order. The listed performance goals are not enforceable effluent limitations or standards. The Discharger shall maintain, if not improve, its treatment efficiency. Any two exceedances of the performance goals shall trigger an investigation into the cause of the exceedance. If the exceedance persists in three successive monitoring periods, the Discharger shall submit a written report to the Regional Water Board on the nature of the exceedance, the results of the investigation as to the cause of the exceedance, and the corrective actions taken or proposed corrective measures with timetable for implementation, if necessary.

VI. RATIONALE FOR RECEIVING WATER LIMITATIONS.

A. Surface Water

The Basin Plan and the Ocean Plan contain numeric and narrative water quality objectives applicable to all surface waters within the Los Angeles Region. Water quality objectives include an objective to maintain the high-quality waters pursuant to federal regulations (40 CFR 131.12) and State Water Board Resolution No. 68-16. Receiving water limitations in the tentative Order are included to ensure protection of beneficial uses of the receiving water.

B. Groundwater – Not Applicable.

VII. RATIONALE FOR PROVISIONS.

A. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR section 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR section 122.42, are provided in Attachment D to the Order.

Sections 122.41(a)(1) and (b) through (n) of 40 CFR establish conditions that apply to all State-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. Section 123.25(a)(12) allows the state to omit or modify conditions to impose more stringent requirements. In accordance with 40 CFR section 123.25, this Order omits federal conditions that address enforcement authority specified in 40 CFR sections 122.41(j)(5) and (k)(2) because the enforcement authority under the CWC is more stringent. In lieu of these conditions, this Order incorporates by reference CWC section 13387(e).

B. Special Provisions

1. Reopener Provisions

These provisions are based on 40 CFR § 123.25. The Regional Water Board may reopen the Order to modify conditions and requirements. Causes for modifications can include, but are not limited to, the promulgation of new regulations, modification in

biosolids use or disposal practices, or adoption of new regulations by the State Water Board or Regional Water Board, including revisions to the Ocean Plan and Basin Plan.

2. **Special Studies and Additional Monitoring Requirements**

a. **Antidegradation Analysis and Engineering Report for Proposed Plant**

Expansion: This provision is based on the State Water Board Resolution No. 68-16, which requires the Regional Water Board in regulating the discharge of waste to maintain high quality waters of the state. The Discharger must demonstrate that it has implemented adequate controls (e.g., adequate treatment capacity) to ensure that high quality waters will be maintained. This provision requires the Discharger to clarify that it has increased plant capacity through the addition of new treatment system(s) to obtain alternative effluent limitations for the discharge from the treatment system(s). This provision requires the Discharger to report specific time schedules for the plant's projects. This provision requires the Discharger to submit a report to the Regional Water Board for approval.

b. **Operations Plan for Proposed Expansion.** This provision is based on section 13385(j)(1)(D) of the CWC and allows a time period not to exceed 90 days in which the Discharger may adjust and test the treatment system(s). This provision requires the Discharger to submit an Operations Plan describing the actions the Discharger will take during the period of adjusting and testing to prevent violations.

c. **Treatment Plant Capacity.** The treatment plant capacity study required by this Order shall serve as an indicator for the Regional Water Board regarding the Facility's increasing hydraulic capacity and growth in the service area.

d. **Toxicity Reduction Evaluation (TRE) Requirements.** If the discharge consistently exceeds an effluent limitation for toxicity as specified in this Order, the Discharger shall conduct a TRE as detailed in section V of the MRP (Attachment E). The TRE will help the Discharger identify the possible source(s) of toxicity. The Discharger shall take all reasonable steps to reduce toxicity to the required level.

3. **Best Management Practices and Pollution Prevention**

a. **Spill Clean-Up Contingency Plan (SCCP):** Since spills or overflows are a common event at the POTW, this Order requires the Discharger to review and update, if necessary, its SCCP after each incident. The Discharger shall ensure that the up-to-date SCCP is readily available to the sewage system personnel at all times and that the sewage personnel are familiar with it.

b. **Pollutant Minimization Program (PMP):** This provision is based on the requirements of section III.C.9 of the Ocean Plan.

4. **Construction, Operation, and Maintenance Specifications**

This provision is based on the requirements of 40 CFR §122.41(e) and the previous Order.

5. **Special Provisions for Publicly-Owned Treatment Works (POTWs)**

a. **Sludge (Biosolids) Requirements.** To implement CWA section 405(d), on February 19, 1993, USEPA promulgated 40 CFR § 503 to regulate the use and disposal of municipal sewage sludge. This regulation was amended on September 3, 1999. The regulation requires that producers of sewage sludge meet certain reporting, handling, and disposal requirements. It is the responsibility of the Discharger to comply with said regulations that are enforceable by USEPA, because California has not been delegated the authority to implement this program.

- b. **Pretreatment Program Requirements.** This permit contains pretreatment requirements consistent with applicable effluent limitations, national standards of performance, and toxic and performance effluent standards established pursuant to sections 208(b), 301, 302, 303(d), 304, 306, 307, 403, 404, 405, and 501 of the CWA, and amendments thereto. This permit contains requirements for the implementation of an effective pretreatment program pursuant to section 307 of the CWA; 40 CFR § 35 and 403; and/or section 2233, Title 23, California Code of Regulations.
- c. **Spill Reporting Requirements for POTWs.** This Order established a reporting protocol for how different types of spills, overflows, and bypasses of raw or partially treated sewage from the POTW shall be reported to regulatory agencies.
- d. **Collection System.** The State Water Board issued General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order 2006-0003-DWQ (General Order) on May 2, 2006. The State Water Board amended the Monitoring and Reporting Program for the General Order through Order WQ 2013-0058-EXEC on August 6, 2013. The General Order requires public agencies that own or operate sanitary sewer systems with sewer lines one mile of pipe or greater to enroll for coverage and comply with the General Order. The General Order requires agencies to develop sanitary sewer management plans and report all sanitary sewer overflows, among other requirements and prohibitions

6. **Compliance Schedules – Not applicable**

VIII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS.

Section 308(a) of the federal Clean Water Act and sections 122.41(h), (j)-(l), 122.44(i), and 122.48 of Title 40 of the Code of Federal Regulations (40 CFR) require that all NPDES permits specify monitoring and reporting requirements. CWC sections 13267 and 13383 also authorize the Regional Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. The MRP establishes monitoring, reporting, and recordkeeping requirements that implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements in the MRP for this facility.

A. Influent Monitoring

Influent monitoring is required to determine compliance with NPDES permit conditions, assess treatment plant performance, and assess effectiveness of the Pretreatment Program. Influent monitoring in this Order follows the influent monitoring requirements in the previous Order.

B. Effluent Monitoring

The Discharger is required to conduct monitoring of the permitted discharges in order to evaluate compliance with permit limitations and conditions. Monitoring requirements are specified in the MRP (Attachment E). This Order requires compliance with the MRP, and is based on 40 CFR § 122.48, 122.44(i), 122.41(j), 122.62, 122.63, and 124.5. The MRP is a standard requirement in NPDES permits (including this Order) issued by the Regional Water Board. In addition to containing definition of terms, it specifies general sampling/analytical protocols and the requirements of reporting spills, violation, and routine monitoring data in accordance with NPDES regulations, the CWC, and Regional Water Board policies. The MRP also contains sampling program specific for the Discharger's wastewater treatment plant. It defines the sampling stations and frequency, pollutants to be monitored, and additional reporting requirements. Pollutants to be monitored include all pollutants for which effluent limitations are specified.

Monitoring for those pollutants expected to be present in the discharge from the facility, will be required as shown on the proposed MRP (Attachment E) and as required in the Ocean Plan.

Monitoring frequency for the constituents is based on historic monitoring frequency, Best Professional Judgment, and the following criteria:

Criterion 1: Monitoring frequency will be monthly for those pollutants with reasonable potential to exceed water quality objectives (monitoring has shown an exceedance of the objectives) or where Best Professional Judgment indicates additional monitoring is necessary due to existing or anticipated changes in the treatment process or environment;

Criterion 2: Monitoring frequency will be quarterly for those pollutants in which some or all of the historic effluent monitoring data detected the pollutants, but without reasonable potential to exceed water quality objectives; and

Criterion 3: Monitoring frequency will be semiannually for those pollutants in which all of the historic effluent monitoring data have had non-detected concentrations of the pollutants and without current reasonable potential to exceed water quality objectives.

Table F-16. Effluent Monitoring Frequency Comparison

Parameter	Monitoring Frequency (2013 Permit)	Monitoring Frequency (2018 Permit)
Flow	Continuous	Continuous
BOD ₅ 20°C	daily	weekly
Total Suspended Solids	daily	weekly
pH	daily	weekly
Oil and Grease	daily	weekly
Temperature	weekly	weekly
Settleable Solids	daily	weekly
Turbidity	continuous	continuous
Nitrate Nitrogen	monthly	monthly
Nitrite Nitrogen	monthly	monthly
Organic Nitrogen	monthly	monthly
Total coliform	daily	daily
Fecal Coliform	5 times/month	5 times/month
<i>Enterococcus</i>	5 times/month	5 times/month
Arsenic	semiannually	semiannually
Cadmium	semiannually	semiannually
Chromium VI	semiannually	semiannually
Copper	semiannually	semiannually
Lead	semiannually	semiannually
Mercury	semiannually	semiannually
Nickel	semiannually	semiannually
Selenium	semiannually	semiannually
Silver	semiannually	semiannually

Parameter	Monitoring Frequency (2013 Permit)	Monitoring Frequency (2018 Permit)
Zinc	semiannually	semiannually
Cyanide	semiannually	semiannually
Total Residual Chlorine	continuous	continuous
Ammonia Nitrogen	monthly	monthly
Toxicity, Chronic	monthly	monthly
Phenolic Compounds (non-chlorinated)	semiannually	semiannually
Phenolic Compounds (chlorinated)	semiannually	semiannually
Endosulfan	semiannually	semiannually
Endrin	semiannually	semiannually
HCH	semiannually	semiannually
Radioactivity (including gross alpha, gross beta, combined radium-226 & radium-228, tritium, strontium-90 and uranium)	semiannually	semiannually
Acrolein	semiannually	semiannually
Antimony	semiannually	semiannually
Bis(2-chloroethoxy) methane	semiannually	semiannually
Bis(2-chloroisopropyl) ether	semiannually	semiannually
Chlorobenzene	semiannually	semiannually
Chromium (III)	semiannually	semiannually
Di-n-butyl-phthalate	semiannually	semiannually
Dichlorobenzenes	semiannually	semiannually
Diethyl phthalate	semiannually	semiannually
Dimethyl phthalate	semiannually	semiannually
4,6-dinitro-2-methylphenol	semiannually	semiannually
2,4-Dinitrophenol	semiannually	semiannually
Ethylbenzene	semiannually	semiannually
Fluoranthene	semiannually	semiannually
Hexachlorocyclopentadiene	semiannually	semiannually
Nitrobenzene	semiannually	semiannually
Thallium	semiannually	semiannually
Toluene	semiannually	semiannually
Tributyltin	semiannually	semiannually
1,1,1-Trichloroethane	semiannually	semiannually
Acrylonitrile	semiannually	semiannually
Aldrin	semiannually	semiannually
Benzene	semiannually	semiannually
Benzidine	quarterly	quarterly

Parameter	Monitoring Frequency (2013 Permit)	Monitoring Frequency (2018 Permit)
Beryllium	semiannually	semiannually
Bis(2-chloroethyl) ether	semiannually	semiannually
Bis(2-ethylhexyl) phthalate	semiannually	semiannually
Carbon tetrachloride	semiannually	semiannually
Chlordane	semiannually	semiannually
Chlorodibromomethane	semiannually	semiannually
Chloroform	semiannually	semiannually
DDT	semiannually	semiannually
1,4-dichlorobenzene	semiannually	semiannually
3,3'-dichlorobenzidine	semiannually	semiannually
1,2-Dichloroethane	semiannually	semiannually
1,1-Dichloroethylene	semiannually	semiannually
Dichlorobromomethane	semiannually	semiannually
Dichloromethane	semiannually	semiannually
1,3-Dichloropropene	semiannually	semiannually
Dieldrin	semiannually	semiannually
2,4-dinitrotoluene	semiannually	semiannually
1,2-diphenylhydrazine	semiannually	semiannually
Halomethanes	semiannually	semiannually
Heptachlor	semiannually	semiannually
Heptachlor epoxide	quarterly	semiannually
Hexachlorobenzene	semiannually	semiannually
Hexachlorobutadiene	semiannually	semiannually
Hexachloroethane	semiannually	semiannually
Isophorone	semiannually	semiannually
N-Nitrosodimethylamine	semiannually	semiannually
N-Nitrosodi-N-propylamine	semiannually	semiannually
N-Nitrosodiphenylamine	semiannually	semiannually
PAHs	semiannually	semiannually
PCBs as Aroclors	quarterly	quarterly
PCBs as Congeners	semiannually	semiannually
TCDD Equivalents	quarterly	quarterly
1,1,2,2-Tetrachloroethane	semiannually	semiannually
Tetrachloroethylene	semiannually	semiannually
Toxaphene	semiannually	semiannually
Trichloroethylene	semiannually	semiannually
1,1,2-Trichloroethane	semiannually	semiannually
2,4,6-Trichlorophenol	semiannually	semiannually

Parameter	Monitoring Frequency (2013 Permit)	Monitoring Frequency (2018 Permit)
Vinyl chloride	semiannually	semiannually
Methyl-tert-butyl-ether	semiannually	semiannually
Remaining pollutants in Table B of the 2009 Ocean Plan	semiannually	semiannually

C. Whole Effluent Toxicity Testing Requirements

The rationale for WET has been discussed extensively in section IV.C.6. of this Fact Sheet.

D. Receiving Water Monitoring.

1. Surface Water and Benthic Monitoring

Receiving water, benthic infauna, and sediment chemistry monitoring is required to determine compliance with receiving water limitations, to characterize the water quality of the receiving water, and ensure beneficial uses are protected. Requirements are based on the Ocean Plan and the Basin Plan. The conceptual framework for the receiving water program has three components that comprise a range of spatial and temporal scales: (a) core monitoring; (b) regional monitoring; and (c) special studies. Additional information can be found in this attachment at II.F and the monitoring and reporting program in Attachment E.

2. Groundwater – Not Applicable

E. Other Monitoring Requirements

1. Outfall Inspection

This survey investigates the condition of the outfall structures to determine if the structures are in serviceable condition to ensure their continued safe operation. The data collected will be used for a periodic assessment of the integrity of the outfall pipes and ballasting system.

2. Biosolids/Sludge Monitoring

Attachment H establishes monitoring and reporting requirements for the storage, handling and disposal practices of biosolids/sludge generated from the operation of this POTW.

3. Discharge Monitoring Report-Quality Assurance (DMR-QA) Study Program

Under the authority of section 308 of the CWA (33 U.S.C. § 1318), USEPA requires major and selected minor dischargers under the NPDES Program to participate in the annual DMR-QA Study Program. The DMR-QA Study evaluates the analytical ability of laboratories that routinely perform or support self-monitoring analyses required by NPDES permits. There are two options to satisfy the requirements of the DMR-QA Study Program: (1) The Discharger can obtain and analyze a DMR-QA sample as part of the DMR-QA Study; or (2) Per the waiver issued by USEPA to the State Water Board, the Discharger can submit the results of the most recent Water Pollution Performance Evaluation Study from its own laboratories or its contract laboratories. A Water Pollution Performance Evaluation Study is similar to the DMR-QA Study. Thus, it also evaluates a laboratory's ability to analyze wastewater samples to produce quality data that ensure the integrity of the NPDES Program. The Discharger shall ensure that the results of the DMR-QA Study or the results of the most recent Water Pollution Performance Evaluation Study are submitted annually to the State Water Board. The State Water Board's Quality

Assurance Program Officer will send the DMR-QA Study results or the results of the most recent Water Pollution Performance Evaluation Study to USEPA's DMR-QA Coordinator and Quality Assurance Manager.

IX. PUBLIC PARTICIPATION.

The Regional Water Board has considered the issuance of WDRs that will serve as an NPDES permit for Oxnard Wastewater Treatment Plant. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs and has encouraged public participation in the WDR adoption process.

A. Notification of Interested Parties

The Regional Water Board notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and provided an opportunity to submit written comments and recommendations. Notification was also provided through posting of the public notice on the entry gate of the OWTP and public access to the Regional Board's website at <http://www.waterboards.ca.gov/losangeles/>.

B. Written Comments

Interested persons were invited to submit written comments concerning tentative WDRs as provided through the notification process. Comments were due either in person or by mail to the Executive Office at the Regional Water Board at the address on the cover page of this Order, or by email submitted to elizabeth.erickson@waterboards.ca.gov.

To be fully responded to by staff and considered by the Regional Water Board, the written comments were due at the Regional Water Board office by 5:00 p.m. on **September 17, 2018**.

C. Public Hearing

The Regional Water Board held a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: October 11, 2018
Time: 9:00 a.m.
Location: Metropolitan Water District's Board Room,
700 North Alameda Street,
Los Angeles, 90012.

Interested persons were invited to attend. At the public hearing, the Regional Water Board heard testimony, pertinent to the discharge, WDRs, and permit. For accuracy of the record, important testimony was requested in writing.

The Regional Water Board's web address is www.waterboards.ca.gov/losangeles where interested persons can access the current agenda for changes in Board meeting dates, times, and venues.

D. Reconsideration of Waste Discharge Requirements

Any aggrieved person may petition the State Water Board to review the decision of the Regional Water Board regarding the final WDRs. The petition must be received by the State Water Board at the following address within 30 calendar days of the Regional Water Board's action:

State Water Resources Control Board

Office of Chief Counsel

P.O. Box 100, 1001 I Street

Sacramento, CA 95812-0100

For instructions on how to file a petition for review, see:

<http://www.waterboards.ca.gov/public_notices/petitions/water_quality/wqpetition_instr.shtml>

E. Information and Copying

The ROWD, related documents, tentative effluent limitations and special conditions, comments received, and other information are on file and may be inspected at 320 West 4th Street, Suite 200, Los Angeles, California and 75 Hawthorne Street, San Francisco, California any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling (213) 576-6600.

F. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Water Board, reference this facility, and provide a name, address, and phone number.

G. Additional Information

Requests for additional information or questions regarding this Order should be directed to Elizabeth Erickson at (213) 576-6665 or elizabeth.erickson@waterboards.ca.gov.

ATTACHMENT G – TOXICITY REDUCTION EVALUATION (TRE) WORK PLAN OUTLINE

- 1. Gather and Review Information and Data**
 - A. POTW Operations and Performance
 - B. POTW Influent and Pretreatment Program
 - C. Effluent Data, including Toxicity Results
 - D. Sludge (Biosolids) Data
- 2. Evaluate Facility Performance**
- 3. Conduct Toxicity Identification Evaluation (TIE)**
- 4. Evaluate Sources and In-Plant Controls**
- 5. Implement Toxicity Control Measures**
- 6. Conduct Confirmatory Toxicity Testing**

H.

**ATTACHMENT H– BIOSOLIDS AND SLUDGE MANAGEMENT
BIOSOLIDS USE AND DISPOSAL REQUIREMENTS**

(Note: “Biosolids” refers to non-hazardous sewage sludge as defined in 40 CFR §503.9. Sewage sludge that is hazardous, as defined in 40 CFR part 261, must be disposed of in accordance with the Resource Conservation and Recovery Act (RCRA).) 40 CFR §503 requirements identified below are for information only and are not regulated by this Order.

I. GENERAL REQUIREMENTS

- A. All biosolids generated by the Discharger shall be reused or disposed of in compliance with the applicable portions of:
 - 1. 40 CFR part 503: for biosolids that are land applied, placed in surface disposal sites (dedicated land disposal sites or monofills), or incinerated; 40 CFR § 503 Subpart B (land application) applies to biosolids placed on the land for the purposes of providing nutrients or conditioning the soil for crops or vegetation. 40 CFR § 503 Subpart C (surface disposal) applies to biosolids placed on land for the purpose of disposal.
 - 2. 40 CFR part 258: for biosolids disposed of in a municipal solid waste landfill.
 - 3. 40 CFR part 257: for all biosolids use and disposal practices not covered under 40 CFR parts 258 or 503.
- B. The Discharger is responsible for assuring that all biosolids from its facility are used or disposed of in accordance with 40 CFR part 503, whether the Discharger uses or disposes of the biosolids itself, or transfers their biosolids to another party for further treatment, reuse, or disposal. The Discharger is responsible for informing subsequent preparers, appliers, and disposers of requirements they must meet under 40 CFR part 503.
- C. Duty to mitigate: The Discharger shall take all reasonable steps to prevent or minimize any biosolids use or disposal which may adversely impact human health or the environment.
- D. No biosolids shall be allowed to enter wetland or other waters of the United States.
- E. Biosolids treatment, storage, use or disposal shall not contaminate groundwater.
- F. Biosolids treatment, storage, use or disposal shall not create a nuisance such as objectionable odors or flies.
- G. The Discharger shall assure that haulers transporting biosolids off site for further treatment, storage, reuse, or disposal take all necessary measures to keep the biosolids contained.
- H. If biosolids are stored for over two years from the time they are generated, the Discharger must ensure compliance with all the requirements for surface disposal under 40 CFR part 503 Subpart C, or must submit a written request to USEPA with the information in part 503.20 (b), requesting permission for longer temporary storage.
- I. Sewage sludge containing more than 50 mg/kg PCBs shall be disposed of in accordance with 40 CFR part 761.
- J. There shall be adequate screening at the plant 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 3/8 inches are removed.

II. MONITORING

- A. Biosolids shall be monitored for the metals required in 40 CFR § 503.16 (for land application) or § 503.26 (for surface disposal), using the methods in "Test Methods for Evaluating Solids Waste, Physical/Chemical Methods" (SW-846), as required in 503.8(b)(4), at the following minimum frequencies:

Amount of Sewage Sludge (Metric Tons per 365 day period)	Frequency
Greater than 0 but less than 290	Once per year
Equal to or greater than 290 but less than 1,500	Once per quarter
Equal to or greater than 1,500 but less than 15,000	Once per 60 days
Equal to or greater than 15,000	Once per month

For accumulated, previously untested biosolids, the Discharger shall develop a representative sampling plan, which addresses the number and location of sampling points, and collect representative samples.

Test results shall be expressed in milligrams pollutant per kilogram biosolids on a 100% dry weight basis.

Biosolids to be land applied shall be tested for organic nitrogen, ammonia nitrogen, and nitrate nitrogen at the frequencies required above.

- B. Biosolids shall be monitored for the following constituents at the frequency stipulated in 40 CFR § 503.16: arsenic, cadmium, copper, lead, mercury, molybdenum, nickel, selenium, zinc, organic nitrogen, ammonia nitrogen, and total solids. If biosolids are removed for use or disposal on a routine basis, sampling should be scheduled for regular intervals throughout the year. If biosolids are stored for an extended period prior to use or disposal, sampling may occur at regular intervals, or samples of the accumulated stockpile may be collected prior to use or disposal, corresponding to the tons accumulated in the stockpile for that period.
- C. Class 1 facilities (facilities with pretreatment programs or others designated as Class 1 by the Regional Administrator) and Federal facilities with > 5 MGD influent flow shall sample biosolids for pollutants listed under section 307 (a) of the Clean Water Act (as required in the pretreatment section of the permit for POTWs with pretreatment programs).

III. PATHOGEN AND VECTOR CONTROL

- A. Prior to land application, the Discharger shall demonstrate that the biosolids meet Class A or Class B pathogen reduction levels by one of the methods listed in 40 CFR § 503.32. Prior to disposal in a surface disposal site, the Discharger shall demonstrate that the biosolids meet Class B levels or shall ensure that the site is covered at the end of each operating day.
- B. If pathogen reduction is demonstrated using a "Process to Further Reduce Pathogens," the Discharger shall maintain daily records of the operating parameters used to achieve this reduction. If pathogen reduction is demonstrated by testing for fecal coliform and/or pathogens, samples must be collected at the frequency specified in Table 1 of 40 CFR § 503.16. If Class B is demonstrated using fecal coliform, at least seven grab samples must be collected during each monitoring period and a geometric mean calculated from these samples. The following holding times between sample collection and analysis shall not be exceeded: fecal coliform – 6 hours when cooled to

<4 degrees Celsius (extended to 24 hours when cooled to <4 degrees Celsius for Class A composted, Class B aerobically digested, and Class B anaerobically digested sample types); Salmonella spp. Bacteria – 24 hours when cooled to <4 degrees Celsius (unless using Method 1682 – 6 hours when cooled to 10 degrees Celsius); enteric viruses – 6 hours when cooled to <10 degrees Celsius (extended to one month when cooled to <4 degrees Celsius).

- C. For biosolids that are land applied or placed in a surface disposal site, the Discharger shall track and keep records of the operational parameters used to achieve Vector Attraction Reduction requirements in 40 CFR § 503.33 (b).

IV. NOTIFICATIONS

The Discharger either directly or through contractual arrangements with their biosolids management contractors shall comply with the following 40 CFR part 503 notification requirements:

- A. Notification of Non-compliance

The Discharger shall require appliers of their biosolids to notify USEPA Region 9 and their state permitting agency of any noncompliance within 24 hours if the non-compliance may seriously endanger health or the environment. For other instances of non-compliance, the Discharger shall require appliers of their biosolids to notify USEPA Region 9 and their state permitting agency of the non-compliance in writing within 10 working days of becoming aware of the non-compliance.

- B. Interstate Notification

If bulk biosolids are shipped to another State or to Indian Lands, the Discharger must send written notice within 60 days of the shipment and prior to the initial application of bulk biosolids to the permitting authorities in the receiving State or Indian Land (the USEPA Regional Office for the area and the State/Indian authorities).

- C. Land Application Notification

Prior to using any biosolids from this facility (other than Class A EQ composted biosolids or heat dried biosolids) at a new or previously unreported site, the Discharger shall notify USEPA and the State. This notification shall include the description and topographic map of the proposed site(s), names and addresses of the applier, and site owner, and a listing of any State or local permits which must be obtained. It shall also include a description of the crops or vegetation to be grown, proposed loading rates, and a determination of agronomic rates.

Within a given monitoring period, if any biosolids do not meet the applicable metals concentration limits specified under 40 CFR § 503.13, then the Discharger must pre-notify USEPA, and determine the cumulative metals loadings at that site to date, as required by 40 CFR § 503.12.

- D. Surface Disposal Notification

Prior to disposal at a new or previously unreported site, the Discharger shall notify USEPA and the State. The notice shall include a description and topographic map of the proposed site, depth to groundwater, whether the site is lined or unlined, site operator and site owner, and any state or local permits. It shall also describe procedures for ensuring grazing and public access restrictions for three years following site closure. The notice shall include a groundwater monitoring plan or description of why groundwater monitoring is not required.

V. REPORTING

The Discharger shall submit an annual biosolids report to USEPA Region 9 Biosolids Coordinator by February 19 of each calendar year. The report shall include:

- A. The amount of biosolids generated that year, in dry metric tons, and the amount accumulated from previous years.
- B. Results of all pollutant monitoring required in the Monitoring Section above. Results must be reported on a 100% dry weight basis.
- C. Descriptions of pathogen reduction methods, and vector attraction reduction methods, as required in 40 CFR § 503.17 and 503.27, and certifications.
- D. Results of any groundwater monitoring or certification by groundwater scientist that the placement of biosolids in a surface disposal site will not contaminate an aquifer.
- E. Except for Class A EQ composted and heat dried biosolids, names and addresses of land appliers and surface disposal site operators, and volumes applied (dry metric tons).
- F. Names and addresses of persons who received biosolids for storage, further treatment, disposal in a municipal waste landfill, deep well injection, or other reuse/disposal methods not covered above, and volumes delivered to each.

The following information must be submitted by the Discharger, unless the Discharger requires its biosolids management contractors to report this information directly to the USEPA Region 9 Biosolids Coordinator.

For land application sites (except sites where Class A EQ composted biosolids and heat dried biosolids are applied): locations of land application sites (with field names and numbers) used that calendar year, size of each field applied to, applier, and site owner; volumes applied to each field (in wet tons and dry metric tons), nitrogen applied, and calculated plant available nitrogen; crops planted, dates of planting, and dates of harvesting; for biosolids exceeding 40 CFR Part 503.13 Table 3 metals concentrations, the locations of sites where the biosolids were applied and cumulative metals loadings at the sites to date; certification of management practices at 40 CFR Part 503.14; and certifications of site restrictions at 40 CFR Part 503.32(b)(5).

For surface disposal sites: locations of sites, site operator and site owner, size of parcel on which biosolids were disposed, results of any groundwater monitoring, and certifications of management practices at 40 CFR Part 503.24.

- G. The annual biosolids report shall be submitted to USEPA using USEPA's NPDES Electronic Reporting Tool (NeT) and can be accessed at <http://www.epa.gov/compliance/national-pollutant-discharge-elimination-system-npdes-electronic-reporting-tool-net-fact>

I.

ATTACHMENT I – PRETREATMENT REPORTING REQUIREMENTS

The Discharger is required to submit annual Pretreatment Program Compliance Report (Report) to the Regional Water Board and United States Environmental Protection Agency, Region 9 (USEPA). This Attachment outlines the minimum reporting requirements of the Report. If there is any conflict between requirements stated in this attachment and provisions stated in the Waste Discharge Requirements (WDRs), those contained in the WDRs will prevail.

A. Pretreatment Requirements

1. The Discharger shall be responsible and liable for the performance of all Control Authority pretreatment requirements contained in 40 CFR part 403, including any subsequent regulatory revisions to part 403. Where part 403 or subsequent revision places mandatory actions upon the Discharger as Control Authority but does not specify a timetable for completion of the actions, the Discharger shall complete the required actions within six months from the issuance date of this permit or the effective date of the part 403 revisions, whichever comes later. For violations of pretreatment requirements, the Discharger shall be subject to enforcement actions, penalties, fines and other remedies by the USEPA or other appropriate parties, as provided in the Act. USEPA may initiate enforcement action against a nondomestic user for noncompliance with applicable standards and requirements as provided in the act.
2. The Discharger shall enforce the requirements promulgated under sections 307(b), 307(c), 307(d) and 402(b) of the Act with timely, appropriate and effective enforcement actions. The Discharger shall cause all nondomestic users subject to federal categorical standards to achieve compliance no later than the date specified in those requirements or, in the case of a new nondomestic user, upon commencement of the discharge.
3. The Discharger shall perform the pretreatment functions as required in 40 CFR part 403 including, but not limited to:
 - a. Implement the necessary legal authorities as provided in 40 CFR part 403.8(f)(1);
 - b. Enforce the pretreatment requirements under 40 CFR parts 403.5 and 403.6;
 - c. Implement the programmatic functions as provided in 40 CFR part 403.8(f)(2); and
 - d. Provide the requisite funding and personnel to implement the pretreatment program as provided in 40 CFR part 403.8(f)(3).
4. The Discharger shall submit annually a report to USEPA Pacific Southwest Region, and the State describing its pretreatment activities over the previous year. In the event the Discharger is not in compliance with any conditions or requirements of this permit, then the Discharger shall also include the reasons for noncompliance and state how and when the Discharger shall comply with such conditions and requirements. This annual report shall cover operations from January 1 through December 31 and is due on April 15 of each year. The report shall contain, but not be limited to, the following information:
 - a. A summary of analytical results from representative, flow proportioned, 24-hour composite sampling of the publicly-owned treatment works (POTW)

influent and effluent for those pollutants USEPA has identified under section 307(a) of the Act which are known or suspected to be discharged by nondomestic users. This will consist of an annual full priority pollutant scan, with quarterly samples analyzed only for those pollutants detected in the full scan. The Discharger is not required to sample and analyze for asbestos. Sludge sampling and analysis are covered in the sludge section of this permit. The Discharger shall also provide any influent or effluent monitoring data for nonpriority pollutants which the Discharger believes may be causing or contributing to interference or pass through. Sampling and analysis shall be performed with the techniques prescribed in 40 CFR part 136;

- b. A discussion of Upset, Interference or Pass Through incidents, if any, at the treatment plant which the Discharger knows or suspects were caused by nondomestic users of the POTW system. The discussion shall include the reasons why the incidents occurred, the corrective actions taken and, if known, the name and address of the nondomestic user(s) responsible. The discussion shall also include a review of the applicable pollutant limitations to determine whether any additional limitations, or changes to existing requirements, may be necessary to prevent pass through or interference;
- c. An updated list of the Discharger's significant industrial users (SIUs) including their names and addresses, and a list of deletions, additions and SIU name changes keyed to the previously submitted list. The Discharger shall provide a brief explanation for each change. The list shall identify the SIUs subject to federal categorical standards by specifying which set(s) of standards are applicable to each SIU. The list shall also indicate which SIUs are subject to local limitations;
- d. The Discharger shall characterize the compliance status of each SIU by providing a list or table which includes the following information:
 - i. Name of the SIU;
 - ii. Category, if subject to federal categorical standards;
 - iii. The type of wastewater treatment or control processes in place;
 - iv. The number of samples taken by the POTW during the year;
 - v. The number of samples taken by the SIU during the year;
 - vi. For an SIU subject to discharge requirements for total toxic organics, whether all required certifications were provided;
 - vii. A list of the standards violated during the year. Identify whether the violations were for categorical standards or local limits;
 - viii. Whether the facility is in significant noncompliance (SNC) as defined at 40 CFR part 403.8(f)(2)(viii) at any time during the year; and
 - ix. A summary of enforcement or other actions taken during the year to return the SIU to compliance. Describe the type of action, final compliance date, and the amount of fines and penalties collected, if any. Describe any proposed actions for bringing the SIU into compliance.
- e. A brief description of any programs the POTW implements to reduce pollutants from nondomestic users that are not classified as SIUs;

- f. A brief description of any significant changes in operating the pretreatment program which differ from the previous year including, but not limited to, changes concerning the program's administrative structure, local limits, monitoring program or monitoring frequencies, legal authority, enforcement policy, funding levels, or staffing levels;
- g. A summary of the annual pretreatment budget, including the cost of pretreatment program functions and equipment purchases; and
- h. A summary of activities to involve and inform the public of the program including a copy of the newspaper notice, if any, required under 40 CFR part 403.8(f)(2)(viii).

B. LOCAL LIMITS EVALUATION

1. In accordance with 40 CFR part 122.44(j)(2)(ii), the POTW shall provide a written technical evaluation of the need to revise local limits under 40 CFR part 403.5(c)(1) within 180 days of issuance or reissuance of the Oxnard Wastewater Treatment Plant NPDES permit. The evaluation shall specify when the next revision is planned given the local limits were revised in 2018.

C. SIGNATORY REQUIREMENTS AND REPORT SUBMITTAL

1. Signatory Requirements.

The annual report must be signed by a principal executive officer, ranking elected official or other duly authorized employee if such employee is responsible for the overall operation of the POTW. Any person signing these reports must make the following certification [40 CFR part 403.6(a)(2)(ii)]:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

2. Report Submittal.

The Annual Pretreatment Report shall be submitted electronically using the State Water Board's California Integrated Water Quality System (CIWQS) Program website <http://www.waterboards.ca.gov/ciwqs/index.html>. The CIWQS website will provide additional information for SMR submittal in the event there will be a planned service interruption for electronic submittal.

A copy of the Annual Pretreatment Report must be sent to USEPA electronically to the following address: R9Pretreatment@epa.gov