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.

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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 $BOD_5 20^oC$) 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).

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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]	Instan-taneous 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 meausured 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.

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Parameter	Units	Effluent Limitations[1]					Performance Goals Average Monthly
		Average Monthly[2]	Average Weekly	Maximum Daily[3]	Instan-taneous 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.

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Parameter	Units	Effluent Limitations[1]					Performance Goals Average Monthly
		Average Monthly[2]	Average Weekly	Maximum Daily[3]	Instan-taneous 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
Dichloro-benzene	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.

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Parameter	Units	Effluent Limitations[1]					Performance Goals Average Monthly
		Average Monthly[2]	Average Weekly	Maximum Daily[3]	Instan-taneous Maximum[4]	Average Monthly	
Tributyltin	µg/L	--	--	--	--	--	0.0263
1,1,1-Trichloro-ethane	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
Chlorodibromo-methane	µg/L	--	--	--	--	--	1.3
Chloroform	µg/L	--	--	--	--	--	1.2
DDT[11]	µg/L	--	--	--	--	--	0.25
1,4-Dichlorobenze ne	µg/L	--	--	--	--	--	3
3,3'-Dichloro-benzidine	µg/L	--	--	--	--	--	25
1,2-Dichloroethane	µg/L	--	--	--	--	--	2.5
1,1-Dichloro-ethylene	µg/L	--	--	--	--	--	2.5
Bromodichloro-methane	µg/L	--	--	--	--	--	2.5
Dichloro-methane	µg/L	--	--	--	--	--	2.5
1,3-Dichloro-propene	µg/L	--	--	--	--	--	2.5
Dieldrin	µg/L	--	--	--	--	--	0.05
2,4-Dinitrotoluene	µg/L	--	--	--	--	--	25
1,2-Diphenyl-hydrazine	µg/L	--	--	--	--	--	5

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Parameter	Units	Effluent Limitations[1]					Performance Goals Average Monthly
		Average Monthly[2]	Average Weekly	Maximum Daily[3]	Instan-taneous Maximum[4]	Average Monthly	
Halomethanes [11]	µg/L	--	--	--	--	--	4.4
Heptachlor	µg/L	--	--	--	--	--	0.05
Heptachlor epoxide	µg/L	--	--	--	--	--	0.05[14]
Hexachloro-benzene	µg/L	--	--	--	--	--	5
Hexachloro-butadiene	µg/L	--	--	--	--	--	5
Hexachloro-ethane	µg/L	--	--	--	--	--	5
Isophorone	µg/L	--	--	--	--	--	5
N-Nitrosodimethyl-amine	µg/L	--	--	--	--	--	25
N-Nitrosodi-N-propylamine	µg/L	--	--	--	--	--	25
N-Nitrosodiphenyl-amine	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-Tetrachloro-ethane	µg/L	--	--	--	--	--	2.5
Tetrachloro-ethylene	µg/L	--	--	--	--	--	2.5
Toxaphene	µg/L	--	--	--	--	--	2.5
Trichloro-ethylene	µg/L	--	--	--	--	--	2.5
1,1,2-Trichloro-ethane	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.

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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 regulations[15](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

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 benefical 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;

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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

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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.anijielo@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;

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(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;

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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.

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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

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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 (Ho) for the TST statistical approach is: Mean discharge In-stream Waste Concentration (IWC) response ≤0.75 × 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 (Ho) (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

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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:

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

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:

$$\text{Geometric Mean} = (C_1 \times C_2 \times \ldots \times C_3)^{1/n}$$

   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).

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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.

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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).

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