CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

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U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION IX

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ORDER R4-2017-0045
NPDES NO. CA0109991

WASTE DISCHARGE REQUIREMENTS AND NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT FOR THE CITY OF LOS ANGELES, HYPERION TREATMENT PLANT DISCHARGE TO THE PACIFIC OCEAN

The following Permittee is subject to state Waste Discharge Requirements (WDRs) and federal National Pollutant Discharge Elimination System (NPDES) permit requirements, as set forth in this Order/Permit:

Table 1. Discharger Information

Discharger	City of Los Angeles (City, Permittee, or Discharger)
Name of Facility	Hyperion Treatment Plant (HTP or Facility)
Facility Address	12000 Vista del Mar Boulevard
	Playa del Rey, CA 90293
	Los Angeles County

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude (North)	Discharge Point Longitude (West)	Receiving Water
001 (1-Mile Outfall)	Secondary treated wastewater	33.918333° N	118.447500° W	Pacific Ocean
002 (Y-shaped diffuser) (5-Mile Outfall)	Secondary treated wastewater	33.911967° N	118.521450° W	Pacific Ocean
North Leg		33.919333° N	118.528483° W	
South Leg		33.900650° N	118.527267° W	

Table 3. Administrative Information for State Order

This Order was adopted on:	February 02, 2017
This Order shall become effective on:	April 01, 2017
This Order shall expire on:	March 31, 2022
The Discharger shall file a Report of Waste Discharge as an application for reissuance of WDR's 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 United States Environmental protection Agency and the California Regional Water Quality Control Board, Los Angeles Region have classified this discharge as follows:	Major

I, Samuel Unger, 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 February 02, 2017.

Samuel Unger

Samuel Unger, P.E., Executive Officer

Table 4. Administrative Information for Federal Permit

This Permit was adopted on:	February 2, 2017
This Permit shall become effective on:	April 01, 2017
This Permit shall expire on:	March 31, 2022
The Discharger shall file a Report of Waste Discharge as an application for reissuance of WDR's 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 Permit expiration date (Title 40, Code of Federal Regulations, part 122.21(d))
The United States Environmental protection Agency and the California Regional Water Quality Control Board, Los Angeles Region have classified this discharge as follows:	Major

I, Tomás Torres, do hereby certify that this Permit with all attachments is a full, true, and correct copy of the Order adopted by the United States Environmental Protection Agency Region IX, on 2/15/2017.

Tomás Torres, Water Division Director

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I. FACILITY INFORMATION

Information describing the Hyperion Treatment Plant (HTP) is summarized in Table 1 and in sections I and III 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) and the United States Environmental Protection Agency (USEPA), find:

A. Legal Authorities. This Order/Permit 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/Permit is also issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the United States Environmental Protection Agency (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 Permittee to discharge into a water of the United States at the discharge location described in Table 2 subject to the WDRs in this Order/Permit.

B. Background and Rationale for Requirements. The Regional Water Board and USEPA developed the requirements in this Order/Permit based on information submitted as part of the application, through monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for the requirements in this Order/Permit, is hereby incorporated into and constitutes Findings for this Order/Permit. Attachments A through E and G through I are also incorporated into this Order/Permit.

C. Notification of Interested Parties. The Regional Water Board and USEPA have notified the City of Los Angeles (City) and interested agencies and persons of its intent to prescribe this Order/Permit 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 and USEPA, in a public meeting, heard and considered all comments pertaining to this Order/Permit. Details of the Public Hearing are provided in the Fact Sheet.

THEREFORE, IT IS HEREBY ORDERED that this Order/Permit supersedes Order No. R4-2010-0200 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 Permittee is authorized to discharge from the identified facility and outfalls into waters of the United States and shall comply with the requirements in this Order/Permit. This action in no way prevents the Regional Water Board or USEPA from taking enforcement action for past violations of the previous Order/Permit.

III. DISCHARGE PROHIBITIONS

A. Discharges to Discharge Point 001 (1-Mile Outfall) are prohibited, except during the following situations, provided that the use of Discharge Point 002 (5-Mile Outfall) is maximized and that the Regional Water Board and USEPA are notified as described below:

1. Emergency discharge of disinfected secondary effluent when the flow rate exceeds the hydraulic capacity of Discharge Point 002 (720 MGD) and/or the hydraulic capacity of the effluent pumping plant;
2. Emergency discharge of disinfected secondary effluent and/or storm water during power outages in which back-up power supplies are inoperable or insufficient to pump all the secondary effluent through Discharge Point 002 and/or to pump stormwater from the North, South, or Central stormwater pump stations;
3. Discharge of disinfected secondary effluent during planned preventative maintenance such as routine opening and closing of the outfall gate valves for exercising and lubrication;
4. Discharge of stormwater flow during wet weather if the runoff rate of stormwater exceeds the capacity of the pumps at the North, South, or Central Stormwater Pump Stations; or
5. Discharge of disinfected secondary effluent, stormwater, and/or brine during major planned capital improvement projects when there is no other feasible alternative. Projects warranting such a diversion will be considered on a case-by-case basis and must be approved by the Executive Officer of the Regional Water Board prior to diverting flow to the 1-Mile Outfall.

The Permittee shall notify the Regional Water Board and USEPA a minimum of 10 days prior to discharging final effluent from Discharge Point 001 during a planned diversion such as preventative maintenance or capital improvement projects. This notification shall include the rationale for the discharge, the expected time, date, the duration of the discharge, and confirmation that the diversion structure and surge chamber have been inspected for debris within one month prior to the discharge.

B. The discharge of any radiological, chemical, or biological warfare agent or high-level radioactive waste into the ocean is prohibited.

C. Discharge to designated Areas of Special Biological Significance is prohibited.

D. Pipeline discharge of sludge to the ocean is prohibited by federal law. The discharge of municipal and industrial waste sludge 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.

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 bypassing of untreated wastes containing concentrations of pollutants in excess of those of Table 1 or Table 2 of the Ocean Plan to the ocean is prohibited.

G. 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.

H. Discharge of treated wastewater at a location different from that described in this Order/Permit is prohibited.

I. The monthly average effluent dry weather discharge flow rate from the collection system to the headworks of the Facility shall not exceed the dry weather flow capacity of 450 MGD.

IV. EFFLUENT LIMITATIONS, PERFORMANCE GOALS, AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations and Performance Goals – Discharge Points 002 and 001

Effluent limitations for Discharge Points 002 and 001 are specified below. The discharge of treated wastewater with constituents in excess of effluent limitations is prohibited.

The performance goals for Discharge Point 002 are prescribed below in this Order/Permit. Performance goals are based upon actual performance data for the Hyperion 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 Permittee 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 Permittee shall submit a written report to the Regional Water Board and USEPA 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 or USEPA may modify any of the performance goals if the Permittee submits a request and demonstrates that the change is warranted.

1. Final Effluent Limitations and Performance Goals – Discharge Point 002

The Permittee shall maintain compliance with the following effluent limitations at Discharge Point 002, with compliance measured at Monitoring Location EFF-002 as described in the attached MRP.

Table 5. Final Effluent Limitations and Performance Goals for Discharge Point 002

Parameter	Units	Effluent Limitations[1]					Performance Goals
		Average Monthly[2]	Average Weekly	Maximum Daily[3]	Instantaneous Maximum[4]	Annual Average	Average Monthly
Major Wastewater Constituents							
Biochemical Oxygen Demand 5-day @ 20°C ($BOD_5$20°C)	mg/L	30	45	--	--	--	--
	lbs/day[5]	105,000	160,000	--	--	--	--
TSS	mg/L	30	45	--	--	--	--
	lbs/day[5]	105,000	160,000	--	--	--	--
pH	standard units	6.0 (instantaneous minimum) – 9.0 (instantaneous maximum)					--
Oil and Grease	mg/L	25	40	--	75	--	--
	lbs/day[5]	88,000	140,000	--	--	--	--
Settleable Solids	mL/L	1.0	1.5	--	3.0	--	--
Turbidity	NTU	75	100	--	225	--	--
Marine Aquatic Life Toxicants							
Arsenic	µg/L	--	--	--	--	--	3.0
Cadmium	µg/L	--	--	--	--	--	0.38
Chromium (VI)	µg/L	--	--	--	--	--	25
Copper	µg/L	--	--	--	--	--	19
Lead	µg/L	--	--	--	--	--	2.5
Mercury	µg/L	--	--	--	--	--	0.0090
Nickel	µg/L	--	--	--	--	--	11

1 The minimum dilution ratios used to calculate effluent limitations for nonconventional and toxic pollutants for Discharge Point 002 are 84:1 for all pollutants except ammonia and chronic toxicity, and 96:1 for ammonia and chronic toxicity (i.e., 84 and 96 parts seawater to one part effluent, respectively).

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

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

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

5 The mass emission rates are calculated using 420 MGD, consistent with the water-quality based limits in the previous permit: lbs/day = 0.00834 x Ce (effluent concentration in ug/L) x Q (flow rate in MGD). During storm events when flow exceeds 420 MGD, the mass emission rate limitations shall not apply.

Parameter	Units	Effluent Limitations[1]					Performance Goals
		Average Monthly[2]	Average Weekly	Maximum Daily[3]	Instan-taneous Maximum[4]	Annual Average	Average Monthly
Selenium	µg/L	--	--	--	--	--	3.2
Silver	µg/L	--	--	--	--	--	0.50
Zinc	µg/L	--	--	--	--	--	42
Cyanide	µg/L	--	--	--	--	--	9.0
Ammonia as Nitrogen	mg/L	58[6]	--	233	582	--	--
	lbs/day[5]	203,000[6]	--	820,000	2.0×10^6	--	--
Chronic Toxicity[7,8] (TST)	Pass or Fail	--	--	Pass	--	--	--
Phenolic compounds (non-chlorinated)[9]	µg/L	--	--	--	--	--	5.0
Phenolic compounds (chlorinated)[9]	µg/L	--	--	--	--	--	0.95
Endosulfan[9]	µg/L	--	--	--	--	--	0.04
Endrin	µg/L	--	--	--	--	--	0.05
Hexachloro-cyclohexane (HCH)[9]	µg/L	--	--	--	--	--	0.025
Radioactivity							
Gross alpha	pCi/L	--	--	--	--	--	15
Gross beta	pCi/L	--	--	--	--	--	14.1
Human Health Toxicants – Non Carcinogens							

6 This is a 6-month median final effluent limitation.

7 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://www3.epa.gov/npdes/pubs/wet_final_tst_implementation2010.pdf) and *EPA Regions 8, 9, and 10, Toxicity Training Tool* (January 2010).

8 The Maximum Daily Effluent Limitation (MDEL) shall be reported as "Pass" or "Fail," and % Effect." See section V.A.5.a of the MRP.

9 See section VIII of this Order/Permit and Attachment A for definition of terms.

Parameter	Units	Effluent Limitations[1]					Performance Goals
		Average Monthly[2]	Average Weekly	Maximum Daily[3]	Instan-taneous Maximum[4]	Annual Average	Average Monthly
Acrolein	µg/L	--	--	--	--	--	25
Antimony	µg/L	--	--	--	--	--	2.6
Bis(2-chloroethoxy) methane	µg/L	--	--	--	--	--	25
Bis(2-chloroiso-propyl) ether	µg/L	--	--	--	--	--	10
Chlorobenzene	µg/L	--	--	--	--	--	10
Chromium (III)	µg/L	--	--	--	--	--	5.2
Di-n-butyl-phthalate	µg/L	--	--	--	--	--	1.6
Dichloro-benzenes[9]	µg/L	--	--	--	--	--	0.25
Diethyl phthalate	µg/L	--	--	--	--	--	10
Dimethyl phthalate	µg/L	--	--	--	--	--	10
4,6-dinitro-2-methylphenol	µg/L	--	--	--	--	--	25
2,4-dinitrophenol	µg/L	--	--	--	--	--	25
Ethylbenzene	µg/L	--	--	--	--	--	10
Fluoranthene	µg/L	--	--	--	--	--	0.25
Hexachloro-cyclopentadiene	µg/L	--	--	--	--	--	25
Nitrobenzene	µg/L	--	--	--	--	--	0.52
Thallium	µg/L	--	--	--	--	--	1.0
Toluene	µg/L	--	--	--	--	--	1.3
Tributyltin	ng/L	--	--	--	--	--	1.6
1,1,1-Trichloro-ethane	µg/L	--	--	--	--	--	10
Human Health Toxicants – Carcinogens							
Acrylonitrile	µg/L	--	--	--	--	--	8.5
Aldrin	µg/L	--	--	--	--	--	0.0019
Benzene	µg/L	--	--	--	--	--	10
Benzidine	µg/L	--	--	--	--	--	0.0059
Beryllium	µg/L	--	--	--	--	--	0.05

Parameter	Units	Effluent Limitations[1]					Performance Goals
		Average Monthly[2]	Average Weekly	Maximum Daily[3]	Instantaneous Maximum[4]	Annual Average	Average Monthly
Bis(2-chloroethyl) ether	µg/L	--	--	--	--	--	4
Bis(2-ethylhexyl) phthalate	µg/L	--	--	--	--	--	2
Carbon tetrachloride	µg/L	--	--	--	--	--	10
Chlordane[9]	µg/L	--	--	--	--	--	0.002
Chlorodibromo-methane	µg/L	--	--	--	--	--	1.6
Chloroform	µg/L	--	--	--	--	--	5.1
DDT[9]	µg/L	0.0101	--	--	--	--	--
	g/yr	--	--	--	--	5,850[10]	--
1,4-dichloro-benzene	µg/L	--	--	--	--	--	10
3,3'-dichloro-benzidine	µg/L	--	--	--	--	--	1
1,2-dichloroethane	µg/L	--	--	--	--	--	10
1,1-dichloro-ethylene	µg/L	--	--	--	--	--	10
Dichlorobromo-methane	µg/L	--	--	--	--	--	1

[10] Consistent with the *Santa Monica Bay TMDL for DDTs and PCBs*, the calculation of the annual mass emissions shall be calculated using the arithmetic average of available monthly mass emissions as follows:

$$Annual\ Mass\ Emission, g/year = \left(\frac{\sum Monthly\ Mass\ Emission,\ g/month}{Number\ of\ Monthly\ Mass\ Emissions\ Calculated}\right) * 12\ months/year$$

$$Monthly\ Mass\ Emission, kg/month = \left(\frac{3{,}785}{N}\right) * \left(\sum_{i=1}^{N} Q_i\, C_i\right) * 30.5 = \frac{0.1154425}{N} * \left(\sum_{i=1}^{N} Q_i C_i\right)$$

C_i = DDT or PCB concentration of each individual sample (ng/L)
Q_i = discharger flow rate on date of sample (mgd)
N = number of samples collected during the month

The total mass load for DDT and PCB from the Joint Water Pollution Control Plant, Hyperion Treatment Plant, and West Basin's Water Reclamation Plant shall not be more than 14,567 g/yr for DDT and 351 g/yr for PCB. The Permittee is deemed in compliance with these group WQBELs for DDT and PCBs if it is in compliance with the individual mass-based WQBELs for DDT and PCBs in Table 5: Effluent Limitations for Discharge Point 002.

Parameter	Units	Effluent Limitations[1]					Performance Goals
		Average Monthly[2]	Average Weekly	Maximum Daily[3]	Instantaneous Maximum[4]	Annual Average	Average Monthly
Dichloromethane	µg/L	--	--	--	--	--	2.0
1,3-dichloropropene	µg/L	--	--	--	--	--	10
Dieldrin	µg/L	--	--	--	--	--	0.0034
2,4-dinitrotoluene	µg/L	--	--	--	--	--	25
1,2-diphenylhydrazine	µg/L	--	--	--	--	--	5
Halomethanes	µg/L	--	--	--	--	--	0.94
Heptachlor	µg/L	--	--	--	--	--	0.0043
Heptachlor epoxide	µg/L	--	--	--	--	--	0.0017
Hexachlorobenzene	µg/L	--	--	--	--	--	0.018
Hexachlorobutadiene	µg/L	--	--	--	--	--	5
Hexachloroethane	µg/L	--	--	--	--	--	5
Isophorone	µg/L	--	--	--	--	--	0.62
N-Nitrosodimethylamine	µg/L	--	--	--	--	--	1.6
N-Nitrosodi-N-propylamine	µg/L	--	--	--	--	--	25
N-Nitrosodiphenylamine	µg/L	--	--	--	--	--	5
Polycyclic Aromatic Hydrocarbons (PAHs)[9]	µg/L	--	--	--	--	--	0.05
Total Polychlorinated Biphenyls (PCBs)[9]	µg/L	0.000271	--	--	--	--	--
	g/yr	--	--	--	--	157[10]	--
TCDD Equivalents[9]	pg/L	--	--	--	--	--	0.33
1,1,2,2-Tetrachloroethane	µg/L	--	--	--	--	--	10
Tetrachloroethylene	µg/L	--	--	--	--	--	1.8

Parameter	Units	Effluent Limitations[1]					Performance Goals
		Average Monthly[2]	Average Weekly	Maximum Daily[3]	Instantaneous Maximum[4]	Annual Average	Average Monthly
Toxaphene	µg/L	--	--	--	--	--	0.018
Trichloroethylene	µg/L	--	--	--	--	--	10
1,1,2-Trichloroethane	µg/L	--	--	--	--	--	10
2,4,6-Trichlorophenol	µg/L	--	--	--	--	--	0.12
Vinyl chloride	µg/L	--	--	--	--	--	10

2. **Final Effluent Limitations – Discharge Point 001**

The Permittee shall maintain compliance with the following effluent limitations at Discharge Point 001, with compliance measured at Monitoring Location EFF-001, as described in the attached MRP.

Table 6. Effluent Limitations for Discharge Point 001

Parameter	Units	Effluent Limitations[11]					Performance Goals
		Average Monthly[12]	Average Weekly	Maximum Daily[13]	Instantaneous Maximum[14]	Annual Average	Average Monthly
Major Wastewater Constituents							
Biochemical Oxygen Demand 5-day @ 20°C	mg/L	30	45	--	--	--	--
	lbs/day[15]	105,000	160,000	--	--	--	--
TSS	mg/L	30	45	--	--	--	--
	lbs/day[15]	105,000	160,000	--	--	--	--

[11] The minimum dilution ratio used to calculate effluent limitations for nonconventional and toxic pollutants for Discharge Point 001 is 13:1 (i.e., 13 parts seawater to one part effluent).

[12] Some of the average monthly effluent limitations for Discharge Point 001 are based on the 6-month median water quality objectives in the 2015 Ocean Plan (copper, chlorine residual, ammonia, and PAHs). 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.

[13] The maximum daily effluent limitations shall apply to flow-weighted 24-hour composite samples.

[14] The Instantaneous maximum effluent limitations shall apply to grab samples.

[15] The mass emission rates are calculated using 420 MGD, consistent with water-quality based limits in the previous permit: lbs/day = 0.00834 x Ce (effluent concentration in ug/L) x Q (flow rate in MGD). During storm events when flow exceeds 420 MGD, the mass emission rate limitations shall not apply.

Parameter	Units	Effluent Limitations[11]					Performance Goals
		Average Monthly[12]	Average Weekly	Maximum Daily[13]	Instantaneous Maximum[14]	Annual Average	Average Monthly
pH	standard units	6.0 (instantaneous minimum) – 9.0 (instantaneous maximum)					--
Oil and Grease	mg/L	25	40	--	75	--	--
	lbs/day[15]	88,000	140,000	--	--	--	--
Settleable Solids	mL/L	1.0	1.5	--	3.0	--	--
Turbidity	NTU	75	100	--	225	--	--
Marine Aquatic Life Toxicants							
Copper	µg/L	16	--	140	160	--	--
	lbs/day[15]	56	--	490	560	--	--
Chlorine Residual	µg/L	28	--	112	840	--	--
	lbs/day[15]	98	--	320	2,900	--	--
Ammonia as N	mg/L	8.4	--	34	84	--	--
	lbs/day[15]	29,000	--	120,000	290,000	--	--
Chronic Toxicity (TST)[16,17]	Pass or Fail (TST)	--	--	Pass	--	--	--
Human Health Toxicants – Carcinogens							
DDT[18]	µg/L	0.0101	--	--	--	--	--
	g/yr	--	--	--	--	5,850[19]	--

[16] A numeric Water Quality Based Effluent Limitation (WQBEL) is established because effluent data showed that there was reasonable potential for the effluent to cause or contribute to an exceedance of the chronic toxicity water quality objective. 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://www3.epa.gov/npdes/pubs/wet_final_tst_implementation2010.pdf) and *EPA Regions 8, 9, and 10, Toxicity Training Tool* (January 2010).

[17] The Maximum Daily Effluent Limitation (MDEL) shall be reported as "Pass" or Fail," and "% Effect."

[18] See section VIII of this Order/Permit and Attachment A for definition of terms.

[19] Consistent with the *Santa Monica Bay TMDL for DDTs and PCBs*, the calculation of the annual mass emissions shall be calculated using the arithmetic average of available monthly mass emissions as follows:

Parameter	Units	Effluent Limitations[11]					Performance Goals
		Average Monthly[12]	Average Weekly	Maximum Daily[13]	Instan-taneous Maximum[14]	Annual Average	Average Monthly
PAHs[18]	µg/L	0.12	--	--	--	--	--
	lbs/day[15]	0.43	--	--	--	--	--
Total PCBs[18]	µg/L	0.000271	--	--	--	--	--
	g/yr	--	--	--	--	157[19]	--

3. **Other Final Effluent Limitations – Discharge Point 001 and 002**

   a. **Percent Removal:** The average monthly percent removal of $BOD_5$20°C and TSS shall not be less than 85 percent.

   b. **Temperature:** The temperature of wastes discharged shall not exceed 100°F.

   c. **Radioactivity:** 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. Reference to section 30253 is prospective, including future changes to any incorporated provisions of federal law, as the changes take effect.

   d. The Permittee shall ensure that bacterial concentrations in the effluent discharged from Discharge Points 001 and 002 do not result in an exceedance of the Hyperion Treatment Plant's waste load allocation of zero (0) days exceedance of single sample numeric limits or geometric mean limits (based on Basin Plan bacteria objectives for marine waters designated REC-1, see Section VI.A.1.b) at shoreline compliance points, as specified in Regional Water Board Resolutions Nos. 2002-004 and 2002-022.

   e. Waste discharged to the ocean must be essentially free of:

      i. Material that is floatable or will become floatable upon discharge.

$$Annual\ Mass\ Emission, g/year = \left(\frac{\sum Monthly\ Mass\ Emission,\ g/month}{Number\ of\ Monthly\ Mass\ Emissions\ Calculated}\right) * 12\ months/year$$

$$Monthly\ Mass\ Emission, kg/month = \left(\frac{3{,}785}{N}\right) * \left(\sum_{i=1}^{N} Q_i\, C_i\right) * 30.5 = \frac{0.1154425}{N} * \left(\sum_{i=1}^{N} Q_i C_i\right)$$

C_i = DDT or PCB concentration of each individual sample (ng/L)
N = number of samples collected during the month

$$Q_i = \left(\frac{\sum_{d=1}^{D} Q_d}{30.5}\right)$$

Q_d = total flow for the day when discharge occurred in a month
D = total number of days where discharge occurred

The total mass load for DDT and PCB from Joint Water Pollution Control Plant, Hyperion Treatment Plant, and West Basin's Water Reclamation Plant shall not be more than 14,567 g/yr for DDT and 351 g/yr for PCB. The Permittee is deemed in compliance with these group WQBELs for DDT and PCBs if it is in compliance with the individual mass-based WQBELs for DDT and PCBs in Table 6: Effluent Limitations for Discharge Point 001.

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.

4. **Interim Effluent Limitations – Discharge Point 001 and 002 - Not Applicable**

B. Land Discharge Specifications – Not Applicable

C. Recycling Specifications – Not Applicable.

V. MASS EMISSION BENCHMARKS

The following mass emission benchmarks, in metric tons per year (MT/yr), have been established for the discharge through the 5-Mile Outfall (Discharge Point 002). The Permittee shall monitor and report the mass emission rate for all constituents that have mass emission benchmarks. These mass emission benchmarks are not enforceable water quality based effluent limitations. They may be re-evaluated and revised during the five-year permit term. The mass emission benchmarks (in metric tons per year; MT/yr) for the Hyperion Treatment Plant discharge were determined using January 2010 through December 2015 effluent concentrations and the Permittee's 1994 dry weather design capacity of 420 MGD.

Table 7. 12-Month Average Effluent Mass Emission Benchmarks

Ocean Plan Constituent	12-month Average Mass Emission Benchmarks (MT/yr)
Marine Aquatic Life	
Arsenic	1.7
Cadmium	0.22
Chromium VI	15
Copper	11
Lead	1.45
Mercury	0.0052
Nickel	6.4
Selenium	1.9
Silver	0.29
Zinc	24
Cyanide	5.2
Ammonia as N	28,000
Phenolic Compounds (non-chlorinated)[20]	2.9
Phenolic Compounds (chlorinated) [20]	0.55

[20] See section VIII of this Order/Permit and Attachment A for definition of terms.

Ocean Plan Constituent	12-month Average Mass Emission Benchmarks (MT/yr)
Endosulfan[20]	0.023
Endrin	0.029
HCH[20]	0.015
Human Health (noncarcinogens)	
Acrolein	15
Antimony	1.5
Bis(2-chloroethoxy) methane	15
Bis(2-chloroisopropyl) ether	5.8
Chlorobenzene	5.8
Chromium (III)	3.0
Di-n-butyl phthalate	0.93
Dichlorobenzenes (BNA)	0.15
Diethyl phthalate	5.8
Dimethyl phthalate	5.8
4,6-dinitro-2-methylphenol	15
2,4-dinitrophenol	15
Ethylbenzene	5.8
Fluoranthene	0.15
Hexachlorocyclopentadiene	15
Nitrobenzene	0.30
Thallium	0.58
Toluene	0.75
Tributyltin	0.93
1,1,1-trichloroethane	5.8
Human Health Protection (carcinogens)	
Acrylonitrile	4.9
Aldrin	0.0011
Chlordane[20]	0.0011
Benzene	5.8
Benzidine	0.0034
Beryllium	0.029
Bis(2-chloroethyl) ether	2.2
Bis(2-ethylhexyl) phthalate	1.2
Carbon tetrachloride	5.8
Chlorodibromomethane	0.93
Chloroform	2.9
1,4-dichlorobenzene (BNA)	5.8

Ocean Plan Constituent	12-month Average Mass Emission Benchmarks (MT/yr)
3,3'-dichlorobenzidine	0.40
1,2-dichloroethane	5.8
1,1-dichloroethylene	5.8
Dichlorobromomethane	0.58
Dichloromethane	1.2
1,3-dichloropropene	5.8
Dieldrin	0.0020
2,4-dinitrotoluene	15
1,2-diphenylhydrazine	2.9
Halomethanes	0.55
Heptachlor	0.0025
Heptachlor epoxide	0.0010
Hexachlorobenzene	0.10
Hexachlorobutadiene	2.9
Hexachloroethane	2.9
Isophorone	0.36
N-nitrosodimethylamine	0.93
N-nitrosodi-n-propylamine	15
N-nitrosodiphenylamine	2.9
TCDD Equivalents[20]	$1.9x10^{-7}$
PAHs[20]	0.029
1,1,2,2-tetrachloroethane	5.8
Tetrachloroethylene	1.0
Toxaphene	0.010
Trichloroethylene	5.8
1,1,2-trichloroethane	5.8
2,4,6-trichlorophenol	0.070
Vinyl chloride	5.8

VI. RECEIVING WATER LIMITATIONS

The Permittee 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 MRP. Offshore station 3505B is the only station within the zone of initial dilution.

A. Surface Water Limitations

1. Bacterial Characteristics

   a. USEPA Primary Recreation Criteria in Federal Waters

Ocean waters beyond the outer limit of the territorial sea shall not exceed the following 304(a)(1) criteria for *Enterococcus* density beyond the zone of initial dilution in areas where primary contact recreation, as defined in USEPA guidance, occurs. USEPA describes the "primary contact recreation" use as protective when the potential for ingestion of, or immersion in, water is likely. Activities usually include swimming, water-skiing, skin-diving, surfing, and other activities likely to result in immersion. (Water Quality Standards Handbook, EPA-823-B-94-005a, 1994, p. 2-2.)

30-day Geometric Mean (per 100 mL): 35

Single sample Maximum (per 100 mL): 104 for designated bathing beach; 158 for moderate use; 276 for light use; 501 for infrequent use.

b. 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 or USEPA (i.e., waters designated as REC-1), but including all kelp beds, the following bacterial objectives shall be maintained throughout the water column.

i. 30-day Geometric Mean Limits

(1). Total coliform density shall not exceed 1,000/100 mL.

(2). Fecal coliform density shall not exceed 200/100 mL.

(3). *Enterococcus* density shall not exceed 35/100 mL.

ii. Single Sample Maximum Limits (SSM)

(1). Total coliform density shall not exceed 10,000/100 mL.

(2). Fecal coliform density shall not exceed 400/100 mL.

(3). *Enterococcus* density shall not exceed 104/100 mL.

(4). 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 5 samples equally spaced over a 30-day period). If any of the single sample limits are exceeded, the Regional Water Board and USEPA 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.

c. 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.

d. 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 California Code of Regulations, Title 17, section 7958, and they are identical to the objectives contained in subsection b, 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 (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, California Code of Regulations, and requires weekly sampling but allows the county health officer more discretion in making posting and closure decisions.

e. Shellfish Harvesting Standards

At all areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board and USEPA, the following bacterial objectives shall be maintained throughout the water column: The median total coliform density shall not exceed 70 per 100 mL, and not more than 10 percent of the samples shall exceed 230 per 100 mL.

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; and

d. change the rate of deposition of inert solids and the characteristics of inert solids in ocean sediments such that benthic communities are degraded.

3. Chemical Characteristics

The waste discharged shall not:

a. cause the dissolved oxygen concentration at any time to be depressed more than 10 percent from that which occurs naturally, as a result of the discharge of oxygen demanding waste;

b. change the pH of the receiving waters at any time more than 0.2 units from that which occurs naturally;

c. cause the dissolved sulfide concentration of waters in and near sediments to be significantly increased above that present under natural conditions;

d. cause concentration of substances (as set forth in Chapter II, Table 1 of the 2015 Ocean Plan) in marine sediments to be increased to levels that would degrade indigenous biota;

e. cause the concentration of organic materials in marine sediments to be increased to levels that would degrade marine life;

f. contain nutrients at levels that will cause objectionable aquatic growths or degrade indigenous biota;

g. cause total chlorine residual exceeding 0.1 mg/L in the receiving water and shall not persist in the receiving water at any concentration that causes impairment of beneficial uses as a result of the discharge;

h. produce concentrations of substances in the receiving water that are toxic to or cause detrimental physiological responses in human, animal, or aquatic life; and

i. contain individual pesticides or combinations of pesticides in concentrations that adversely affect beneficial uses.

4. Biological Characteristics

The waste discharged shall not:

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

b. alter the natural taste, odor, and color of fish, shellfish, or other marine resources used for human consumption;

c. cause the concentration of organic materials in fish, shellfish or other marine resources used for human consumption to bioaccumulate to levels that are harmful to human health; and

d. contain substances that result in biochemical oxygen demand that adversely affects the beneficial uses of the receiving water.

5. Radioactivity

Discharge of radioactive waste shall not degrade marine life.

B. Groundwater Limitations – Not applicable

VII. PROVISIONS

A. Standard Provisions

1. The Permittee shall comply with all Standard Provisions included in Attachment D of this Order/Permit.

2. **Regional Water Board Standard Provisions**. The Permittee shall comply with the following provisions. In the event that there is any conflict, duplication, or overlap between provisions specified by this Order/Permit, 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 sludge 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 and USEPA, 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 and USEPA.

f. The provisions of this Order/Permit are severable. If any provision of this Order/Permit or the application of any provision of this Order/Permit is found invalid, the remainder of this Order/Permit shall not be affected.

g. Nothing in this Order/Permit shall be construed to preclude the institution of any legal action or relieve the Permittee 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 Permittee from any responsibilities, liabilities or penalties to which the Permittee 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/Permit is prohibited.

j. The Permittee 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 such spill of such materials shall be contained and removed immediately.

m. A copy of these waste discharge specifications shall be maintained at the discharge 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 Permittee shall file with the Regional Water Board and USEPA 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 Permittee 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 and USEPA to

local agencies.

q. In the event of any change in name, ownership, or control of these waste disposal facilities, the Permittee shall notify the Regional Water Board and USEPA of such change and shall notify the succeeding owner or operator of the existence of this Order/Permit 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/Permit 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/Permit, 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/Permit 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/Permit.

u. The Permittee 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/Permit, or violation of other applicable laws or regulations governing discharges from this facility, may subject the Permittee to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Permittee to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.

w. In the event the Permittee does not comply or will be unable to comply for any reason, with any prohibition, effluent limitation, or receiving water limitation of this Order/Permit that may endanger health or the environment, the Permittee shall notify the Chief of the Watershed Regulatory Section at the Regional Water Board by telephone (213) 576-6616, 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-1492 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)(i) requires the Regional Water Board to assess a mandatory minimum penalty of three-thousand dollars ($3,000) for each serious violation. Pursuant to CWC section 13385(h)(2), a "serious violation" is defined as any waste discharge that violates the effluent limitations contained in the applicable waste discharge requirements for a Group II pollutant by 20 percent or more, or for a Group I pollutant by 40 percent or more. Appendix A of 40 CFR § 123.45 specifies the Group I and II pollutants. Pursuant to CWC section 13385.1(a)(1), a "serious violation" is also defined as "a failure to file a discharge monitoring report required pursuant to section 13383 for each complete period of 30 days following the deadline for submitting the report, if the report is designed to ensure compliance with limitations contained in waste discharge requirements that contain effluent limitations."

y. CWC section 13385(i) requires the Regional Water Board to assess a mandatory minimum penalty of three-thousand dollars ($3,000) for each violation whenever a person violates a waste discharge requirement effluent limitation in any period of six consecutive months, except that the requirement to assess the mandatory minimum penalty shall not be applicable to the first three violations within that time period.

z. Pursuant to CWC section 13385.1(d), for the purposes of section 13385.1 and subdivisions (h), (i), and (j) of section 13385, "effluent limitation" means a numeric restriction or a numerically expressed narrative restriction, on the quantity, discharge rate, concentration, or toxicity units of a pollutant or pollutants that may be discharged from an authorized location. An effluent limitation may be final or interim, and may be expressed as a prohibition. An effluent limitation, for these purposes, does not include a receiving water limitation, a compliance schedule, or a best management practice.

aa. Violation of any of the provisions of this Order/Permit may subject the Permittee to any of the penalties described herein or in Attachment D of this Order/Permit, or any combination thereof, at the discretion of the prosecuting authority; except that only one kind of penalty may be applied for each kind of violation.

3. The Permittee shall comply with the following USEPA Region 9 Standard Conditions:

a. The following condition has been established to enforce applicable requirements of the Resource Conservation and Recovery Act. POTWs may not receive hazardous waste by truck, rail, or dedicated pipe except as provided under 40 CFR § 270.

Hazardous wastes are defined at 40 CFR § 261 and include any mixture containing any waste listed under 40 CFR § 261.31 through § 261.33. The Domestic Sewage Exclusion (40 CFR § 261.4) applies only to wastes mixed with domestic sewage in a sewer leading to a POTW and not to mixtures of hazardous wastes and sewage or septage delivered to the treatment plant by truck.

b. **Transfers by Modification:** Except as provided in 40 CFR § 122.61(b), this Permit may be transferred by the Permittee to a new owner or operator only if the Permit has been modified or revoked and reissued (under 40 CFR § 122.62(b)(2)), or a minor modification made (under 40 CFR § 122.63(d)), to identify the new permittee and incorporate such other requirements as may be necessary under the CWA. (40 CFR § 122.61(a).)

c. **Automatic Transfers:** As an alternative to transfers under 40 CFR § 122.61(a), this Permit may be automatically transferred to a new permittee if: the notice includes a written agreement between the Discharger and new permittee containing a specific date for transfer of permit responsibility, coverage, and liability between them; and the Water Division Director does not notify the Discharger and the proposed new permittee of his/her intent to modify or revoke and reissue the Permit. A modification under this paragraph may also be a minor modification under 40 CFR § 122.63. If this notice is not received, the transfer is effective on the date specified in the written agreement between the Discharger and the new permittee. (40 CFR § 122.61(b).)

d. **Minor Modification of Permits:** Upon the consent of the Permittee, the Water Division Director may modify the Permit to make the corrections or allowances for changes in the permitted activity listed under 40 CFR § 122.63(a) through (g), without following the procedures of 40 CFR § 124. Any permit modification not processed as a minor modification under 40 CFR § 122.63 must be made for cause and with 40 CFR § 124 draft permit and public notice as required in 40 CFR § 122.62. (40 CFR § 122.63.)

e. **Termination of Permits:** The causes for terminating a permit during its term, or for denying a permit renewal application are found at 40 CFR § 122.64(a)(1) through (4). (40 CFR § 122.64.)

f. **Availability of Reports:** Except for data determined to be confidential under 40 CFR § 2, all reports prepared in accordance with the terms of this Order/Permit shall be available for public inspection at the offices of the Regional Water Board and USEPA. As required by the CWA, permit applications, permits, and effluent data shall not be considered confidential. (Pursuant to CWA section 308.)

g. **Removed Substances:** Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters. (Pursuant to CWA section 301.)

h. **Severability:** The provisions of this Order/Permit are severable, and if any provision of this Order/Permit or the application of any provision of this Order/Permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this Order/Permit shall not be affected thereby. (Pursuant to CWA section 512.)

i. **Civil and Criminal Liability:** Except as provided in standard conditions on Bypass and Upset, nothing in this Order/Permit shall be construed to relieve the Permittee from civil or criminal penalties for noncompliance. (Pursuant to CWA section 309.)

j. **Oil and Hazardous Substances Liability:** Nothing in this Order/Permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties to which the Permittee is or may be subject under CWA section 311.

k. **State or Tribal Law:** Nothing in this Order/Permit shall be construed to preclude the institution of any legal action or relieve the operator from any responsibilities, liabilities, or penalties established pursuant to any applicable State or Tribal law or regulation under authority preserved by CWA section 510.

B. Monitoring and Reporting Program (MRP) Requirements

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

C. Special Provisions

1. Reopener Provisions

a. This Order/Permit 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 Permittee and evaluated by the Regional Water Board and USEPA.

b. This Order/Permit may be reopened and modified to incorporate new mass emission rates based on the current Hyperion Treatment Plant's design capacity of 450 MGD provided that the Permittee requests and conducts an antidegradation analysis to demonstrate that the change is consistent with the state and federal antidegradation policies.

c. This Order/Permit may be reopened and modified, in accordance with the provisions set forth in 40 CFR § 122 and 124, to incorporate requirements for the implementation of the watershed protection management approach.

d. This Order/Permit may be modified, in accordance with the provisions set forth in 40 CFR § 122 to 124, to include new minimum levels (MLs).

e. This Order/Permit may be reopened and modified to revise effluent limitations as a result of future Basin Plan Amendments or the adoption of a TMDL for Santa Monica Bay Watershed Management Areas.

f. The Regional Water Board or USEPA may modify or revoke and reissue this Order/Permit if present or future investigations demonstrate that the discharge(s) governed by this Order/Permit will cause, have the potential to cause, or will contribute to adverse impacts on water quality and/or beneficial uses of the receiving waters.

g. This Order/Permit 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/Permit, 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/Permit adoption and issuance. The filing of a request by the Discharger for an Order/Permit modification, revocation, and issuance or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order/Permit.

h. This Order/Permit may be modified, or revoked and reissued, based on the results of Magnuson-Stevens Fishery Conservation and Management Act and/or Endangered Species Act section 7 consultation(s) with the National Marine Fisheries Service and/or the U.S. Fish and Wildlife Service.

i. This Order/Permit may be reopened and modified to incorporate conforming monitoring requirements and schedule dates for implementation of the Comprehensive Monitoring Program for Santa Monica Bay (Santa Monica Bay Restoration Commission, January 2007).

j. This Order/Permit 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/Permit;

   ii. Obtaining this Order/Permit 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.

k. The filing of a request by the Permittee for an Order/Permit modification, revocation, and issuance or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order/Permit.

l. 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/Permit, the Regional Water Board and USEPA may institute proceedings under these regulations to modify or revoke and reissue the Order/Permit to conform to the toxic effluent standard or prohibition.

m. 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 and USEPA will revise and modify this Order/Permit in accordance with such standards.

n. This Order/Permit may be reopened and modified, to revise effluent limitations as a result of the delisting of a pollutant from the 303(d) list.

o. This Order/Permit 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 the Toxicity Plan that is subsequently adopted by the State Water Board promptly after USEPA-approval of such plan.

p. This Order/Permit 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.

q. The Regional Water Board and USEPA will reconsider the ammonia limits and may reopen the Order if the Permittee has demonstrated that conservation efforts and recycling projects have caused an increase in the ammonia concentration, the plant

is optimized with respect to ammonia control, and the Permittee provides justification that the proposed modification will not impact the beneficial uses of the receiving water.

2. **Special Studies, Technical Reports and Additional Monitoring Requirements**

a. Toxicity Reduction Requirements

In coordination with the West Basin Municipal Water District, the Permittee shall propose a special study that evaluates the projected effects of water conservation and planned recycling on effluent acute toxicity and ammonia, including a mass balance of nitrogen species through the treatment plant and an assessment of operational alternatives (e.g. treatment optimization, additional treatment, additional dilution credits) to address projected compliance with acute toxicity and ammonia water quality objectives. A Special Study Work Plan, including a proposed schedule, shall be submitted for approval by the Regional Water Board Executive Officer and the USEPA Water Division Director no later than one year from the effective date of this Order. The special study report shall be submitted no later than two years before the permit expires.

The Permittee shall also prepare and submit a copy of the Permittee's initial investigation Toxicity Reduction Evaluation (TRE) work plan in accordance with Monitoring and Reporting Program section V.A.6.

b. Treatment Plant Capacity

The Permittee shall submit a written report to the Executive Officer of the Regional Water Board and USEPA within 90 days after the "30-day (monthly) average" daily dry-weather flow equals or exceeds 75 percent of the design capacity (0.75 x 450 MGD = 337 MGD) of waste treatment and/or disposal facilities. The Permittee'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 Permittee'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/Permit. 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/Permit.

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

a. **Storm Water Pollution Prevention Plan (SWPPP)**

The HTP is regulated under the State Water Board Water Quality Order No. 2014-0057-DWQ, NPDES General Permit No. CAS000001 (General Permit), WDRs for

Discharge of Storm Water Associated with Industrial Activities Excluding Construction Activities.

b. **Spill Clean-up Contingency Plan (SCCP)**

Within 90 days of the effective date of this Order/Permit, the Permittee 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 Permittee'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, monitoring, and the procedures to be carried out if floatable material is visible on the water surface near the discharge point or has been washed ashore. The Permittee shall review and amend the plan as appropriate after each spill from the Facility or in the service area of the Facility. The Permittee 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 Permittee 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/Permit; 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; or,

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 the MRP.

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 and USEPA 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 and USEPA:

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 and USEPA including:

(1). All PMP monitoring results for the previous year;

(2). A list of potential sources of the reportable pollutant(s);

(3). A summary of all actions undertaken pursuant to the control strategy; and

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/Permit 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 Permittee 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 Permittee shall halt, reduce, or otherwise control all discharges upon the reduction, loss, or failure of the primary source of power.

c. The Permittee 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 Permittee 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 Permittee will be able to comply with requirements of this Order/Permit.

v. Reference to the most current SCCP.

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

a. **Sludge Disposal Requirements – Refer to Attachment H**

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

ii. The Permittee is separately required to comply with the requirements in State Water Board Order No. 2004-10-DWQ, General WDRs for the Discharge of Biosolids to Land for Use as a Soil Amendment in Agricultural, Silvicultural, Horticultural and Land Reclamation Activities, for those sites receiving the Permittee's biosolids which a Regional Water Board has placed under this general order, and with the requirements in individual WDRs issued by a Regional Water Board for sites receiving the Permittee's biosolids.

iii. The Permittee shall separately comply, if applicable, with WDRs issued by other Regional Water Boards to which jurisdiction the biosolids are transported and applied.

iv. The Permittee shall ensure that haulers transporting sludge within the City's jurisdiction for treatment, storage, use, or disposal take all necessary measures to keep the sludge contained. The Permittee shall maintain and have haulers adhere to a spill clean-up plan. Any spills shall be reported to USEPA and the Regional Water Board or state agency in which the spill occurred. All trucks hauling sludge shall be thoroughly washed after unloading at the field or at the receiving facility.

v. The Permittee shall furnish this Regional Water Board with a copy of any report submitted to USEPA, the State Water Board or other Regional Water Board, with respect to municipal sludge or biosolids.

b. **Pretreatment Requirements – Refer to Attachment I**

i. The Permittee has developed and implemented a Pretreatment Program that was previously submitted to this Regional Water Board and USEPA. This Order/Permit requires implementation of the approved Pretreatment Program. Any violation of the Pretreatment Program will be considered a violation of this Order/Permit.

ii. Any change to the program shall be reported to the Regional Water Board and USEPA in writing and shall only be implemented following the review and approval procedures established in 40 CFR § 403.18.

iii. Applications for renewal or modification of this Order/Permit 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/Permit, the Permittee 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 Permittee 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 Permittee shall evaluate whether its pretreatment local limits are adequate to meet the requirements of this Order/Permit (including mass emission benchmarks) and shall submit a written technical report as required under section II of Attachment I. The Permittee shall submit revised local limits to the Regional Water Board and USEPA for approval, as necessary. In addition, the Permittee shall consider collection system overflow protection from such constituents as oil and grease, etc.

v. The Permittee shall comply with requirements contained in Attachment I – Pretreatment Reporting Requirements.

6. **Collection System Requirements**

The Permittee 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 do 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 Permittee shall make notifications as required below:

i. In accordance with the requirements of Health and Safety Code section 5411.5, the Permittee 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 Permittee 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. In addition, the Permittee shall notify Heal the Bay of any such sewage spill.

iii. The Permittee shall notify the Regional Water Board and USEPA of any unauthorized release of sewage from its POTW that causes, or probably will cause, a discharge to a water of the state 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 Permittee 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. The phone number for USEPA is (415) 972-3577.

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

(1). The location, date, and time of the release;

(2). The route of the spill including the water body that received or will receive the discharge;

(3). An estimate of the amount of sewage or other waste released and the amount that reached a surface water at the time of notification;

(4). If ongoing, the estimated flow rate of the release at the time of the notification; and,

(5). 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 Permittee shall monitor as required below:

To define the geographical extent of the spill's impact, the Permittee 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 Permittee shall analyze the samples for total coliform, fecal coliform, *E. 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 County Department of Public Health 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 Permittee 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:

(1). Agency, NPDES No., Order No., and MRP CI No., if applicable;

(2). The location, date, and time of the discharge;

(3). The water body that received the discharge;

(4). A description of the level of treatment of the sewage or other waste discharged;

(5). An initial estimate of the amount of sewage or other waste released and the amount that reached a surface water;

(6). The Cal OES control number and the date and time that notification of the incident was provided to Cal OES; and,

(7). 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 and USEPA 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 Permittee shall submit the final written report to this Regional Water Board and USEPA. (A copy of the final written report, for a given incident, already submitted pursuant to 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 Permittee 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 Permittee's preventive maintenance plan. Any deviations from or modifications to the plan shall be discussed.

d. **Records**

The Permittee 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 VIII.C.6.b;

iv. The cause of each spill, overflow, or bypass;

v. Whether each spill, overflow, or bypass entered a receiving water and, if so, the name of the water body and whether it entered via storm drains or other man-made conveyances;

vi. Any mitigation measures implemented;

vii. Any corrective measures implemented or proposed to be implemented to prevent/minimize future occurrences; and,

viii. The mandatory information included in SSO online reporting for finalizing and certifying the SSO report for each spill, overflow, or bypass under the SSO WDR.

e. **Activities Coordination**

Although not required by this Order/Permit, the Regional Water Board and USEPA expect 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 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 Permittee's collection system is part of the POTW that is subject to this NPDES permit. As such, pursuant to federal regulations, the Permittee 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/Permit 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 and USEPA recognize that there may be some overlap between these NPDES permit provisions and SSO WDR requirements, related to the collection systems. The requirements of the SSO WDR are considered the minimum thresholds (see finding 11 of State Water Board Order No. 2006-0003-DWQ). To encourage efficiency, the Regional Water Board and

USEPA will accept the documentation prepared by the Permittees under the SSO WDR for compliance purposes as satisfying the requirements in sections VII.C.3.b, VII.C.4, and VII.C.6 provided the more stringent provisions contained in this NPDES permit are also addressed. Pursuant to SSO WDR, section D, provision 2(iii) and (iv), the provisions of this NPDES permit supersede the SSO WDR, for all purposes, including enforcement, to the extent the requirements may be deemed duplicative.

8. **Other Special Provisions – Not Applicable**

9. **Compliance Schedules – Not Applicable**

VIII. COMPLIANCE DETERMINATION

Compliance with the effluent limitations contained in section IV of this Order/Permit 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/Permit. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Permittee shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the corresponding 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 Permittee 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, this will represent a single violation, though the Permittee 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). If only a single sample is collected during the calendar month and the analytical result for that sample exceeds the AMEL, the Permittee may be considered out of compliance for that calendar 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 Permittee 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 Permittee will have demonstrated compliance with the AMEL for each day of that month for that parameter.

If the analytical result of any single sample, monitored monthly, quarterly, semiannually, or annually, exceeds the AMEL for any parameter, the Permittee 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 Permittee 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 Permittee 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 Permittee 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 Permittee 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 Permittee will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples collected within a calendar day that both exceed the instantaneous maximum effluent limitation would result in two instances of non-compliance with the instantaneous maximum effluent limitation).

H. Six-month Median Effluent Limitation

If the median of daily discharges over any 180-day period exceeds the six-month median effluent limitation for a given parameter, a potential violation will be flagged and the Permittee 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 Permittee 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 Permittee 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 (7.1% effluent for Discharge Point 001 and 1.04% effluent for Discharge Point 002) 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 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 Permittee, USEPA, the State Water Board's Quality Assurance Officer, or the State Water Board's Environmental Laboratory Accreditation Program as needed.

K. Percent Removal

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

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

When preferred, the Permittee 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

Permittees 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

Permittees 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. Compliance with Total Maximum Daily Loads

The NPDES regulations at 40 CFR § 122.44(d)(1)(vii)(B) require that NPDES permits include effluent limitations developed consistent with the assumptions and requirements of any WLA that has been assigned to the discharge as part of an approved TMDL. There are three TMDLs for the Santa Monica Bay: the *Santa Monica Bay Beaches Bacteria TMDL*, the *Santa Monica Bay Nearshore and Offshore Debris TMDL*, and the *Santa Monica Bay TMDL for DDT and PCBs*. WLAs in the *Santa Monica Bay Beaches Bacteria TMDL* are expressed as an allowed number of exceedance days and Hyperion has an individual WLA of zero days of exceedances during both summer dry weather and winter dry weather. The MS4 permit for Los Angeles County (Order No. R4-2012-0175, NPDES No. CAS004001) includes shoreline monitoring to ensure that HTP meets the WLA of 0 days of exceedances contained in the *Santa Monica Bay Beaches Bacteria TMDL*. For point sources, the debris TMDL is implemented through the LA County MS4 and Ventura County MS4 permits (i.e. no Waste Load allocation for Hyperion). The *Santa Monica Bay TMDL for DDT and PCBs* includes WLAs for DDT (10.1 ng/L and 5,850 g/yr) and for Total PCBs (0.271 ng/L and 157 g/year) for HTP. Consistent with the federal requirement and with the NPDES Permit Writer's Manual (EPA-833-K-10-001, September 2010), Average Monthly and Annual Average effluent limitations have been included in this Order/Permit for DDT and Total PCBs for which WLAs have been assigned to HTP through the *Santa Monica Bay TMDL for DDT and PCBs*.

P. 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. 'Q_i' and 'C_i' 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, 'C_i' is the concentration measured in the composite sample and 'Q_i' 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. 'Q_i' and 'C_i' are the flow rate (MGD) and the constituent concentration (mg/L), respectively, which are associated with each of the 'N' waste streams. 'Q_t' is the total flow rate of the combined waste streams.

Q. 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 and 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.

R. 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 Permittee'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 Permittee may assert SOU to limit liability only for those violations which the Permittee 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 Permittees 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 Permittees to assert the SOU limitation of liability, and the manner of counting violations) shall be in accordance with CWC section 13385 (f)(2).

ATTACHMENT A – DEFINITIONS

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.

Areas of Special Biological Significance (ASBS)

Ocean areas designated by the State Water Board as 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.

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 C.F.R. 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, 24-hour

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:

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 24 hours.

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 collected 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 collected 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

The sum of 4,4'DDT, 2,4'DDT, 4,4'DDE, 2,4'DDE, 4,4'DDD, and 2,4'DDD.

Degrade

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

Dichlorobenzenes

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

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.

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 the headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. Enclosed bays include, but are not limited to, Humboldt Bay, Bodega Harbor, Tomales Bay, Drake’s Estero, San Francisco Bay, Morro Bay, Los Angeles-Long Beach 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

Waters located at the mouths of streams that serve as areas of mixing for fresh and ocean waters. Coastal lagoons and mouths of streams that are temporarily separated from the ocean by sandbars shall be considered estuaries. Estuarine waters shall be considered to extend from a bay or the open ocean to a point upstream where there is no significant mixing of fresh water and seawater. Estuarine waters included, but are not limited to, the Sacramento-San Joaquin Delta, as defined in CWC section 12220, Suisun Bay, Carquinez Strait downstream to the Carquinez Bridge, and appropriate areas of the Smith, Mad, Eel, Noyo, Russian, Klamath, San Diego, and Otay rivers. Estuaries do not include inland surface waters or ocean waters.

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, Total

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

HCH

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

Initial Dilution

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

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

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

Kelp Beds

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

Mariculture

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

Material

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

Maximum Daily Effluent Limitation (MDEL)

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

Median

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

Method Detection Limit (MDL)

The minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in in 40 CFR § 136, Attachment B, revised as of July 3, 1999.

Minimum Level (ML)

The concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

Natural Light

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

Not Detected (ND)

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

Ocean Waters

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

PAHs (polynuclear aromatic hydrocarbons)

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

PCBs (polychlorinated biphenyls) as Aroclors

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

PCBs as Congeners

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

PCBs, Total

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

Persistent Pollutants

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

Phenolic Compounds (chlorinated)

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

Phenolic Compounds (non-chlorinated)

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

Pollutant Minimization Program (PMP)

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

Pollution Prevention

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

Publicly Owned Treatment Works.

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

Reported Minimum Level (RML)

The reported ML (also known as the Reporting Level or RL) is the ML (and its associated analytical method) chosen by the Permittee for reporting and compliance determination from the MLs included in this Order/Permit. The MLs included in this Order/Permit correspond to approved analytical methods for reporting a sample result that are selected by the Regional Water Board and USEPA either from Appendix II of the Ocean Plan in accordance with section III.C.5.a. of the Ocean Plan or established in accordance with section III.C.5.b. of the Ocean Plan. The ML is based on the proper application of method-specific analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the reported ML. (See Ocean Plan section III.C.6.)

Satellite Collection System

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

Shellfish

Organisms identified by the California Department of Health Services as shellfish for public health purposes (i.e., mussels, clams and oysters).

Significant Difference

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

Six-month Median Effluent Limitation

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

Standard Deviation (σ)

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

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

where:

x is the observed value;

μ is the arithmetic mean of the observed values; and

n is the number of samples.

State Water Quality Protection Areas (SWQPAs)

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

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

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

Test of Significant Toxicity (TST)

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

Toxicity Identification Evaluation (TIE)

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

Toxicity Reduction Evaluation (TRE)

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

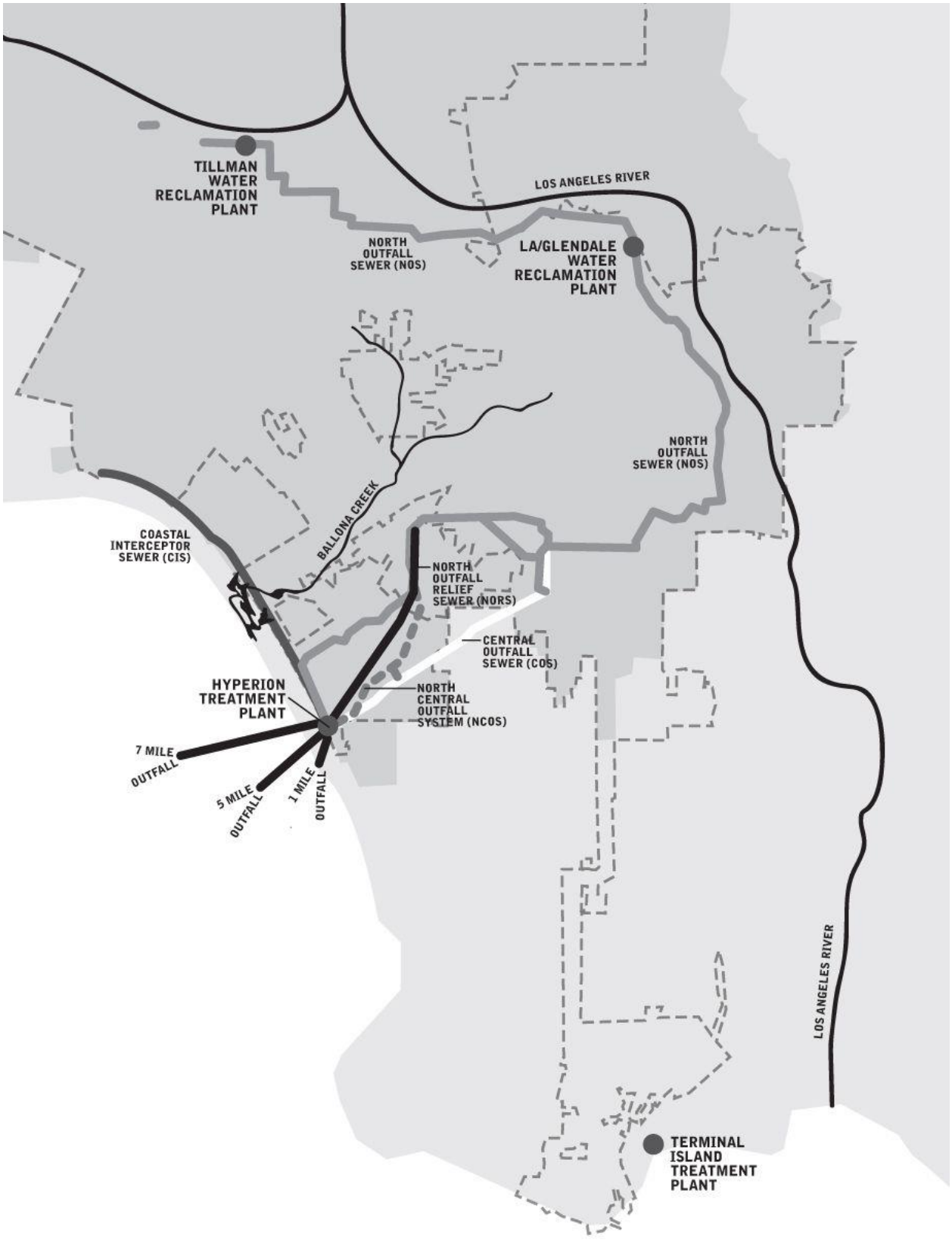
Waste

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

Water Recycling

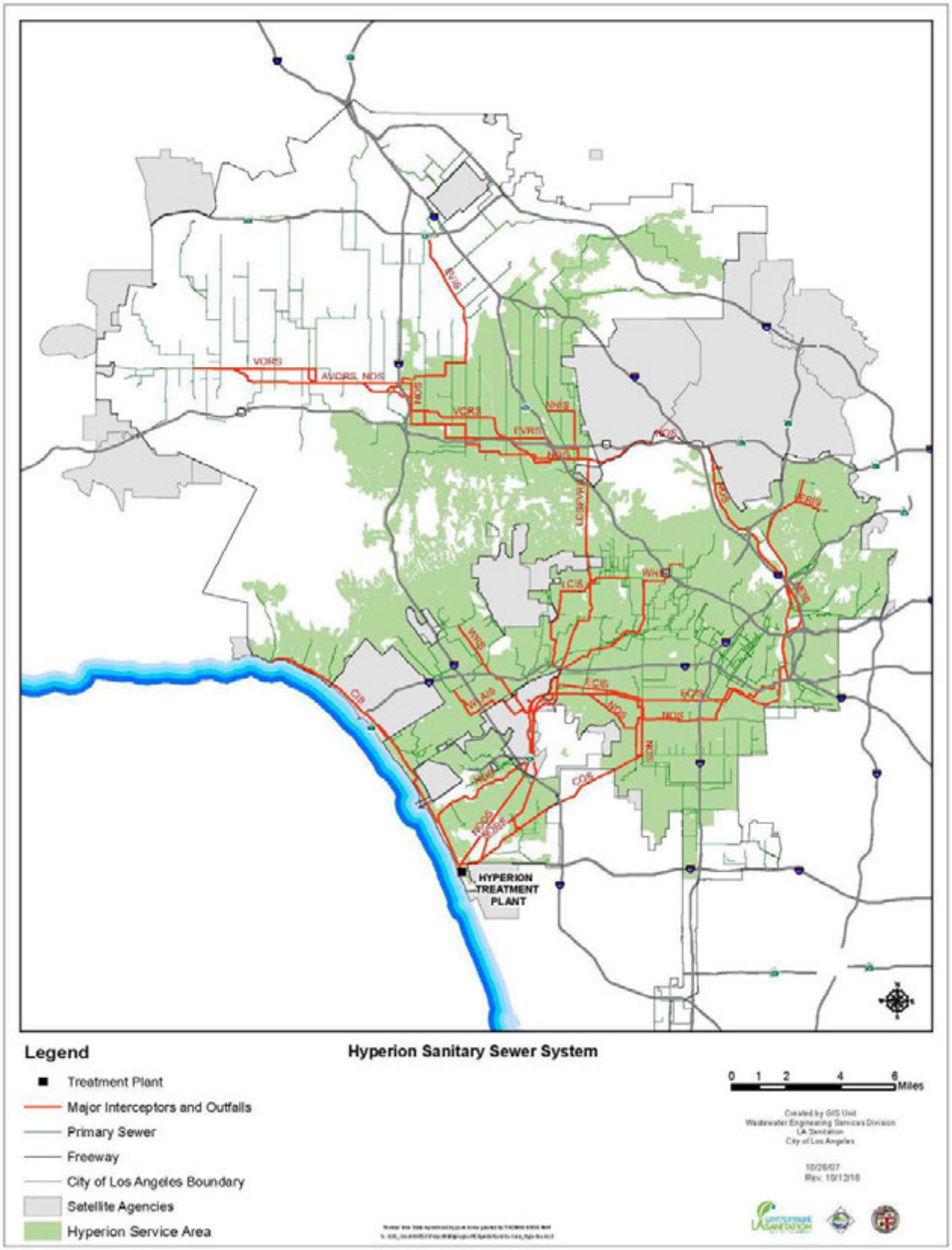
The treatment of wastewater to render it suitable for reuse, the transportation of treated wastewater to the place of use, and the actual use of treated wastewater for a direct beneficial use or controlled use that would not otherwise occur.

ATTACHMENT B1 – Map of HTP & Surrounding Area

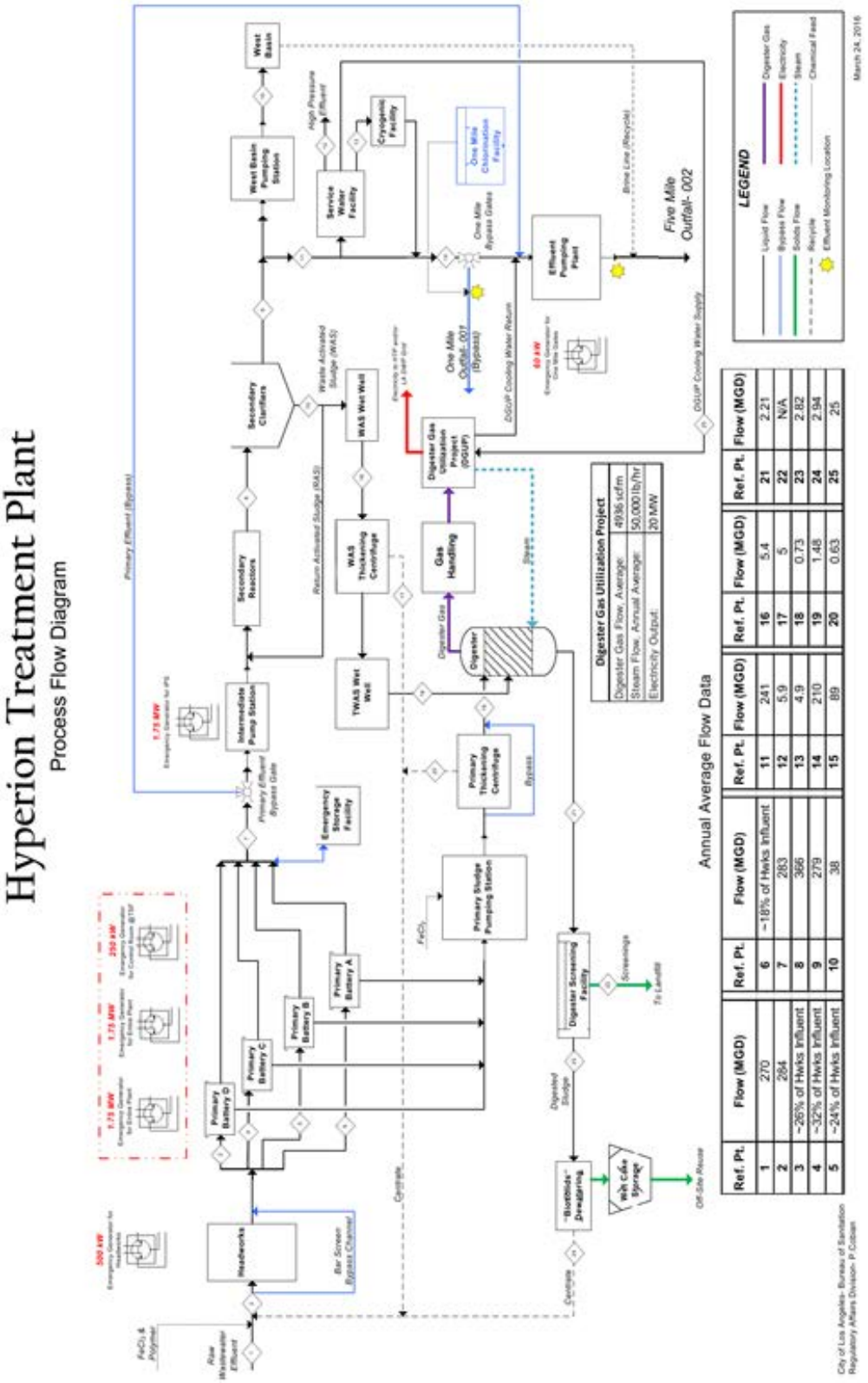


ATTACHMENT B2 – Site Layout of Hyperion Treatment Plant

ATTACHMENT B3 – Hyperion Treatment System Service Area



ATTACHMENT C1 – Process Flow Diagram of Hyperion Treatment Plant



Annual Average Flow Data

Ref. Pt.	Flow (MGD)
1	270
2	264
3	~26% of Hwks Influent
4	~32% of Hwks Influent
5	~24% of Hwks Influent

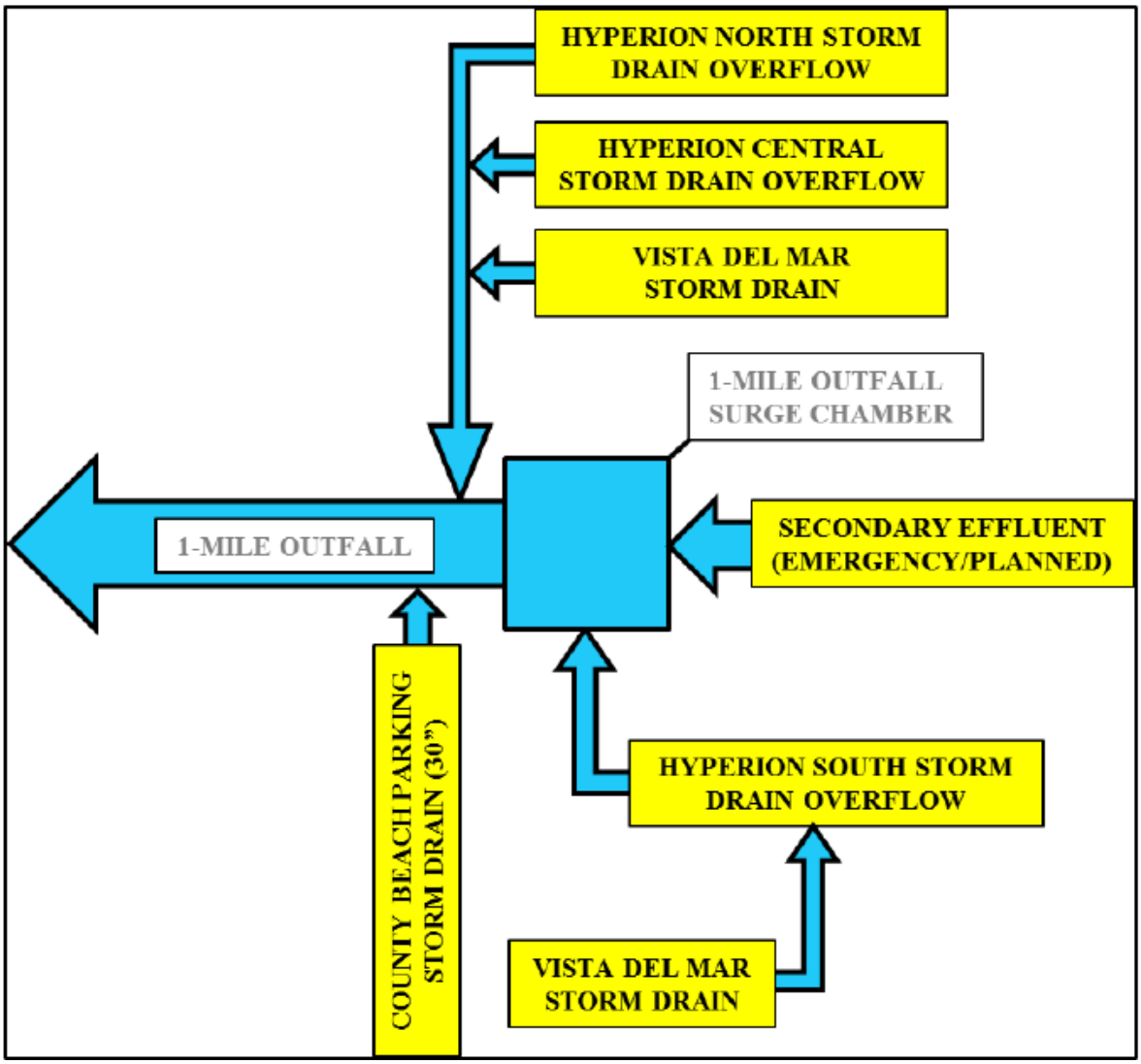
Ref. Pt.	Flow (MGD)
6	~18% of Hwks Influent
7	283
8	366
9	279
10	38

Ref. Pt.	Flow (MGD)
11	241
12	5.9
13	4.9
14	210
15	89

Ref. Pt.	Flow (MGD)
16	5.4
17	5
18	0.73
19	1.48
20	0.63

Ref. Pt.	Flow (MGD)
21	2.21
22	N/A
23	2.82
24	2.94
25	25

ATTACHMENT C2 –Hyperion Treatment Plant One-Mile Outfall Connections



ATTACHMENT D – STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

1. The Permittee must comply with all of the terms, requirements, and conditions of this Order/Permit. Any noncompliance constitutes a violation of the Clean Water Act (CWA), its regulations, and the California Water Code (CWC) and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; denial of a permit renewal application; or a combination thereof. (40 CFR § 122.41(a); California Water Code (CWC) sections 13261, 13263, 13264, 13265, 13268, 13000, 13001, 13304, 13350, 13385.)

2. The Permittee shall comply with effluent standards or prohibitions established under Part 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order/Permit has not yet been modified to incorporate the requirement. (Title 40 of the Code of Federal Regulations (40 CFR) § 122.41(a)(1).)

B. Need to Halt or Reduce Activity Not a Defense

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

C. Duty to Mitigate

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

D. Proper Operation and Maintenance

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

E. Property Rights

1. This Order/Permit does not convey any property rights of any sort or any exclusive privileges. (40 CFR § 122.41(g).)

2. The issuance of this Order/Permit does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations. (40 CFR § 122.5(c).)

F. Inspection and Entry

The Permittee shall allow the Regional Water Board, State Water Board, USEPA, and/or their authorized representatives (including an authorized contractor acting as their representative),

upon the presentation of credentials and other documents, as may be required by law, to (33 U.S.C. section 1318(a)(4)(B); 40 CFR § 122.41(i); CWC sections 13267 and 13383):

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

G. Bypass

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

c. The Permittee submitted notice to the Regional Water Board and USEPA as required under Standard Provisions – Permit Compliance I.G.5 below. (40 CFR § 122.41(m)(4)(i)(C).)

4. The Regional Water Board and USEPA may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board and USEPA determine that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 CFR § 122.41(m)(4)(ii).)

5. Notice

a. *Anticipated bypass*. If the Permittee knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. As of December 21, 2020 all notices must be submitted electronically by the Permittee to the initial recipient, as defined in 40 CFR § 127.2(b), in compliance with this section and 40 CFR part 3 (including, in all cases, subpart D of part 3), § 122.22, and 40 CFR part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of part 127, the Permittee may be required to report electronically if specified by a particular permit or if required to do so by state law. (40 CFR § 122.41(m)(3)(i).)

b. *Unanticipated bypass*. The Permittee shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). As of December 21, 2020 all notices must be submitted electronically by the Permittee to the initial recipient, as defined in 40 CFR § 127.2(b), in compliance with this section and 40 CFR part 3 (including, in all cases, subpart D of part 3), § 122.22, and 40 CFR part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of part 127, the Permittee may be required to report electronically if specified by a particular permit or if required to do so by state law. (40 CFR § 122.41(m)(3)(ii).)

H. Upset

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

1. **Effect of an upset.** An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 CFR § 122.41(n)(2).)

2. **Conditions necessary for a demonstration of upset.** A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 CFR § 122.41(n)(3)):

a. An upset occurred and that the Permittee can identify the cause(s) of the upset (40 CFR § 122.41(n)(3)(i));

b. The permitted facility was, at the time, being properly operated (40 CFR § 122.41(n)(3)(ii));

c. The Permittee submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) (40 CFR § 122.41(n)(3)(iii)); and

d. The Permittee complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 CFR § 122.41(n)(3)(iv))

3. **Burden of proof.** In any enforcement proceeding, the Permittee seeking to establish the occurrence of an upset has the burden of proof. (40 CFR § 122.41(n)(4).)

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

This Order/Permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order/Permit condition. (40 CFR § 122.41(f).)

B. Duty to Reapply

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

C. Transfers

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

III. STANDARD PROVISIONS – MONITORING

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

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

1. The method minimum level (ML) is at or below the level of the most stringent effluent limitation established in the permit for the measured pollutant or pollutant parameter, and either the method ML is at or below the level of the most stringent applicable water quality criterion for the measured pollutant or pollutant parameter or the method ML is above the applicable water quality criterion but the amount of the pollutant or pollutant parameter in the facility's discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge; or

2. For situations in which none of the EPA-approved methods for a pollutant can achieve the MLs necessary to assess reasonable potential or to monitor compliance with a

permit limit, the method that has the lowest ML of the analytical methods approved under 40 CFR part 136 or required under 40 CFR chapter 1, subchapter N or O for the measured pollutant or pollutant parameter, shall be used.

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

IV. STANDARD PROVISIONS – RECORDS

A. Except for records of monitoring information required by this Order/Permit related to the Permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR part 503), the Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order/Permit, and records of all data used to complete the application for this Order/Permit, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer or USEPA Water Division Director at any time. (40 CFR § 122.41(j)(2).)

B. Records of monitoring information shall include:

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

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

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

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

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

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, V.B.5, and V.B.6 below. (40 CFR § 122.41(k).)

2. All permit applications submitted to the Regional Water Board or USEPA shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA). (40 CFR § 122.22(a)(3).)

3. All reports required by this Order/Permit and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

   a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 CFR § 122.22(b)(1));

   b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 CFR § 122.22(b)(2)); and

   c. The written authorization is submitted to the Regional Water Board and State Water Board, and USEPA. (40 CFR § 122.22(b)(3).)

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

5. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above shall make the following certification:

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

   Any person providing the electronic signature for documents described in Standard Provisions - V.B.1, V.B.2, or V.B.3 that are submitted shall meet all relevant

requirements of Standard Provisions – Reporting V.B, and shall ensure that all relevant requirements of 40 CFR part 3 (Cross-Media Electronic Reporting) and 40 CFR part 127 (NPDES Electronic Reporting Requirements) are met for that submission. (40 CFR § 122.22(e).)

C. Monitoring Reports

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

D. Compliance Schedules

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

E. Twenty-Four Hour Reporting

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

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

As of December 21, 2020 all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events must be submitted electronically by the Permittee to the initial recipient, as defined in Standard Provisions – Reporting V.J, in compliance with this section and 40 CFR part 3 (including in all cases, subpart D of part 3), section 122.22, and 40 CFR part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of part 127, the Permittee may be required to electronically submit reports related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section by a particular permit or if required to do so by state law. The Regional Water Board and USEPA may also require the Permittee to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (40 CFR § 122.41(l)(6)(i))

2. The following shall be included as information that must be reported within 24 hours:

   a. Any unanticipated bypass that exceeds any effluent limitation in this Order/Permit. (40 CFR § 122.41(l)(6)(ii)(A).)

   b. Any upset that exceeds any effluent limitation in this Order. (40 CFR § 122.41(l)(6)(ii)(B).)

3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 CFR § 122.41(l)(6)(iii).)

F. Planned Changes

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

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) (40 CFR § 122.41(l)(1)(i)); or

2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Order/Permit. (40 CFR § 122.41(l)(1)(ii).)

3. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are neither subject to effluent limitations in this Order/Permit nor to notification requirements under section 122.42(a)(1) (see Additional Provisions—Notification Levels VII.A.1). (40 C.F.R. § 122.41(l)(1)(ii).)

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

G. Anticipated Noncompliance

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

H. Other Noncompliance

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

I. Other Information

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

J. Initial Recipient for NPDES Electronic Reporting Data

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

VI. STANDARD PROVISIONS – ENFORCEMENT

A. The Regional Water Board and USEPA are authorized to enforce the terms of this Order/Permit under several provisions of the Water Code, including, but not limited to, sections 13268, 13385, 13386, and 13387.

B. The CWA provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the CWA, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the CWA, is subject to a civil penalty not to exceed $25,000 per day for each violation. The CWA provides that any person who *negligently* violates sections 301, 302, 306, 307, 308, 318, or 405 of the CWA, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the CWA, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the CWA, is subject to criminal penalties of $2,500 to $25,000 per day of violation, or imprisonment of not more than one year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than $50,000 per day of violation, or by imprisonment of not more than two years, or both. Any person who *knowingly* violates such conditions or limitations is subject to criminal penalties of $5,000 to $50,000 per day of violation, or imprisonment for not more than three years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than 6 years, or both. Any person who *knowingly* violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the CWA, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the CWA, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than

$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than $500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than $1,000,000 and can be fined up to $2,000,000 for second or subsequent convictions (40 CFR § 122.41(a)(2); CWC section 13385 and 13387).

C. Any person may be assessed an administrative penalty by the Administrator of USEPA, or an administrative civil liability by the Regional Water Board, or State Water Board for violating section 301, 302, 306, 307, 308, 318 or 405 of this CWA, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the CWA. Administrative penalties for Class I violations are not to exceed $10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed $25,000. Penalties for Class II violations are not to exceed $10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed $125,000. (40 CFR § 122.41(a)(3).)

D. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than two years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than four years, or both. (40 CFR § 122.41(j)(5).)

E. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than six months per violation, or by both. (40 CFR § 122.41(k)(2).)

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Publicly-Owned Treatment Works (POTWs)

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

1. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to sections 301 or 306 of the CWA if it were directly discharging those pollutants (40 CFR § 122.42(b)(1)); and

2. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of adoption of the Order/Permit. (40 CFR § 122.42(b)(2).)

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

ATTACHMENT E – Monitoring and Reporting Program

Contents

Tables

ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP), CI-1492

Section 308(a) of the federal Clean Water Act and sections 122.41(h), (j), (l), 122,44(i), and 122.48 of Title 40 of the Code of Federal Regulations (40 CFR) require that all NPDES permits specify monitoring and reporting requirements. California Water Code (CWC) sections 13267 and 13383 also authorize the Regional Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. This MRP establishes monitoring, reporting, and recordkeeping requirements that implement federal and California laws and/or regulations.

I. GENERAL MONITORING PROVISIONS

A. All samples shall be representative of the waste discharge under conditions of peak load. Quarterly influent and effluent analyses shall be performed during the first quarter (January, February, and March), the second quarter (April, May, and June), the third quarter (July, August, and September), and the fourth quarter (October, November, and December). Semiannual influent and effluent analyses shall be performed during the first quarter (January, February, and March) and third quarter (July, August, and September). Annual analyses shall be performed during the third quarter (July, August, and September). Should there be instances when monitoring could not be performed during these specified months, the Permittee must notify the Regional Water Board and USEPA, state the reason why monitoring could not be conducted, and obtain approval from the Executive Officer for an alternate schedule. Results of quarterly, semiannual, and annual analyses shall be reported by the due date specified in Table E-16 of the MRP.

B. Pollutants shall be analyzed using the analytical methods described in 40 CFR § 136.3, 136.4, and 136.5; or where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board. Laboratories analyzing effluent samples and receiving water samples shall be certified by the State Water Resources Control Board, Division of Drinking Water (DDW) Environmental Laboratory Accreditation Program (ELAP) or approved by the Executive Officer and must include quality assurance/quality control (QA/QC) data in their reports. A copy of the laboratory certification shall be provided in the Annual Report due to the Regional Water Board and USEPA each time a new certification and/or renewal of the certification is obtained from ELAP.

C. Water/wastewater samples must be analyzed within allowable holding time limits as specified in 40 CFR § 136.3. All QA/QC analyses must be run on the same dates that samples are actually analyzed. The Permittee shall retain the QA/QC documentation in its files and make available for inspection and/or submit this documentation when requested by the Regional Water Board and/or USEPA. Proper chain of custody procedures must be followed and a copy of this documentation shall be submitted with the monthly report.

D. The Permittee shall calibrate and perform maintenance procedures on all monitoring instruments to insure accuracy of measurements, or shall ensure that both equipment activities will be conducted.

E. For any analyses performed for which no procedure is specified in the United States Environmental Protection Agency (USEPA) guidelines, or in the MRP, the constituent or parameter analyzed and method or procedure used must be specified in the monitoring report.

F. Each monitoring report must affirm in writing that “all analyses were conducted at a laboratory certified for such analyses under the Environmental Laboratory Accreditation Program (ELAP), or approved by the Executive Officer and in accordance with current USEPA guideline procedures or as specified in this monitoring and reporting program.”

G. The monitoring report shall specify the USEPA analytical method used, the Method Detection Limit (MDL), and the Reporting Level (RL) [the applicable Minimum Level (ML) or Reported Minimum Level (RML)] for each pollutant. The MLs are those published by the State Water Board in appendix II of the 2015 Ocean Plan. The ML represents the lowest quantifiable concentration in a sample based on the proper application of all method-based analytical procedures and the absence of any matrix interference. When all specific analytical steps are followed and after appropriate application of method specific factors, the ML also represents the lowest standard in the calibration curve for that specific analytical technique. When there is deviation from the analytical method for dilution or concentration of samples, other factors are applied to the ML depending on the sample preparation. The resulting value is the reported Minimum Level.

H. The Permittee shall select the analytical method that provides an ML lower than the effluent limitation or performance goal established for a given parameter or where no such requirement exists, the lowest applicable water quality objective in the Ocean Plan. If the effluent limitation, performance goal, or the lowest applicable water quality objective is lower than all the MLs in Appendix II of the 2015 Ocean Plan, the Permittee must select the method with the lowest ML for compliance purposes. The Permittee shall include in the annual summary reports a list of the analytical methods and MLs employed for each test.

I. The Permittee shall instruct its laboratories to establish calibration standards so that the ML (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lower calibration standard. At no time is the Permittee to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.

J. The Permittee shall develop and maintain a record of all spills or bypasses of raw or partially treated sewage from its collection system or treatment plant according to the requirements in the WDRs of this Order/Permit. 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.

K. If the permittee samples and performs analyses (other than for process/operational control, startup, research, or equipment testing) on any influent, effluent, or receiving water constituent more frequently than required by this Order/Permit using approved analytical methods, the results of those analyses shall be included in the monitoring report. These results shall be reflected in the calculation of the average (or median) used in demonstrating compliance with limitations set forth in this Order/Permit.

L. For all bacterial analyses, sample dilutions should be performed so the expected range of values is bracketed (for example, with multiple tube fermentation method or membrane filtration method, 2 to 16,000 per 100 mL for total and fecal coliforms, at a minimum; and 1 to 1000 per 100 mL for *Enterococcus*). The detection methods used for each analysis shall be reported with the results of the analyses.

    1. Detection methods used for coliforms (total and fecal) shall be those presented in Table 1A of 40 CFR § 136, unless alternate methods have been approved in advance by the USEPA pursuant to 40 CFR § 136.

    2. Detection methods for *E. coli* shall be those presented in Table 1A of 40 CFR § 136 or in the USEPA publication EPA 600/4-85/076, *Test Methods for* Escherichia coli *and* Enterococci *in Water By Membrane Filter Procedure*, or any improved method determined by the Regional Water Board and USEPA to be appropriate.

M. All receiving and ambient water monitoring conducted in compliance with the MRP must be comparable with the Quality Assurance requirements of the Surface Water Ambient Monitoring Program (SWAMP).

N. NPDES compliance monitoring focuses on the effects of a specific point source discharge. Generally, it is not designed to assess impacts from other sources of pollution (e.g., nonpoint source runoff, aerial fallout) or to evaluate the current status of important ecological resources in the water body. The scale of existing compliance monitoring programs does not match the spatial and, to some extent, temporal boundaries of the important physical and biological processes in the ocean. In addition, the spatial coverage provided by compliance monitoring programs is less than ten percent of the nearshore ocean environment. Better technical information is needed about status and trends in ocean waters to guide management and regulatory decisions, to verify the effectiveness of existing programs, and to shape policy on marine environmental protection.

O. The Regional Water Board and USEPA, working with other groups, have developed a comprehensive basis for effluent and receiving water monitoring appropriate to large publicly owned treatment works (POTWs) discharging to waters of the Southern California Bight. This effort has culminated in the publication by the Southern California Coastal Water Research Project (SCCWRP) of the Model Monitoring Program guidance document (Schiff, K.C., J.S. Brown and S.B. Weisberg. 2001. *Model Monitoring Program for Large Ocean Dischargers in Southern California*. SCCWRP Tech. Rep. #357. Southern California Coastal Water Research Project, Westminster, CA. 101 pp.). This guidance provides the principles, framework and recommended design for effluent and receiving water monitoring elements that have guided development of the monitoring program described below.

P. In July 2000, the Santa Monica Bay Restoration Project (SMBRP) published "An Assessment of the Compliance Monitoring System in Santa Monica Bay" to set forth recommendations and priorities for compliance monitoring in Santa Monica Bay. This report reasoned that a reduced level of receiving water monitoring is justified for large POTWs discharging to Santa Monica Bay due to improvements in effluent quality and associated decreases in receiving water impacts. Like the Model Monitoring Plan developed by SCCWRP, SMBRP recommendations are focused on providing answers to management questions and allowing a reduction in POTW receiving water monitoring where discharge effects are well understood. The monitoring plan set forth here has been guided by SMBRP recommendations.

Q. The conceptual framework for the Model Monitoring Program has three components that comprise a range of spatial and temporal scales: (1) core monitoring; (2) regional monitoring; and (3) special studies.

1. Core monitoring is local in nature and focused on monitoring trends in quality and effects of the point source discharge. This includes effluent monitoring as well as some aspects of receiving water monitoring. In the monitoring program described below, these core components are typically referred to as local monitoring.

2. Regional monitoring is focused on questions that are best answered by a region-wide approach that incorporates coordinated survey design and sampling techniques. The major objective of regional monitoring is to collect information required to assess how safe it is to swim in the ocean, how safe it is to eat seafood from the ocean, and whether the marine ecosystem is being protected. Key components of regional monitoring include elements to address pollutant mass emission estimations, public health concerns, monitoring of trends in natural resources, assessment of regional impacts from all contaminant sources, and protection of beneficial uses. The final design of regional monitoring programs is developed by means of steering committees and technical committees comprised of participating agencies and organizations and is not specified in this Order/Permit. Instead, for each regional component, the degree and nature of participation of the Permittee is specified. For this Order/Permit, these levels

of effort are based upon past participation of the Permittee in regional monitoring programs.

The Permittee shall participate in regional monitoring activities coordinated by the SCCWRP or any other appropriate agency approved by the Regional Water Board and USEPA. The procedures and time lines for the Regional Water Board and USEPA approval shall be the same as detailed for special studies, below.

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

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

R. Every five years SCCWRP coordinates regional monitoring within the Southern California Bight and compiles monitoring data collected by the dischargers and other participating entities. The fifth regional monitoring program (Bight '13) occurred primarily during summer 2013. The next (sixth) regional monitoring program (Bight '18) is expected to take place during 2018. While participation in regional monitoring programs is required under this Order/Permit, revisions to the Permittee's monitoring program at the direction of the Regional Water Board and USEPA may be necessary to accomplish the goals of regional monitoring or to allow the performance of special studies to investigate regional or site-specific water issues of concern. These revisions may include a reduction or increase in the number of parameters to be monitored, the frequency of monitoring, or the number and size of samples to be collected. Such changes may be authorized by the Regional Water Board Executive Officer and USEPA Director upon written notification to the Permittee.

   Permittee participation in regional monitoring programs is required as a condition of this Order/Permit. The Permittee shall complete collection and analysis of samples in accordance with the schedule established by the Steering Committee directing the Bight-wide regional monitoring surveys. The level of participation shall be similar to that provided by the Permittee in previous regional surveys conducted in 1994, 1998, 2003, 2008, and 2013.

S. Bay Comprehensive Monitoring Program. The Santa Monica Bay Restoration Commission adopted a new comprehensive monitoring program for Santa Monica Bay in April 2007. This new monitoring program, developed by the Commission's Technical Advisory Committee, culminates efforts that began in the mid-1990s with the identification of key management questions and monitoring priorities. It lays out new monitoring designs for five major habitats within the Bay:

   - Pelagic Ecosystem
   - Soft Bottom Ecosystem
   - Hard Bottom Ecosystem

- Rocky and Sandy Intertidal
- and Wetlands.

Design for each habitat includes a core motivating question, a number of related objectives, specific monitoring approaches, indicators, data products, and sampling designs detailing number and locations of stations, sampling frequency, and measurements to be collected. The Bay Monitoring Program also includes an implementation plan that includes a detailed schedule, cost estimates for individual Program elements, and recommendations on the Program's management structure, including data management and assessment strategies.

The Bay Monitoring Program is designed to be implemented in part through modifications to existing receiving water monitoring programs for major NPDES dischargers into coastal ocean waters. Some elements of this monitoring program already have been implemented, for example, through establishment of periodic Bight-wide regional monitoring surveys (Southern California Bight Pilot Project '94, Bight '98, Bight '03, Bight '08, and Bight '13) and kelp bed monitoring. However, other elements of the program have yet to be implemented.

SMBRC, USEPA, the Regional Water Board, the Permittee, affected NPDES permit holders, and other interested agencies and stakeholders will develop plans to collaboratively fund these elements of the program and determine each party's level of participation. It is anticipated that funding for the program from the City of Los Angeles will be supplied through a combination of modifications to the Hyperion Treatment Plant's Monitoring and Reporting Program, including redirection of existing effort and new monitoring efforts relevant to the Hyperion Treatment Plant's discharge. Redirection of existing monitoring requirements and/or the imposition of additional monitoring efforts conducted under the terms of this Order/Permit are subject to a public hearing before the Regional Water Board and public notice by USEPA. This Order/Permit may be reopened and modified by the Regional Water Board and USEPA to incorporate conforming monitoring requirements and schedule dates for implementation of the Comprehensive Monitoring Program for Santa Monica Bay (Santa Monica Bay Restoration Commission, January 2007).

Each year, at a Spring Regional Water Board meeting, the Permittee shall provide an informational report summarizing to date its contributing activities towards coordinated implementation of the Comprehensive Monitoring Program for Santa Monica Bay (SMBRC, January 2007).

T. This monitoring program for Hyperion Treatment Plant is comprised of requirements to demonstrate compliance with the conditions of the NPDES permit, ensure compliance with State water quality standards, and mandate participation in regional monitoring and/or area-wide studies.

II. MONITORING LOCATIONS

The Permittee shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order/Permit:

Table E-1. Influent and Effluent Monitoring Stations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
Influent Monitoring Stations		
--	INF-001	North Outfall Relief Sewer - Sampling stations shall be established at each point of inflow to the sewage treatment plant and shall be located upstream of any in-plant return flows and where representative samples of the influent can be obtained. (33.93061°N, 118.43317°W)
--	INF-002	North Central Outfall Sewer - Sampling stations shall be established

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
		at each point of inflow to the sewage treatment plant and shall be located upstream of any in-plant return flows and where representative samples of the influent can be obtained. (33.9306°N, 118.43326°W)
--	INF-003	Central Outfall Sewer - Sampling stations shall be established at each point of inflow to the sewage treatment plant and shall be located upstream of any in-plant return flows and where representative samples of the influent can be obtained. (33.93033°N, 118.43353°W)
--	INF-004	North Outfall Sewer - Sampling stations shall be established at each point of inflow to the sewage treatment plant and shall be located upstream of any in-plant return flows and where representative samples of the influent can be obtained. (33.92756°N, 118.43317°W)
--	INF-005	Coastal Interceptor Sewer - Sampling stations shall be established at each point of inflow to the sewage treatment plant and shall be located upstream of any in-plant return flows and where representative samples of the influent can be obtained. (33.92746°N, 118.43318°W)
Effluent Monitoring Stations		
001	EFF-001	Sampling station shall be located downstream of any in-plant return flows but before entering the discharge tunnel where representative samples of the effluent discharged through Discharge Point 001 (1-Mile Outfall) can be obtained. (33.92417°N, 118.4314°W)
002	EFF-002	Sampling station shall be located downstream of any in-plant return flows but before entering the discharge tunnel where representative samples of the effluent discharged through Discharge Point 002 (5-Mile Outfall) can be obtained. (33.92527°N, 118.43195°W)

Table E-2. Receiving Water Monitoring Stations

Station	Latitude	Longitude		Station	Latitude	Longitude
In-shore Water Quality Monitoring Stations						
RW-IS-01[1]	33.997217° N	118.801117° W		RW-IS-07[1]	33.975833° N	118.471950° W
RW-IS-02[1]	34.015833° N	118.782783° W		RW-IS-08[1]	33.959450° N	118.459717° W
RW-IS-03[1]	34.028617° N	118.735283° W		RW-IS-09[1]	33.948333° N	118.452217° W
RW-IS-04[1]	34.030550° N	118.673050° W		RW-IS-10[1]	33.938050° N	118.446950° W
RW-IS-05[1]	34.034167° N	118.413833° W		RW-IS-11[1]	33.846633° N	118.398633° W
RW-IS-06[1]	34.003350° N	118.580550° W				
Off-shore Water Quality Monitoring Stations						
RW-OS-3201	33.854167° N	118.406117° W		RW-OS-3604[2]	33.940267° N	118.509767° W
RW-OS-3202	33.848617° N	118.417783° W		RW-OS-3605[2]	33.927767° N	118.535550° W
RW-OS-3203	33.845283° N	118.426383° W		RW-OS-3606[2]	33.916667° N	118.558333° W
RW-OS-3204[2]	33.836950° N	118.440550° W		RW-OS-3701	33.986100° N	118.486100° W
RW-OS-3205[2]	33.823883° N	118.463617° W		RW-OS-3702	33.980000° N	118.500000° W
RW-OS-3206	33.811100° N	118.492783° W		RW-OS-3703	33.974167° N	118.510000° W

[1] Shall be sampled at a distance of 1,000 feet from the shoreline or at the 30-foot contour, whichever is further from shore (except that station IS-11 is located at King Harbor in Redondo Beach).

[2] Discrete stations of the Central Bight Cooperative Water Quality Survey.

Station	Latitude	Longitude	Station	Latitude	Longitude
RW-OS-3301	33.893050° N	118.427217° W	RW-OS-3704[2]	33.966667° N	118.525550° W
RW-OS-3302	33.889167° N	118.436383° W	RW-OS-3705[2]	33.953600° N	118.553600° W
RW-OS-3303	33.885550° N	118.446667° W	RW-OS-3706[2]	33.942500° N	118.575000° W
RW-OS-3304[2]	33.879450° N	118.456950° W	RW-OS-3801	34.033333° N	118.583333° W
RW-OS-3305[2]	33.868333° N	118.493333° W	RW-OS-3802	34.025833° N	118.587500° W
RW-OS-3306[2]	33.851117° N	118.527217° W	RW-OS-3803	34.005833° N	118.597217° W
RW-OS-3401	33.902500° N	118.432500° W	RW-OS-3804[2]	33.993333° N	118.604167° W
RW-OS-3402	33.900000° N	118.447217° W	RW-OS-3805[2]	33.972217° N	118.614167° W
RW-OS-3403	33.901100° N	118.460000° W	RW-OS-3806	33.956100° N	118.623600° W
RW-OS-3404[2]	33.896933° N	118.468600° W	RW-OS-3901	34.027500° N	118.716667° W
RW-OS-3405[2]	33.887217° N	118.506383° W	RW-OS-3902	34.019433° N	118.716667° W
RW-OS-3406[2]	33.879167° N	118.535550° W	RW-OS-3903	34.011100° N	118.716667° W
RW-OS-3501	33.931383° N	118.448050° W	RW-OS-3904[2]	33.997500° N	118.716667° W
RW-OS-3502	33.927767° N	118.460267° W	RW-OS-3905	33.960267° N	118.716667° W
RW-OS-3503	33.923883° N	118.472500° W	RW-OS-3906	33.942767° N	118.716667° W
RW-OS-3504[2]	33.916667° N	118.494167° W	RW-OS-4001	33.995267° N	118.805267° W
RW-OS-3505[2,3]	33.909167° N	118.525267° W	RW-OS-4002	33.988333° N	118.805267° W
RW-OS-3505B[2,3]	33.908800° N	118.523200° W	RW-OS-4003[2]	33.980550° N	118.805267° W
RW-OS-3506[2]	33.900000° N	118.549717° W	RW-OS-4004	33.958333° N	118.805267° W
RW-OS-3601	33.959733° N	118.466250° W	RW-OS-4005	33.928050° N	118.805267° W
RW-OS-3602	33.955550° N	118.477767° W	RW-OS-4006	33.912500° N	118.805267° W
RW-OS-3603	33.949433° N	118.490267° W			

Table E-3. Benthic Infauna and Sediment Chemistry

Station	Latitude	Longitude	Station	Latitude	Longitude
FIXED GRID STATIONS					
RW-A-1N	34.002233° N	118.516900° W	RW-C-5	33.952783° N	118.55388 3° W
RW-A-2	33.918617° N	118.448050° W	RW-C-6[4]	33.928050° N	118.534717° W
RW-A-6	33.924800° N	118.452916° W	RW-C-7[5]	33.893050° N	118.537500° W
RW-B-1	33.006950° N	118.715550° W	RW-C-8[5]	33.879167° N	118.523617° W
RW-B-3	33.005833° N	118.597217° W	RW-C9B[5]	33.862850 ° N	118.467767 ° W
RW-B-5	33.966383° N	118.525550° W	RW-D-1[5]	33.911667° N	118.550000° W
RW-B-6	33.941117° N	118.509450° W	RW-E-1	33.984283° N	118.714450° W
RW-B-7	33.921383° N	118.491667° W	RW-E-3	33.971950° N	118.614450° W
RW-B-8	33.896667° N	118.474167° W	RW-E-6[4]	33.928333° N	118.556950° W
RW-B-10	33.841383° N	118.415667° W	RW-E-10	33.823417° N	118.464667° W
RW-C-1[4]	33.997217° N	118.717500° W	RW-Z-1	33.914717° N	118.525000° W
RW-C-3[5]	33.989717° N	118.600550° W	RW-Z-2[4]	33.907500° N	118.524450° W

[3] Monitoring station 3505 and 3505B shall both be monitored for 3 years. After three years, the Permittee may submit a written request to the Regional Water Board and USEPA to replace monitoring location 3505 with 3505B. The request shall include justification for the replacement and an analysis indicating that the difference in water quality at the two stations is not significant.

[4] Monitored annually for dissolved sulfides, acid volatile sulfides, ammonia nitrogen, organic nitrogen, selected priority pollutants, acute toxicity, and compounds on the 303(d) list.

[5] Monitored annually for selected priority pollutants, acute toxicity, and compounds on the 303(d) list.

Station	Latitude	Longitude	Station	Latitude	Longitude
YEAR 1 RANDOM STATIONS					
RW-NA-1	33.889933° N	118.519833° W	RW-FA-11	33.893233° N	118.501750° W
RW-NA-2	33.900900° N	118.515117° W	RW-FA-12	33.897833° N	118.490633° W
RW-NA-3	33.903317° N	118.533750° W	RW-FA-13	33.906633° N	118.568833 ° W
RW-NA-4	33.917683° N	118.506333° W	RW-FA-14	33.914567° N	118.476700 ° W
RW-NA-5	33.919450° N	118.518567° W	RW-FA-15	33.917883° N	118.556450 ° W
RW-NA-6	33.934017° N	118.527267° W	RW-FA-16	33.932767° N	118.500833 ° W
RW-FA-7	33.873283° N	118.497283° W	RW-FA-17	33.934767° N	118.553467 ° W
RW-FA-8	33.877917° N	118.544167° W	RW-FA-18	33.943533° N	118.489183 ° W
RW-FA-9	33.883017° N	118.487717° W	RW-FA-19	33.944517° N	118.536117 ° W
RW-FA-10	33.885533° N	118.516383° W	RW-FA-20	33.952617° N	118.524500 ° W
YEAR 2 RANDOM STATIONS					
RW-NB-1	33.905417° N	118.550367° W	RW-FB-11	33.884783° N	118.553183° W
RW-NB-2	33.908167° N	118.501750° W	RW-FB-12	33.887483° N	118.512650° W
RW-NB-3	33.914717° N	118.534283° W	RW-FB-13	33.888033° N	118.483583° W
RW-NB-4	33.915083° N	118.509900° W	RW-FB-14	33.893600° N	118.565000° W
RW-NB-5	33.921017° N	118.549683° W	RW-FB-15	33.903233° N	118.480683° W
RW-NB-6	33.927000° N	118.498133° W	RW-FB-16	33.918367° N	118.489583° W
RW-NB-7	33.927833° N	118.531450° W	RW-FB-17	33.937000° N	118.563750° W
RW-NB-8	33.936867° N	118.513767° W	RW-FB-18	33.940117° N	118.487183° W
RW-FB-9	33.874883° N	118.518417° W	RW-FB-19	33.944833° N	118.531183° W
RW-FB-10	33.883617° N	118.497567° W	RW-FB-20	33.947633° N	118.504783° W

Table E-4. Trawl Monitoring Stations

Station	Latitude	Longitude	Station	Latitude	Longitude
FIXED GRID STATIONS					
RW-C-1	33.997217° N	118.717500° W	RW-Z-2	33.907500° N	118.524450° W
RW-C-3	33.989717° N	118.600550° W	RW-Z-3	33.900083° N	118.506583° W
RW-C-6	33.928050° N	118.534717° W	RW-Z-4	33.921383° N	118.509650° W
RW-D-1T	33.913417° N	118.536917° W			
YEAR 1 RANDOM STATIONS			**YEAR 2 RANDOM STATIONS**		
RW-1A	33.914567° N	118.476700 ° W	RW-1B	33.937000° N	118.563750° W
RW-2A	33.873283° N	118.497283 ° W	RW-2B	33.940117° N	118.487183° W
RW-3AA	33.861877° N	118.467955° W	RW-3B	33.883617° N	118.497567° W

Table E-5. Local Bioaccumulation Sampling Zones

Monitoring Location Name	Monitoring Location Description
RW-BA-Z4	**Zone 4 (south Santa Monica Bay) -** Inshore of the 150 meter depth contour and between a line bearing 235° magnetic off the south end of the Redondo Beach Pier and a line bearing 240° magnetic off the south entrance of Marina del Rey. This zone includes the Redondo Piers, the north rim of the Redondo Canyon, Short Bank, and the 1, 5, and 7-mile Hyperion outfalls.

Monitoring Location Name	Monitoring Location Description
RW-BA-Z5	**Zone 5 (north Santa Monica Bay) -** Inshore of the 150-meter depth contour and between a line bearing 240° magnetic off the south entrance of Marina del Rey and a line bearing 180° magnetic off Point Dume. This zone includes the Santa Monica beaches, Venice and Santa Monica Piers, Paradise Cove and most of Point Dume Canyon.
RW-BA-NF	**Nearfield** - A 2-km radius around the 5-Mile Outfall (Discharge Point 002) or a 2-km radius from every port on both legs of the diffuser. The biennial assessment report shall indicate the radius used and rationale for its use.

Figure E-1 Inshore Water Quality Station Locations

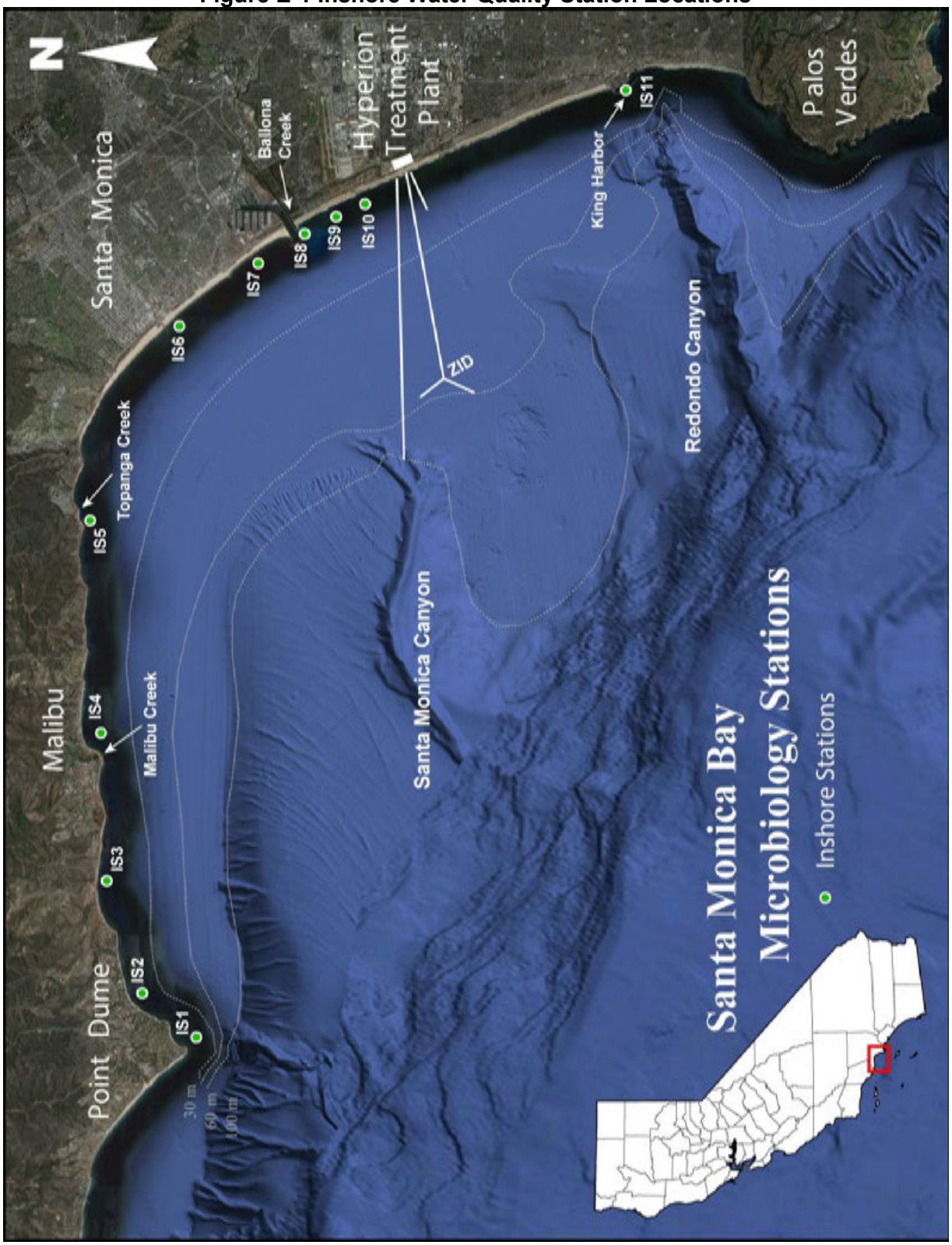


Figure E-2 Offshore Water Quality Station Locations

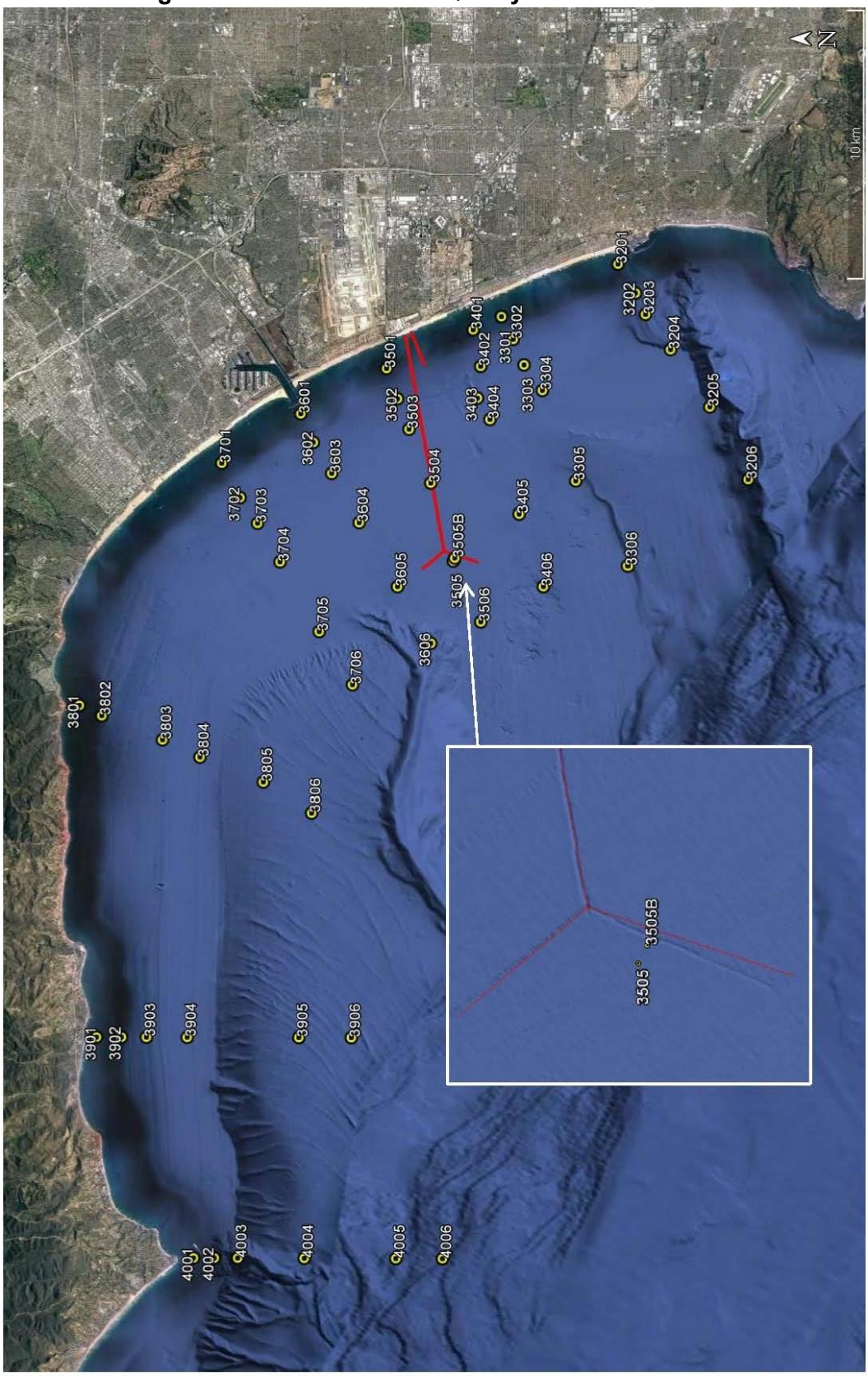


Figure E-3 Offshore Benthic Sediments and Macrofauna Locations for Fixed Stations & Year 1 Random Stations

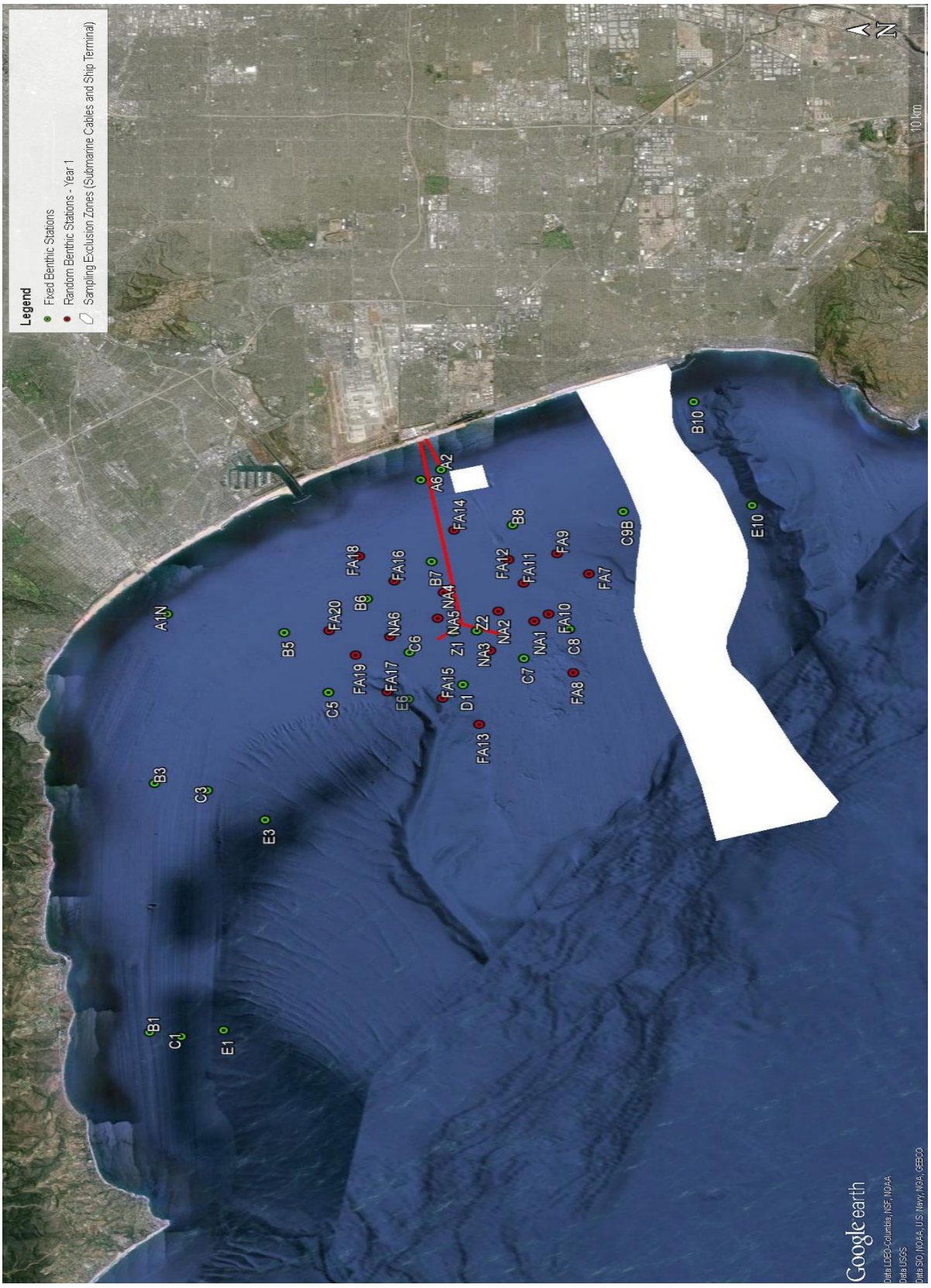


Figure E-4 Offshore Benthic Sediments and Macrofauna Station Location for Fixed Stations & Year 2 Random Stations

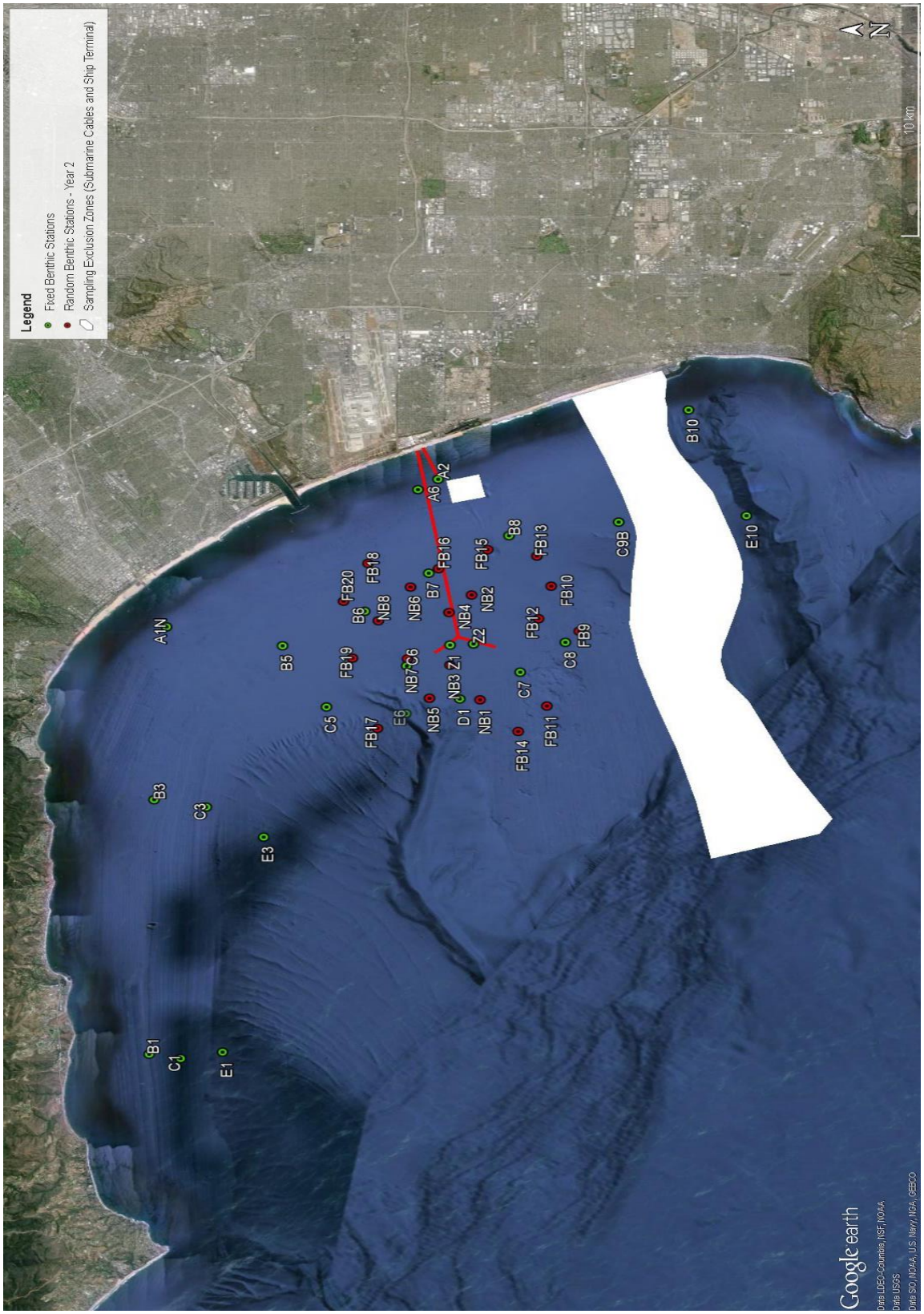


Figure E-5 Trawl Fixed and Random Station Locations Year 1

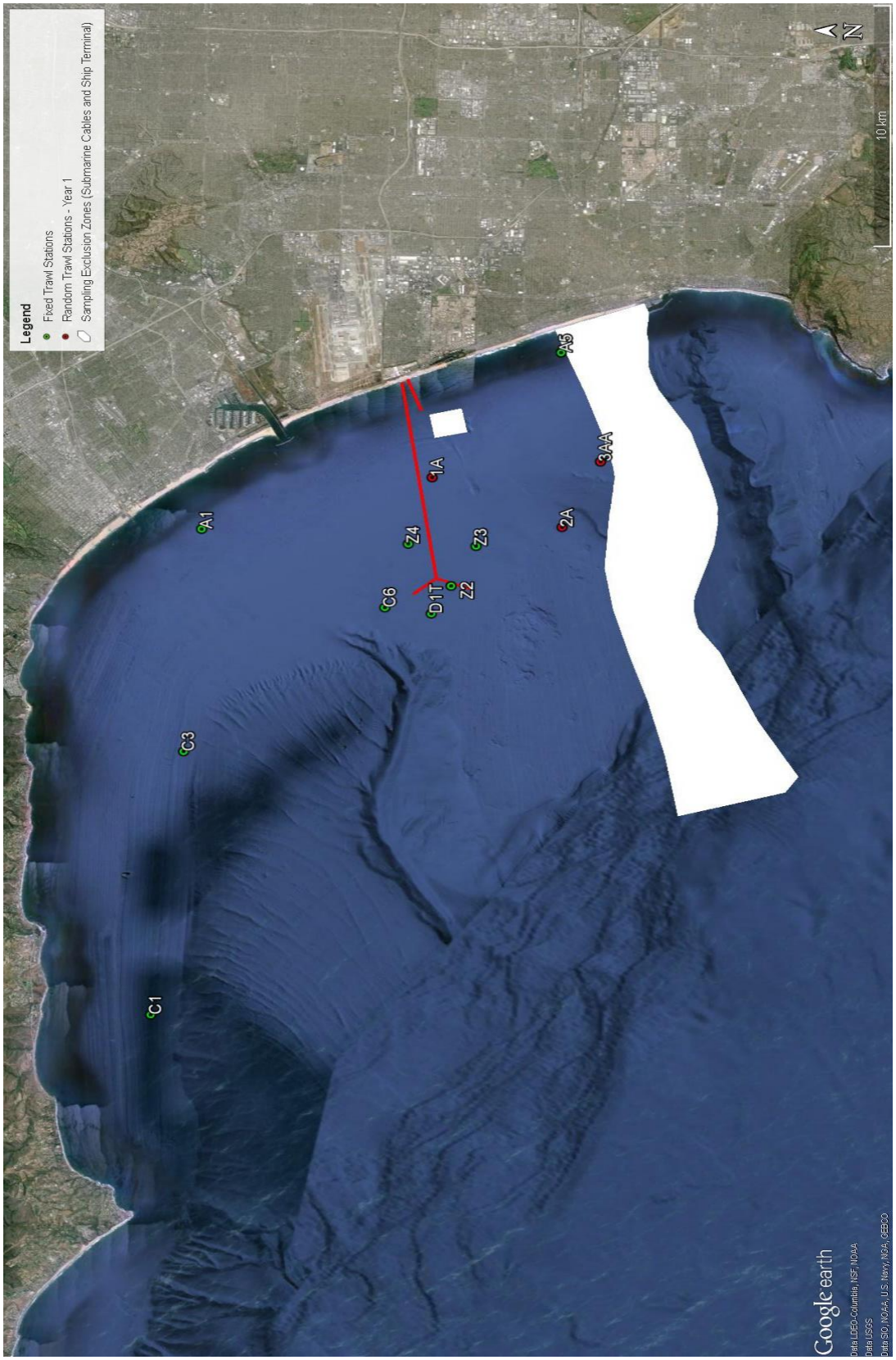


Figure E-6 Trawl Fixed and Random Station Locations Year 2

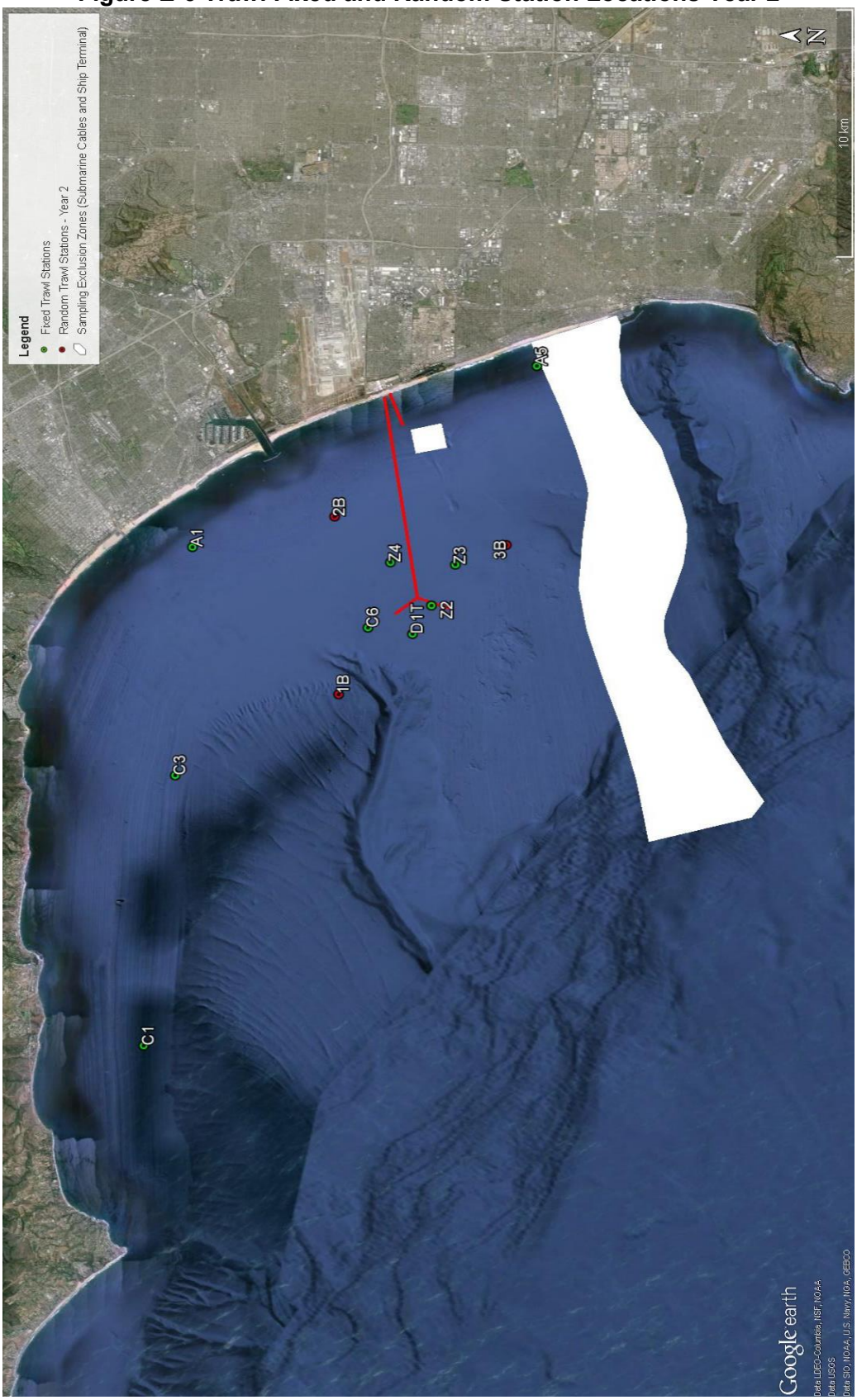
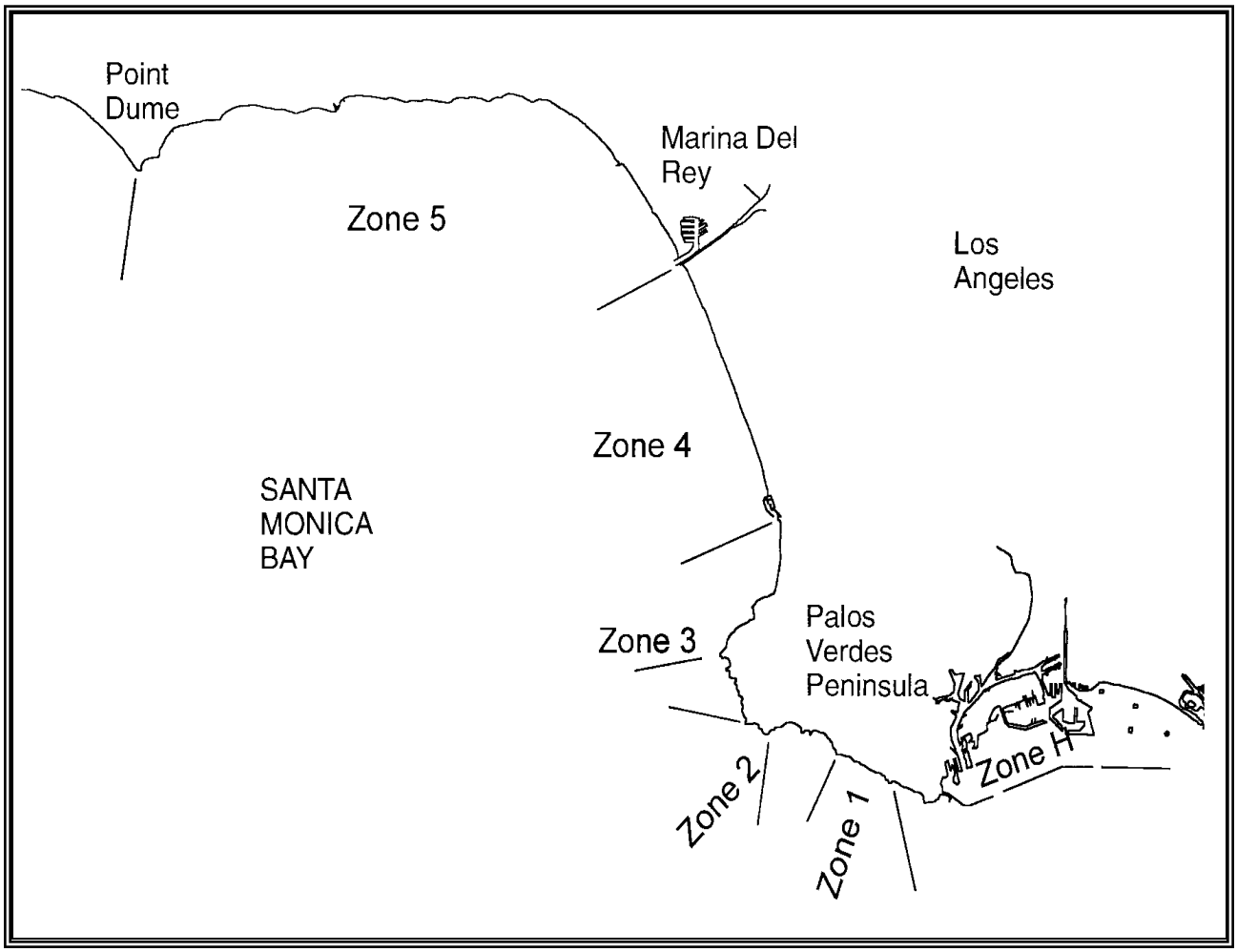


Figure E-7 Local Seafood Survey Zones as Defined by SMBRC Seafood Tissue Monitoring Design



III. INFLUENT MONITORING REQUIREMENTS

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

A. Monitoring Location INF-001, INF-002, INF-003, INF-004, and INF-005

The Permittee shall monitor influent to the Facility at INF-001, INF-002, INF-003, INF-004, and INF-005 as follows. If more than one analytical test method is listed for a given parameter, the Permittee must select from the listed methods and corresponding Minimum Level.

Table E-6. Influent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency[6]	Required Analytical Test Method
Flow	MGD	Recorder/totalizer	Continuous[7]	[8]
Biochemical Oxygen Demand (BOD_5 20°C)	mg/L	24-hr composite	Daily	[8]
TSS	mg/L	24-hr composite	Daily	[8]
pH	pH units	Grab	Weekly	[8]
Oil and Grease	mg/L	Grab[9]	Weekly	[8]
Total Organic Carbon (TOC)	mg/L	24-hr composite	Monthly	[8]
Organic Nitrogen	mg/L	24-hr composite	Quarterly	[8]
Total phosphorus (as P)	mg/L	24-hr composite	Quarterly	[8]
Arsenic	µg/L	24-hr composite	Quarterly	[8]
Cadmium	µg/L	24-hr composite	Quarterly	[8]
Chromium VI[10]	µg/L	Grab	Semiannually	[8]
Copper	µg/L	24-hr composite	Quarterly for Discharge Point 002 and Monthly for Discharge Point 001	[8]
Lead	µg/L	24-hr composite	Quarterly	[8]

[6] For the influent and effluent, weekly and monthly sampling shall be arranged so that each day of the week is represented over a seven week or month period. The schedule should be repeated every seven weeks or months.

[7] When continuous monitoring of flow is required, total daily flow, monthly average flow, and instantaneous peak daily flow (24-hour basis) shall be reported. Actual monitored flow shall be reported (not design capacity).

[8] Pollutants shall be analyzed using the analytical methods described in 40 CFR § 136; where no methods are specified for a given pollutant, by methods approved by this Regional Water Board, the State Water Board, and USEPA Region 9. For any pollutant whose effluent limitation is lower than all the MLs specified in Appendix II of the Ocean Plan, the analytical method with the lowest ML must be selected.

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

[10] The Permittee may, at its option, meet the hexavalent chromium limitation by analyzing for total chromium rather than hexavalent chromium.

Parameter	Units	Sample Type	Minimum Sampling Frequency[6]	Required Analytical Test Method
Mercury[11]	µg/L	24-hr composite	Quarterly	[8]
Nickel	µg/L	24-hr composite	Quarterly	[8]
Selenium	µg/L	24-hr composite	Quarterly	[8]
Silver	µg/L	24-hr composite	Quarterly	[8]
Zinc	µg/L	24-hr composite	Quarterly	[8]
Cyanide	µg/L	Grab	Quarterly	[8]
Ammonia Nitrogen	mg/L	24-hr composite	Monthly	[8]
Phenolic Compounds (non-chlorinated)[12]	µg/L	24-hr composite	Semiannually	[8]
Phenolic Compounds (chlorinated)[12]	µg/L	24-hr composite	Quarterly	[8]
Endosulfan[12]	µg/L	24-hr composite	Quarterly	[8]
Endrin	µg/L	24-hr composite	Semiannually	[8]
Hexachlorocyclohexane (HCH)[12]	µg/L	24-hr composite	Semiannually	[8]
Radioactivity (including gross alpha, gross, beta, combined radium-226 & radium-228, tritium, strontium-90 and uranium)[13]	pCi/L	24-hr composite	Quarterly	[8]
Acrolein	µg/L	Grab	Semiannually	[8]
Antimony	µg/L	24-hr composite	Quarterly	[8]
Bis(2-chloroethoxy) methane	µg/L	24-hr composite	Semiannually	[8]
Bis(2-chloroisopropyl) ether	µg/L	24-hr composite	Semiannually	[8]
Chlorobenzene	µg/L	Grab	Semiannually	[8]
Chromium (III)	µg/L	Grab	Quarterly	[8]
Di-n-butyl phthalate	µg/L	24-hr composite	Quarterly	[8]
Dichlorobenzenes[12]	µg/L	24-hr composite	Quarterly	[8]
Diethyl phthalate	µg/L	24-hr composite	Semiannually	[8]
Dimethyl phthalate	µg/L	24-hr composite	Semiannually	[8]
4,6-dinitro-2-methylphenol	µg/L	24-hr composite	Semiannually	[8]
2,4-dinitrophenol	µg/L	24-hr composite	Semiannually	[8]
Ethylbenzene	µg/L	Grab	Semiannually	[8]

[11] USEPA Method 1631E, with a quantitation level of 0.5 ng/L, shall be used to analyze total mercury.

[12] See Attachment A for definition of terms.

[13] Analyze these radiochemicals by the following USEPA methods: method 900.0 for gross alpha and gross beta, method 903.0 or 903.1 for radium-226, method 904.0 for radium-228, method 906.0 for tritium, method 905.0 for strontium-90, and method 908.0 for uranium. Analysis for combined radium-226 & 228 shall be conducted only if gross alpha and gross beta results for the same sample exceed 15 pCi/L or 50 pCi/L, respectively. If radium-226 & 228 exceeds the stipulated criteria, then analyze for tritium, strontium-90, and uranium.

Parameter	Units	Sample Type	Minimum Sampling Frequency[6]	Required Analytical Test Method
Fluoranthene	µg/L	24-hr composite	Semiannually	[8]
Hexachlorocyclopentadiene	µg/L	24-hr composite	Semiannually	[8]
Nitrobenzene	µg/L	24-hr composite	Quarterly	[8]
Thallium	µg/L	24-hr composite	Quarterly	[8]
Toluene	µg/L	Grab	Quarterly	[8]
Tributyltin	ng/L	24-hour composite	Quarterly	[8]
1,1,1-Trichloroethane	µg/L	Grab	Semiannually	[8]
Acrylonitrile	µg/L	Grab	Semiannually	[8]
Aldrin	µg/L	24-hr composite	Semiannually	[8]
Benzene	µg/L	Grab	Semiannually	[8]
Benzidine	µg/L	24-hr composite	Semiannually	[8]
Beryllium	µg/L	24-hr composite	Quarterly	[8]
Bis(2-chloroethyl) ether	µg/L	24-hr composite	Semiannually	[8]
Bis(2-ethylhexyl) phthalate	µg/L	24-hr composite	Quarterly	[8]
Carbon tetrachloride	µg/L	Grab	Semiannually	[8]
Chlordane[12]	µg/L	24-hr composite	Semiannually	[8]
Chlorodibromomethane	µg/L	Grab	Quarterly	[8]
Chloroform	µg/L	Grab	Quarterly	[8]
DDT[12]	µg/L	24-hr composite	Quarterly	[8]
1,4-dichlorobenzene	µg/L	24-hr composite	Semiannually	[8]
3,3'-dichlorobenzidine	µg/L	24-hr composite	Semiannually	[8]
1,2-Dichloroethane	µg/L	Grab	Semiannually	[8]
1,1-Dichloroethylene	µg/L	Grab	Semiannually	[8]
Dichlorobromomethane	µg/L	Grab	Quarterly	[8]
Dichloromethane	µg/L	Grab	Quarterly	[8]
1,3-Dichloropropene	µg/L	Grab	Semiannually	[8]
Dieldrin	µg/L	24-hr composite	Semiannually	[8]
2,4-dinitrotoluene	µg/L	24-hr composite	Semiannually	[8]
1,2-diphenylhydrazine	µg/L	24-hr composite	Semiannually	[8]
Halomethanes[12]	µg/L	Grab	Quarterly	[8]
Heptachlor	µg/L	24-hr composite	Semiannually	[8]
Heptachlor epoxide	µg/L	24-hr composite	Semiannually	[8]
Hexachlorobenzene	µg/L	24-hr composite	Semiannually	[8]
Hexachlorobutadiene	µg/L	24-hr composite	Semiannually	[8]
Hexachloroethane	µg/L	24-hr composite	Semiannually	[8]
Isophorone	µg/L	24-hr composite	Quarterly	[8]
N-Nitrosodimethylamine	µg/L	24-hr composite	Quarterly	[8]
N-Nitrosodi-n-propylamine	µg/L	24-hr composite	Semiannually	[8]
N-Nitrosodiphenylamine	µg/L	24-hr composite	Semiannually	[8]
Polycyclic Aromatic	µg/L	24-hr composite	Quarterly	[8]

Parameter	Units	Sample Type	Minimum Sampling Frequency[6]	Required Analytical Test Method
Hydrocarbons (PAHs)[12]				
Polychlorinated Biphenyls (PCBs) as Aroclors[12]	µg/L	24-hr composite	Quarterly	[8]
TCDD Equivalents[12,14]	pg/L	24-hr composite	Semiannually	[8]
1,1,2,2-Tetrachloroethane	µg/L	Grab	Semiannually	[8]
Tetrachloroethylene	µg/L	Grab	Quarterly	[8]
Toxaphene	µg/L	24-hr composite	Semiannually	[8]
Trichloroethylene	µg/L	Grab	Semiannually	[8]
1,1,2-Trichloroethane	µg/L	Grab	Semiannually	[8]
2,4,6-Trichlorophenol	µg/L	24-hr composite	Quarterly	[8]
Vinyl chloride	µg/L	Grab	Semiannually	[8]
Methyl-tert-butyl-ether	µg/L	Grab	Quarterly	[8]

IV. EFFLUENT MONITORING REQUIREMENTS

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

A. Monitoring Location EFF-001 and EFF-002

The Permittee shall monitor effluent at EFF-001 and EFF-002 as follows. If more than one analytical test method is listed for a given parameter, the Permittee must select from the listed methods and corresponding Minimum Level:

[14] USEPA Method 1613 shall be used to analyze TCDD equivalents.

Table E-7. Effluent Monitoring

Parameter	Units	Sample Type[15]	Minimum Sampling Frequency[16,17]	Required Analytical Test Method
Flow	MGD	Recorder/totalizer	Continuous[18]	[19]
BOD_5 20°C	mg/L	24-hour composite	Daily	[19]
TSS	mg/L	24-hour composite	Daily	[19]
pH	pH units	Grab	Weekly	[19]
Oil and Grease	mg/L	Grab[20]	Weekly	[19]
Temperature	°F	Continuous	Continuous	[19]
Total Organic Carbon	mg/L	24-hr composite	Monthly	[19]
Settleable Solids	mL/L	Grab[20]	Daily	[19]
Dissolved Oxygen	mg/L	Grab	Weekly	[19]
Turbidity	NTU	Grab and 24-hr composite	Weekly	[19]
Nitrate Nitrogen	mg/L	24-hour composite	Quarterly	[19]
Organic Nitrogen	mg/L	24-hour composite	Quarterly	[19]
Total Phosphorus (as P)	mg/L	24-hr composite	Quarterly	[19]
Arsenic	μg/L	24-hr composite	Quarterly	[19]
Cadmium	μg/L	24-hr composite	Quarterly	[19]
Chromium (VI)	μg/L	Grab	Semiannually	[19]

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

[16] For the influent and effluent, weekly and monthly sampling shall be arranged so that each day of the week is represented over a seven week or month period. The schedule should be repeated every seven weeks or months.

[17] For Discharge Point 001, the minimum frequency of analysis shall be once per discharge day, but no more than one analysis is required during the indicated sampling period for those constituents that are monitored less frequently. During routine maintenance activities lasting less than 24 hours at Discharge Point 001, sampling and analyses are not required except for parameters with instantaneous maximum effluent limitations specified in Table 6 of the Order/Permit: pH, oil and grease, settleable solids, turbidity, ammonia, copper, and total chlorine residuals. Compliance with the instantaneous maximum final effluent limitations (with the exception of total residual chlorine) may be determined at the compliance location for Discharge Point 002 during routine maintenance of the gates at the diversion structure as long as there is no plant upset during maintenance and the sample is representative of the final effluent discharged to the 1-Mile Outfall.

[18] When continuous monitoring of flow is required, total daily flow, monthly average flow, and instantaneous peak daily flow (24-hour basis) shall be reported. Actual monitored flow shall be reported (not design capacity).

[19] Pollutants shall be analyzed using the analytical methods described in 40 CFR § 136; where no methods are specified for a given pollutant, by methods approved by this Regional Water Board, the State Water Board, and USEPA Region 9. For any pollutant whose effluent limitation is lower than all the MLs specified in Appendix II of the Ocean Plan, the analytical method with the lowest ML must be selected.

[20] Oil and grease, and settleable solids monitoring shall consist of a single grab sample at peak flow over a 24-hour period.

Parameter	Units	Sample Type[15]	Minimum Sampling Frequency[16,17]	Required Analytical Test Method
Copper	µg/L	24-hr composite for Discharge Point 002; Grab and 24-hr composite for Discharge Point 001	Quarterly for Discharge Point 002 and Monthly for Discharge Point 001	[19]
Lead	µg/L	24-hr composite	Quarterly	[19]
Mercury[21]	µg/L	24-hr composite	Quarterly	[19]
Nickel	µg/L	24-hr composite	Quarterly	[19]
Selenium	µg/L	24-hr composite	Quarterly	[19]
Silver	µg/L	24-hr composite	Quarterly	[19]
Zinc	µg/L	24-hr composite	Quarterly	[19]
Cyanide	µg/L	Grab	Quarterly	[19]
Total Residual Chlorine (Discharge Point 001 only)[22]	mg/L	Grab	Daily	[19]
Ammonia Nitrogen	mg/L	Grab and 24-hr composite	Monthly	[19]
Toxicity, Chronic	Pass or Fail, % Effect (TST)	24-hr composite	Monthly	[19]
Phenolic compounds (non-chlorinated)[23]	µg/L	24-hr composite	Semiannually	[19]
Phenolic compounds (chlorinated)[23]	µg/L	24-hr composite	Quarterly	[19]
Endosulfan[23]	µg/L	24-hr composite	Quarterly	[19]
Endrin	µg/L	24-hr composite	Semiannually	[19]
HCH[23]	µg/L	24-hr composite	Semiannually	[19]
Radioactivity (including gross alpha, gross beta, combined radium-226 & radium-228, tritium, strontium-90 and uranium)[24]	pCi/L	24-hr composite	Quarterly	[19]

[21] USEPA Method 1631E, with a quantitation level of 0.5 ng/L, shall be used to analyze total mercury.

[22] Total residual chlorine is monitored at receiving water station A2 for compliance with the final effluent limitation for Discharge Point 001.

[23] See Attachment A for definition of terms.

[24] Analyze these radiochemicals by the following USEPA methods: method 900.0 for gross alpha and gross beta, method 903.0 or 903.1 for radium-226, method 904.0 for radium-228, method 906.0 for tritium, method 905.0 for strontium-90, and method 908.0 for uranium. Analysis for combined radium-226 & 228 shall be conducted only if gross alpha and gross beta results for the same sample exceed 15 pCi/L or 50 pCi/L, respectively. If radium-226 & 228 exceeds the stipulated criteria, then analyze for tritium, strontium-90, and uranium.

Parameter	Units	Sample Type[15]	Minimum Sampling Frequency[16,17]	Required Analytical Test Method
Acrolein	µg/L	Grab	Semiannually	[19]
Antimony	µg/L	24-hr composite	Quarterly	[19]
Bis(2-chloroethoxy) methane	µg/L	24-hr composite	Semiannually	[19]
Bis(2-chloroisopropyl) ether	µg/L	24-hr composite	Semiannually	[19]
Chlorobenzene	µg/L	Grab	Semiannually	[19]
Chromium (III)	µg/L	Grab	Quarterly	[19]
Di-n-butyl phthalate	µg/L	24-hr composite	Quarterly	[19]
Dichlorobenzenes[23]	µg/L	24-hr composite	Quarterly	[19]
Diethyl Phthalate	µg/L	24-hr composite	Semiannually	[19]
Dimethyl Phthalate	µg/L	24-hr composite	Semiannually	[19]
4,6-dinitro-2-methylphenol	µg/L	24-hr composite	Semiannually	[19]
2,4-dinitrophenol	µg/L	24-hr composite	Semiannually	[19]
Ethylbenzene	µg/L	Grab	Semiannually	[19]
Fluoranthene	µg/L	24-hr composite	Semiannually	[19]
Hexachlorocyclopentadiene	µg/L	24-hr composite	Semiannually	[19]
Nitrobenzene	µg/L	24-hr composite	Quarterly	[19]
Thallium	µg/L	24-hr composite	Quarterly	[19]
Toluene	µg/L	Grab	Quarterly	[19]
Tributyltin	ng/L	24-hr composite	Quarterly	[19]
1,1,1-Trichloroethane	µg/L	Grab	Semiannually	[19]
Acrylonitrile	µg/L	Grab	Semiannually	[19]
Aldrin	µg/L	24-hr composite	Semiannually	[19]
Benzene	µg/L	Grab	Semiannually	[19]
Benzidine	µg/L	24-hr composite	Semiannually	[19]
Beryllium	µg/L	24-hr composite	Quarterly	[19]
Bis(2-chloroethyl) ether	µg/L	24-hr composite	Semiannually	[19]
Bis(2-ethylhexyl) phthalate	µg/L	24-hr composite	Quarterly	[19]
Carbon Tetrachloride	µg/L	Grab	Semiannually	[19]
Chlordane[23]	µg/L	24-hr composite	Semiannually	[19]
Chlorodibromomethane	µg/L	Grab	Quarterly	[19]
Chloroform	µg/L	Grab	Quarterly	[19]
DDT[23]	µg/L	24-hr composite	Quarterly	[19]
1,4-dichlorobenzene	µg/L	24-hr composite	Semiannually	[19]
3,3'-dichlorobenzidine	µg/L	24-hr composite	Semiannually	[19]
1,2-dichloroethane	µg/L	Grab	Semiannually	[19]
1,1-dichloroethylene	µg/L	Grab	Semiannually	[19]
Dichlorobromomethane	µg/L	Grab	Quarterly	[19]
Dichloromethane	µg/L	Grab	Quarterly	[19]
1,3-Dichloropropene	µg/L	Grab	Semiannually	[19]
Dieldrin	µg/L	24-hr composite	Semiannually	[19]

Parameter	Units	Sample Type[15]	Minimum Sampling Frequency[16,17]	Required Analytical Test Method
2,4-dinitrotoluene	µg/L	24-hr composite	Semiannually	[19]
1,2-diphenylhydrazine	µg/L	24-hr composite	Semiannually	[19]
Halomethanes[23]	µg/L	Grab	Quarterly	[19]
Heptachlor	µg/L	24-hr composite	Semiannually	[19]
Heptachlor Epoxide	µg/L	24-hr composite	Semiannually	[19]
Hexachlorobenzene	µg/L	24-hr composite	Semiannually	[19]
Hexachlorobutadiene	µg/L	24-hr composite	Semiannually	[19]
Hexachloroethane	µg/L	24-hr composite	Semiannually	[19]
Isophorone	µg/L	24-hr composite	Quarterly	[19]
N-Nitrosodimethylamine	µg/L	24-hr composite	Quarterly	[19]
N-Nitrosodi-n-propylamine	µg/L	24-hr composite	Semiannually	[19]
N-Nitrosodiphenylamine	µg/L	24-hr composite	Semiannually	[19]
PAHs[23]	µg/L	24-hr composite	Quarterly	[19]
PCBs as Aroclors[23]	µg/L	24-hr composite	Quarterly	[19]
PCBs as Congeners[23,25,26]	pg/L	24-hr composite	Annually	[19]
TCDD Equivalents[23,27]	pg/L	24-hr composite	Semiannually	[19]
1,1,2,2-Tetrachloroethane	µg/L	Grab	Semiannually	[19]
Tetrachloroethylene	µg/L	Grab	Quarterly	[19]
Toxaphene	µg/L	24-hr composite	Semiannually	[19]
Trichloroethylene	µg/L	Grab	Semiannually	[19]
1,1,2-Trichloroethane	µg/L	Grab	Semiannually	[19]
2,4,6-Trichlorophenol	µg/L	24-hr composite	Quarterly	[19]
Vinyl chloride	µg/L	Grab	Semiannually	[19]
Methyl-tert-butyl-ether	µg/L	Grab	Quarterly	[19]

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

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

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

[27] USEPA Method 1613 shall be used to analyze TCDD equivalents.

B. Mass Emission Benchmarks

Constituents that have been assigned Mass Emission Benchmarks are listed in the NPDES Order/Permit under Section V. The Mass Emission Benchmarks have been established for the discharge through the 5-Mile Outfall (Discharge Point 002) and shall be reported in metric tons per year (MT/yr). The Permittee shall monitor and report the mass emission rate for all constituents that have mass emission benchmarks. For each constituent, the 12-month average mass emission rate and the concentration and flow used to calculate that mass emission rate shall be reported in the annual NPDES summary report.

V. WHOLE EFFLUENT TOXICITY (WET) TESTING REQUIREMENTS

A. Chronic Toxicity Testing

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

The chronic IWC is the concentration of a pollutant or the parameter toxicity in the receiving water after mixing. The chronic toxicity IWC for Discharge Point 001 and 002 are 7.1% and 1.04% percent effluent, respectively.

2. Sample Volume and Holding Time

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

3. Chronic Marine Species and Test Methods

If effluent samples are collected from outfalls discharging to receiving waters with salinity >1 ppt, the Permittee shall conduct the following chronic toxicity tests on effluent samples, at the in-stream waste concentration for the discharge, in accordance with species and test methods in *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (EPA/600/R-95/136, 1995). Artificial sea salts or hypersaline brine shall be used to increase sample salinity if needed. In no case shall these species be substituted with another test species unless written authorization from the Executive Officer is received.

a. A static renewal toxicity test with the topsmelt, *Atherinops affinis* (Larval Survival and Growth Test Method 1006.0).

b. A static non-renewal toxicity test with the purple sea urchin, *Strongylocentrotus purpuratus*, and the sand dollar, *Dendraster excentricus* (Fertilization Test Method 1008.0), or a static non-renewal toxicity test with the red abalone, *Haliotis rufescens* (Larval Shell Development Test Method).

c. A static non-renewal toxicity test with the giant kelp, *Macrocystis pyrifera* (Germination and Growth Test Method 1009.0).

4. Species Sensitivity Screening

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

collected for use as test solution renewal water as the seven-day toxicity test progresses. If the result of all three species is "Pass", then the species that exhibits the highest "Percent Effect" at the discharge IWC during species sensitivity screening shall be used for routine monitoring during the permit cycle. If only one species fails, then that species shall be used for routine monitoring during the permit cycle. Likewise, if two or more species result in "Fail", then the species that exhibits the highest "Percent Effect" at the discharge IWC during the suite of species sensitivity screening shall be used for routine monitoring during the permit cycle, until such time as a rescreening is required.

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

During the calendar month, toxicity tests used to determine the most sensitive test species shall be reported as effluent compliance monitoring results for the chronic toxicity MDEL.

5. Quality Assurance and Additional Requirements

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

a. The discharge is subject to determination of "Pass" or "Fail" from a chronic toxicity test using the Test of Significant Toxicity statistical t-test approach described in the *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010), Appendix A, Figure A-1, and Table A-1, and Appendix B, Table B-1. The null hypothesis (H_o) for the TST statistical approach is: Mean discharge 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." The relative "Percent Effect" at the discharge IWC is defined and reported as: ((Mean control response - Mean discharge IWC response) ÷ Mean control response)) × 100. This is a t-test (formally Student's t-Test), a statistical analysis comparing two sets of replicate observations – in the case of a 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.

b. If the effluent toxicity test does not meet all test acceptability criteria (TAC) specified in the referenced test method Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms (EPA/600/R-95/136, 1995) (see Table E-8, below), then the Permittee must re-sample and re-test within 14 days.

Table E-8. USEPA Test Methods and Test Acceptability Criteria

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

c. Dilution water and control water, including brine controls, shall be 1-µm-filtered uncontaminated natural seawater, hypersaline brine prepared using uncontaminated natural seawater, or laboratory water prepared and used as specified in the test methods manual. If dilution water and control water is different from test organism culture water, then a second control using culture water shall also be used.

d. Monthly reference toxicant testing is sufficient. All reference toxicant test results should be reviewed and reported using the EC25[28].

e. The Permittee shall perform toxicity tests on final effluent samples. Chlorine and ammonia shall not be removed from the effluent sample prior to toxicity testing,

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

unless explicitly authorized under this section of the Monitoring and Reporting Program and the rationale is explained in the Fact Sheet (Attachment F).

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

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

   a. A description of the investigation and evaluation techniques that will be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency.

   b. A description of the Facility's methods of maximizing in-house treatment efficiency and good housekeeping practices, and a list of all chemicals used in the operation of the Facility; and,

   c. If a TIE is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor).

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

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

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

8. Toxicity Reduction Evaluation (TRE) Process

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

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

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

i. Further actions by the Permittee to investigate, identify, and correct the causes of toxicity.

ii. Actions the Permittee will take to mitigate the effects of the discharge and prevent the recurrence of toxicity.

iii. A schedule for these actions, progress reports, and the final report.

b. **TIE Implementation.** The Permittee may initiate a TIE as part of a TRE to identify the causes of toxicity using the same species and test method and, as guidance, USEPA manuals: *Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures* (EPA/600/6-91/003, 1991); *Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/080, 1993); *Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/081, 1993); and *Marine Toxicity Identification Evaluation (TIE): Phase I Guidance Document* (EPA/600/R-96-054, 1996). The TIE should be conducted on the species demonstrating the most sensitive toxicity response.

c. Many recommended TRE elements parallel required or recommended efforts for source control, pollution prevention, and storm water control programs. TRE efforts should be coordinated with such efforts. As toxic substances are identified or characterized, the Permittee shall continue the TRE by determining the sources and evaluating alternative strategies for reducing or eliminating the substances from the discharge. All reasonable steps shall be taken to reduce toxicity to levels consistent with toxicity evaluation parameters.

d. The Permittee shall continue to conduct routine effluent monitoring for compliance determination purposes while the TIE and/or TRE is taking place. Additional accelerated monitoring and TRE work plans are not required once a TRE has begun.

e. The Regional Water Board and USEPA recognize that toxicity may be episodic and identification of causes and reduction of sources of toxicity may not be successful in all cases. The TRE may be ended at any stage if monitoring finds there is no longer toxicity.

9. Reporting

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

a. Test results shall be reported in percent survival for acute toxicity tests.

b. The valid toxicity test results for the TST statistical approach, reported as “Pass” or “Fail” and “Percent Effect” at the chronic toxicity IWC for the discharge. All toxicity test results (whether identified as valid or otherwise) conducted during the calendar month shall be reported on the SMR due date specified in Table E-16.

c. Summary water quality measurements for each toxicity test (e.g. pH, dissolved oxygen, temperature, conductivity, hardness, salinity, chlorine, ammonia).

d. The statistical analysis used in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010) Appendix A, Figure A-1 and Table A-1, and Appendix B, Table B-1.

e. TRE/TIE results. The Executive Officer shall be notified no later than 30 days from completion of each aspect of TRE/TIE analyses. Prior to completion of the final TIE/TRE report, the Permittee shall provide status updates in the monthly monitoring reports, indicating which TIE/TRE steps are underway and which steps have been completed.

f. Statistical program (e.g., TST calculator, CETIS, etc.) output results, including graphical plots, for each toxicity test.

g. Graphical plots clearly showing the laboratory's performance of the reference toxicant for the previous 20 tests and the laboratory's performance of the control mean, control standard deviation, and control coefficient of variation for the previous 12-month period.

h. Any additional QA/QC documentation or any additional chronic toxicity-related information, upon written request of the Regional Water Board Chief Deputy Executive Officer or Executive Officer.

B. Ammonia Removal

1. Except with prior approval from the Executive Officer of the Regional Water Board, ammonia shall not be removed from bioassay samples. The Permittee must demonstrate the effluent toxicity is caused by ammonia because of increasing test pH when conducting the toxicity test. It is important to distinguish the potential toxic effects of ammonia from other pH sensitive chemicals, such as certain heavy metals, sulfide, and cyanide. The following may be steps to demonstrate that the toxicity is caused by ammonia and no other toxicants before the Executive Officer would allow for control of pH in the test.

   a. There is consistent toxicity in the effluent and the maximum pH in the toxicity test is in the range to cause toxicity due to increased pH.

   b. Chronic ammonia concentrations in the effluent are greater than 4 mg/L total ammonia.

   c. Conduct graduated pH tests as specified in the toxicity identification evaluation methods. For example, mortality should be higher at pH 8 and lower at pH 6.

   d. Treat the effluent with a zeolite column to remove ammonia. Mortality in the zeolite treated effluent should be lower than the non-zeolite treated effluent. Then add ammonia back to the zeolite-treated samples to confirm toxicity due to ammonia.

2. When it has been demonstrated that toxicity is due to ammonia because of increasing test pH, pH may be controlled using appropriate procedures which do not significantly alter the nature of the effluent, after submitting a written request to the Regional Water Board, and receiving written permission expressing approval from the Executive Officer of the Regional Water Board.

C. Chlorine Removal

Except with prior approval from the Executive Officer of the Regional Water Board, chlorine shall not be removed from bioassay samples.

VI. LAND DISCHARGE MONITORING REQUIREMENTS (NOT APPLICABLE)

VII. RECYCLING MONITORING REQUIREMENTS (NOT APPLICABLE)

VIII. RECEIVING WATER MONITORING REQUIREMENTS

All receiving water stations shall be located by state-of-the-art navigational methods (e.g. DGPS); other means (e.g. visual triangulation, fathometer readings) may be used to improve the accuracy of locating stations.

A. Inshore Water Quality Monitoring

This monitoring is designed to determine if Ocean Plan and Basin Plan objectives for bacteria are being met. Data collected at inshore stations provide the means to determine whether bacteriological objectives for water contact and shellfish harvesting are being met in the area of greatest potential for water contact and shellfish harvesting activities most proximal to the points of discharge.

The Permittee shall monitor the 11 inshore stations listed in Table E-2 (See Figure E-1) of this MRP for the following parameters:

Table E-9. Inshore Microbiological Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Total coliform	CFU/100 mL or MPN/100mL	Grab at surface and midwater	Annually (summer)[29]	[30]
Fecal coliform	CFU/100 mL or MPN/100mL	Grab at surface and midwater	Annually (summer)[29]	[30]
Enterococcus	CFU/100 mL or MPN/100mL	Grab at surface and midwater	Annually (summer)[29]	[30]

B. Offshore Water Quality Monitoring

This monitoring is designed to determine if Ocean Plan and Basin Plan objectives for physical and chemical parameters and bacteria are being met. Water quality data collected provide the information necessary to demonstrate compliance with the water quality standards. In addition, data collected by the City of Los Angeles contribute to the Central Bight Cooperative Water Quality Survey. This regionally coordinated survey provides integrated water quality surveys on a quarterly basis and covers more than 200 kilometers of coast in Ventura, Los Angeles, Orange, and San Diego Counties, from the nearshore to approximately 10 kilometers offshore. This cooperative program contributes to a regional understanding of seasonal patterns in water column structure. The regional view provides context for determining the significance and causes of locally observed patterns in the area of wastewater outfalls.

1. The Permittee shall monitor the 54 offshore stations listed in Table E-2 for the following parameters:

[29] The annual sample shall be collected in the summer quarter (July-September).

[30] Pollutants shall be analyzed using the analytical methods described in 40 CFR § 136; where no methods are specified for a given pollutant, by methods approved by this Regional Water Board, the State Water Board, and USEPA Region 9. For any pollutant whose effluent limitation is lower than all the MLs specified in Appendix II of the Ocean Plan, the analytical method with the lowest ML must be selected.

Table E-10. Offshore Water Quality Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Dissolved oxygen	mg/L	continuous profile[31]	Quarterly	[32]
Temperature	°C	continuous profile[31]	Quarterly	[32]
Salinity	ppt	continuous profile[31]	Quarterly	[32]
Transmissivity	% transmittance	continuous profile[31]	Quarterly	[32]
Chlorophyll a	μg/L	continuous profile[31]	Quarterly	[32]
pH	pH units	continuous profile[31]	Quarterly	[32]
Ammonia	μg/L	discrete sampling at specified depth[33]	Quarterly	[32]
Fecal coliform	CFU/100 mL or MPN/100mL	discrete sampling at specified depth[33]	Quarterly	[32]
Total coliform	CFU/100 mL or MPN/100mL	discrete sampling at specified depth[33]	Quarterly	[32]
Enterococcus	CFU/100 mL or MPN/100mL	discrete sampling at specified depth[33]	Quarterly	[32]
Visual observations[34]	---	---	Quarterly	---

2. Sampling Design - Fifty-four offshore water quality stations shall be sampled quarterly by a CTD profiler (see Figure E-2). Water quality methods and protocols shall follow those described in the most current edition of the Field Operations Manual for Marine Water Column, Benthic, and Trawl Monitoring in Southern California. Visual observations shall be recorded at each station.

   Concurrent with the CTD profiling survey, discrete samples shall be collected quarterly at all 21 offshore discrete sampling stations of the Central Bight Cooperative Water Quality Survey for ammonia and fecal coliform, total coliform and *Enterococcus* at fixed depths of 1, 15, 30, and 45 meters (or as deep as practicable for those stations located in depths less than 45 m) as noted in Table E-2.

3. Whenever there is any effluent discharge to the 1-Mile Outfall (Discharge Point 001), the following additional offshore sampling shall be conducted at Station A-2 (see Benthic

[31] Depth profile measurements shall be obtained using multiple sensors to measure parameters through the entire water column (from the surface to as close to the bottom as practicable).

[32] Pollutants shall be analyzed using the analytical methods described in 40 CFR § 136; where no methods are specified for a given pollutant, by methods approved by this Regional Water Board, the State Water Board, and USEPA Region 9. For any pollutant whose effluent limitation is lower than all the MLs specified in Appendix II of the Ocean Plan, the analytical method with the lowest ML must be selected.

[33] Discrete sampling for ammonia nitrogen, fecal coliform, total coliform, and *Enterococcus* shall be performed below the surface within 1 meter (3.1 feet) and at 15 meters (49.2 feet), 30 meters (98.4 feet), and 45 meters (147.6 feet), or as deep as practicable for those stations located in depths less than 45 meters.

[34] Receiving water observations of any discoloration, turbidity, odor, and unusual or abnormal amounts of floating or suspended matter in the water or on the beach, rocks, jetties, or beach structures, shall be made and recorded at stations. The character and extent of such matter shall be described. The dates, times, and depths of sampling and these observations shall also be reported. Recreational use at time of sampling, within a 100 meter radius of each sample location, shall also be recorded and submitted with results. Recreational uses include, but are not limited to, swimming, wading, water-skiing, diving, surfing, and fishing.

and Trawl Stations table in Benthic Sediments Monitoring under Table E-3 and Figure E-3) and two additional stations within approximately 50 meters of Discharge Point 001:

Table E-11. Additional Offshore Water Quality Monitoring Requirements - Outfall 001

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Total chlorine residual	mg/L	Grab[35,36]	Once per discharge day	37
Fecal coliform	CFU/100 mL or MPN/100mL	Surface & Bottom Grab[38]	Once per discharge day	37
Total coliform	CFU/100 mL or MPN/100mL	Surface & Bottom Grab[38]	Once per discharge day	37
Enterococcus	CFU/100 mL or MPN/100mL	Surface & Bottom Grab[38]	Once per discharge day	37

C. Benthic Infauna and Sediment Chemistry Monitoring

1. Local Benthic Trends Survey

   This survey is designed to determine if benthic conditions under the influence of the discharge are changing over time. The data collected are used for regular assessment of trends in sediment contamination and biological response along a fixed grid of sites within the influence of the discharge.

   a. Sampling Design - Benthic infauna and sediment chemistry monitoring stations in Table E-3 shall be sampled in summer (July – September) for the parameters in Table E-12. Separate samples shall be collected for benthic infauna and sediment chemistry.

      Forty-four benthic monitoring stations (24 fixed stations plus one set of 20 random stations) shall be sampled annually for benthic infauna community analysis[39]. Random station sets A (Figure E-3) and B (Figure E-4) shall be sampled in alternate years. The entire contents of each sample shall be passed through a 1.0 millimeter screen to retain the benthic organisms. Sampling methods and protocols shall follow those described in the most current edition of the Field Operations Manual for Marine Water Column, Benthic, and Trawl Monitoring in Southern California.

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[35] Discrete sampling for ammonia nitrogen, fecal coliform, total coliform, *Enterococcus*, and total residual chlorine shall be performed below the surface within 1 meter (3.1 feet) and at 15 meters (49.2 feet), 30 meters (98.4 feet), and 45 meters (147.6 feet), or as deep as practicable for those stations located in depths less than 45 meters.

[36] The "Daily Maximum" value shall be reported during periods of discharge.

[37] Pollutants shall be analyzed using the analytical methods described in 40 CFR § 136; where no methods are specified for a given pollutant, by methods approved by this Regional Water Board, the State Water Board, and USEPA Region 9. For any pollutant whose effluent limitation is lower than all the MLs specified in Appendix II of the Ocean Plan, the analytical method with the lowest ML must be selected.

[38] Bottom sampling shall be conducted within 2 meters (6.6 feet) of the seabed.

[39] Community analysis of the benthic infauna shall include the number of species, number of individuals per species, total numerical abundance per station, benthic response index (BRI) and biological indices, plus utilize appropriate regression analyses, parametric and nonparametric statistics, and multivariate techniques or other appropriate analytical techniques.

For benthic infauna community analysis, the following determinations shall be made at each station, where appropriate: Identification of all organisms to lowest possible taxon based on morphological taxonomy; community analysis[41]; mean, range, standard deviation, and 95% confidence limits, if appropriate, for value determined in the community analysis. The Permittee shall conduct additional statistical analyses to determine temporal and spatial trends in the marine environment.

Forty-four benthic monitoring stations (24 fixed stations plus one set of 20 random stations) shall also be sampled annually for Grain Size (sufficiently detailed to calculate percent weight in relation to phi size) and TOC; random station sets A and B shall be sampled in alternate years. Four benthic monitoring stations (RW- C1, C6, Z2, and E6) shall be sampled annually for ammonia nitrogen, acid volatile sulfides, dissolved sulfides and organic nitrogen. Nine benthic monitoring stations (RW- Z2, C1, C3, C6, C7, C8, C9B, D1, and E6) shall be sampled annually for selected priority pollutants, acute sediment toxicity, and compounds on the local 303(d) list; see Table E-12. All 64 benthic monitoring stations (24 fixed stations plus both sets of 20 random stations) shall be sampled in year five of the Order/Permit for selected priority pollutants, and compounds on the local 303(d) list; see Table E-12. The 24 fixed benthic monitoring stations shall also be sampled in year five for acute sediment toxicity.

Table E-12. Benthic Infauna and Sediment Chemistry Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Benthic Infauna	--	0.1 square meter Van Veen grab	Annually	[40]
Grain Size	Phi size	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	[40]
Total organic carbon	mg/kg	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	[40]
Dissolved sulfides	mg/kg	0.1 square meter Van Veen grab (upper 2 centimeters, pore water)	Annually	[40]
Organic nitrogen	mg/kg	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	[40]
Arsenic	mg/kg	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	[40]
Cadmium	mg/kg	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	[40]
Chromium	mg/kg	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	[40]
Copper	mg/kg	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	[40]
Lead	mg/kg	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	[40]
Mercury	mg/kg	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	[40]
Nickel	mg/kg	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	[40]

[40] Pollutants shall be analyzed using the analytical methods described in 40 CFR § 136; where no methods are specified for a given pollutant, by methods approved by this Regional Water Board, the State Water Board, and USEPA Region 9. For any pollutant whose effluent limitation is lower than all the MLs specified in Appendix II of the Ocean Plan, the analytical method with the lowest ML must be selected.

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Silver	mg/kg	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	40
Zinc	mg/kg	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	40
DDT[41]	μg/kg	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	40
PCBs as Aroclors[41]	μg/kg	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	40
PCBs as Congeners[41]	μg/kg	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	40
Acid Volatile Sulfides	mg/kg	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	40
Organophosphate (OP) Pesticides[42]	μg/kg	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	40
Ammonia Nitrogen	mg/kg	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	40
PAHs[41]	mg/kg	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	40
Chlorinated Hydrocarbons[43]	mg/kg	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	40
Acute Sediment Toxicity	% survival	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	40
Compounds on local 303(d) list	μg/kg	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	40

2. Acute Sediment Toxicity Monitoring

The Permittee shall conduct acute sediment toxicity monitoring as described above. Testing shall be conducted using one of the three amphipod species *Eohaustorius estuarius*, *Leptocheirus plumulosus*, and *Rhepoxynius abronius* in accordance with EPA 600/R-94/0925 (USEPA, 1994), *Methods for Assessing the Toxicity of Sediment-associated Contaminants with Estuarine and Marine Amphipods*, and the Southern California Bight Project sediment toxicity testing guidelines (Bight '13 Toxicology Committee, 2013). Test results shall be reported in percent survival, assessed for the presence of persistent toxicity, and the results shall be included in the annual monitoring report. If persistent toxicity is observed at a sediment sampling location, a Phase I Toxicity Identification Evaluation (TIE) shall be conducted as defined in the *Sediment Toxicity Identification (TIE) Phase I, II, and III Guidance Document* (EPA/R-07/080). The Permittee shall submit a Sediment Toxicity TIE Work Plan within 90 days of the effective date of this Order. The work plan shall define persistent toxicity and outline the procedures that will take place if persistent toxicity is observed.

[41] See Attachment A for definition of terms.

[42] The OP pesticdes required to be monitored includes the following: chlorpyrifos, demeton, guthion, malathion, parathion, and diazinon,.

[43] Chlorinated hydrocarbons shall include aldrin, dieldrin, chlordane, heptachlor, heptachlor epoxide, endosulfan I, endosulfan II, and endosulfan sulfate.

3. Regional Benthic Survey

This regional survey is designed to determine 1) the extent, distribution, magnitude and trend of ecological change in soft-bottom benthic habitats within the Southern California Bight and 2) the relationship between biological response and contaminant exposure. The data collected will be used to assess the condition of the sea-floor environment and the health of biological communities in the Bight.

Sampling Design - A regional survey of benthic conditions within the Southern California Bight took place in 2013 (Bight '13). The final survey design was determined cooperatively by participants represented on the Regional Steering Committee. The Permittee provided support to the Bight '13 benthic survey by participating in or performing the following activities:

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

This level of participation was consistent with that provided by the Permittee during the 2008, 2003, 1998, and 1994 Regional Benthic Surveys. The next regional survey is expected to take place in 2018 and the Permittee's level of participation shall be consistent with that provided in previous surveys.

D. Fish and Macroinvertebrate (Trawl and Rig Fishing) Monitoring

1. Local Demersal Fish and Macroinvertebrates Survey

This survey is designed to determine how the health of demersal fish and epibenthic invertebrate communities in the vicinity of the discharge are changing over time. The data collected are used for regular assessment of temporal trends in community structure along an array of sites within the influence of the discharge. Data will also be collected on trash and debris to contribute to the SMBRP's Sources and Loadings program.

Sampling Design - Ten trawl monitoring stations (7 fixed stations including RW- C-1, C-3, C-6, Z-2, Z-3, Z-4, and D-1T, plus one set of 3 random stations; see Table E-4) shall be sampled in winter (January – March) and summer (July – September) for demersal fish and epibenthic invertebrates, using 10-minute otter trawls. Random station sets A (Figure E-5) and B (Figure E-6) shall be sampled in alternate years. Sampling methods and protocols shall follow those described in the most current edition of the Field Operations Manual for Marine Water Column, Benthic, and Trawl Monitoring in Southern California.

All organisms captured shall be identified to the lowest possible taxon and counted. Fish shall be size-classed. Wet-weight biomass shall be estimated for all species. Each individual captured shall be examined for the presence of externally evident signs of disease or anomaly. Estimates of type, quantity, and weight of trash and debris in each trawl shall be made. Community analysis[44] shall be conducted for fish and

[44] Community analysis of fish and macroinvertebrates shall include wet weight of fish and macroinvertebrate species (when combined weight of individuals of one species exceed 0.1 kg), standard length of each individual fish, number of species, number of individuals per species, total numerical abundance per station, number of individuals in each 1-cm size class of each fish species, species abundance per trawl and per

macroinvertebrates at each station. Mean, range, standard deviation, and 95% confidence limits, if appropriate, shall be reported for the values determined in the community analysis. The Permittee shall conduct additional statistical analyses to determine temporal and spatial trends in the marine environment.

2. Regional Demersal Fish and Invertebrate Survey

This regional survey is designed to determine 1) the extent, distribution, magnitude and trend of ecological change in demersal fish and epibenthic invertebrate communities within the Southern California Bight and 2) the relationship between biological response and contaminant exposure. The data collected will be used to assess the condition of the sea-floor environment and health of biological resources in the Bight.

Sampling Design - A regional survey of trawl-caught demersal fish and epibenthic invertebrates within the Southern California Bight took place in 2013 (Bight '13). The final survey design was determined cooperatively by the participants as represented in the Regional Steering Committee. The Permittee provided support to the Bight '13 survey by participating in or performing the following activities:

Participation on the Steering Committee
Participation on relevant Technical Committees (e.g., Information Management, Field Methods & Logistics, Fish & Invertebrates)
Field sampling at sea
Tissue chemical analysis
Data management

This level of participation was consistent with that provided by the Permittee during the 2008, 2003, 1998, and 1994 Regional Benthic Surveys. The next regional survey is expected to occur in 2018 and the Permittee's level of participation shall be consistent with that provided in previous surveys.

3. Bioaccumulation and Seafood Safety Monitoring

a. Local Bioaccumulation Trends Survey

This survey is designed to determine if fish tissue contamination levels in the vicinity of the outfall are changing over time. The data collected are used for regular assessment of temporal trends in hornyhead turbot tissue. The hornyhead turbot is the preferred species; however if the required numbers and sizes of hornyhead turbot are not available, the Permittee may use english sole (*Parophrys vetulus*) as a substitute.

Sampling Design - Three survey sites (Table E-5 shall be sampled annually for the parameters in Table E-13. The composite sample for muscle tissue and the composite sample for liver tissue for a survey site can be taken from any station within that survey site.

station, and biological indices, plus utilize appropriate regression analyses, parametric and nonparametric techniques, and multivariate techniques or other appropriate analytical techniques.

Table E-13. Local Bioaccumulation Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
% moisture	%	Composite of liver tissue from 10 individuals of hornyhead turbot[45]	Annually	[46]
		Composite of muscle tissue from 10 individuals of hornyhead turbot[45]	Annually	[46]
% lipid	%	Composite of liver tissue from 10 individuals of hornyhead turbot[45]	Annually	[46]
		Composite of muscle tissue from 10 individuals of hornyhead turbot[45]	Annually	[46]
Arsenic	µg/kg	Composite of liver tissue from 10 individuals of hornyhead turbot[45]	Annually	[46]
		Composite of muscle tissue from 10 individuals of hornyhead turbot[45]	Annually	[46]
Selenium	µg/kg	Composite of liver tissue from 10 individuals of hornyhead turbot[45]	Annually	[46]
		Composite of muscle tissue from 10 individuals of hornyhead turbot[45]	Annually	[46]
Mercury	µg/kg	Composite of liver tissue from 10 individuals of hornyhead turbot[45]	Annually	[46]
		Composite of muscle tissue from 10 individuals of hornyhead turbot[45]	Annually	[46]
DDT[47]	µg/kg	Composite of liver tissue from 10 individuals of hornyhead turbot[45]	Annually	[46]
		Composite of muscle tissue from 10 individuals of hornyhead turbot[45]	Annually	[46]

[45] The hornyhead turbot is the preferred species; however if the required numbers and sizes of hornyhead turbot are not available, the Permittee may use english sole (*Parophrys vetulus*) as a substitute.

[46] Pollutants shall be analyzed using the analytical methods described in 40 CFR § 136; where no methods are specified for a given pollutant, by methods approved by this Regional Water Board, the State Water Board, and USEPA Region 9. For any pollutant whose effluent limitation is lower than all the MLs specified in Appendix II of the Ocean Plan, the analytical method with the lowest ML must be selected.

[47] See Attachment A for definition of terms.

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
PCBs as Aroclors[47]	µg/kg	Composite of liver tissue from 10 individuals of hornyhead turbot[45]	Annually	[46]
		Composite of muscle tissue from 10 individuals of hornyhead turbot[45]	Annually	[46]
PCBs as Congeners[47]	µg/kg	Composite of liver tissue from 10 individuals of hornyhead turbot[45]	Annually	[46]
		Composite of muscle tissue from 10 individuals of hornyhead turbot[45]	Annually	[46]

b. Local Seafood Safety Survey

This survey is designed to determine 1) if tissue concentrations of contaminants continue to exceed the Advisory Tissue Concentration (ATC) where seafood consumption advisories exist locally, and 2) tissue contaminant trends relative to the ATC in other species and for other contaminants not currently subject to local consumption advisories. The data collected will be used to provide information necessary for the management of local seafood consumption advisories.

Sampling Design - A regionally coordinated survey covering Santa Monica Bay employing the sampling design proposed by the Santa Monica Bay Restoration Commission (SMBRC). During years one, three, and five of this Order/Permit, two survey sites (RW-BA-Z4 and RW-BA-Z5, see Table E-5 and Figure E-7) shall be sampled annually (late summer/early fall)—focusing on a consistent size class of fish—for the parameters in Table E-14. The composite sample for muscle tissue for a survey site can be taken from any station within that survey site.

One species from each of five groups of fish (rockfish, kelp bass, sand bass, surfperches and croakers) shall be sampled from each of the two zones in years one, three and five. For rockfishes, scorpionfish (*Scorpaena guttata*) is the preferred species, followed by bocaccio (*Sebastes paucispinis*) and then by any other abundant and preferably benthic rockfish species. For surfperches, black perch (*Embiotoca jacksoni*) is the preferred species, followed by white sea perch (*Phanerodon furcatus*) and then by walleye surfperch (*Hyperprosopon argenteum*). For croakers, white croaker is the preferred species, followed by black croaker, and then by white seabass. If an insufficient number of croakers are collected and a significant effort has been made to collect the appropriate number of croakers, one of the following alternative species may be substituted: ocean whitefish (*Caulolatilus princeps*), opaleye (*Girella nigricans*), blacksmith (*Chromis punctipinnis*), or pacific mackerel (*Scomber japonicus*).

Sampling should take place within the same season of the year (preferably late summer/early fall) and should focus upon a consistent size class of fish. All tissue samples shall be analyzed for:

Table E-14. Local Seafood Safety Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
% moisture	%	Composite of muscle tissue from 10 individuals of each of 5 species[48]	Annually during years 1, 3 and 5	[49]
% lipid	%	Composite of muscle tissue from 10 individuals of each of 5 species[48]	Annually during years 1, 3 and 5	[49]
Arsenic	μg/kg	Composite of muscle tissue from 10 individuals of each of 5 species[48]	Annually during years 1, 3 and 5	[49]
Selenium	μg/kg	Composite of muscle tissue from 10 individuals of each of 5 species[48]	Annually during years 1, 3 and 5	[49]
Mercury	μg/kg	Composite of muscle tissue from 10 individuals of each of 5 species[48]	Annually during years 1, 3 and 5	[49]
DDT[50]	μg/kg	Composite of muscle tissue from 10 individuals of each of 5 species[48]	Annually during years 1, 3 and 5	[49]
PCBs as Aroclors[50]	μg/kg	Composite of muscle tissue from 10 individuals of each of 5 species[48]	Annually during years 1, 3 and 5	[49]
PCBs as Congeners[50]	μg/kg	Composite of muscle tissue from 10 individuals of each of 5 species[48]	Annually during years 1, 3 and 5	[49]

c. Regional Seafood Safety Survey

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

Sampling Design - A regional survey of edible tissue contaminant levels in fish within the Southern California Bight shall be conducted at least once every ten

[48] Community analysis of fish and macroinvertebrates shall include wet weight of fish and macroinvertebrate species (when combined weight of individuals of one species exceed 0.1 kg), standard length of each individual fish, number of species, number of individuals per species, total numerical abundance per station, number of individuals in each 1-cm size class of each fish species, species abundance per trawl and per station, and biological indices, plus utilize appropriate regression analyses, parametric and nonparametric techniques, and multivariate techniques or other appropriate analytical techniques.

[49] Pollutants shall be analyzed using the analytical methods described in 40 CFR § 136; where no methods are specified for a given pollutant, by methods approved by this Regional Water Board, the State Water Board, and USEPA Region 9. For any pollutant whose effluent limitation is lower than all the MLs specified in Appendix II of the Ocean Plan, the analytical method with the lowest ML must be selected.

[50] See Attachment A for definition of terms.

years, encompassing a broader set of sampling sites and target species than those addressed in the local seafood survey. The objective is to determine whether any unexpected increases or decreases in contaminant levels have occurred in non-target species and/or at unsampled sites. The final survey design may be determined cooperatively by participants represented on a Regional Steering Committee or by the State of California's Office of Environmental Health and Hazard Assessment. The Permittee shall provide support to a Regional Seafood Safety Survey by participating in or performing the following activities:

Participation on a Steering Committee
Participation on relevant Technical Committees (e.g., Information Management, Field Methods & Logistics, and Chemistry)
Field sampling at sea
Tissue chemical analysis
Data management

The Permittee's participation shall be consistent with that provided by the Permittee to similar regional bioaccumulation surveys.

d. Regional Bioaccumulation Survey

This regional survey is designed to determine if fish body burdens within the Southern California Bight are a health risk to higher trophic levels in the marine food web. The data collected will be used to estimate health risk to marine birds, mammals and wildlife from the consumption of fish tissue.

Sampling Design - A regional survey of whole fish body burdens of contaminants within the Southern California Bight took place in 2013 (Bight '13). The final survey design was determined cooperatively by participants represented on the Regional Steering Committee. The Permittee provided support to the Bight '13 Bioaccumulation Survey by participating in or performing the following activities:

Participation on the Steering Committee
Participation on relevant Technical Committees (e.g., Information Management, Field Methods & Logistics, and Chemistry)
Field sampling at sea
Tissue chemical analysis

This level of participation was consistent with that provided by the Permittee to the 2008, 2003, and 1998 Regional Bioaccumulation/Predator Risk Survey. The next regional survey is expected to occur in 2018 and the Permittee's level of participation shall be consistent with that provided in previous surveys.

E. Kelp Bed Monitoring

This regional survey is designed to determine if the extent of kelp beds in the Southern California Bight are changing over time and if the rate of change differs between kelp beds. The data collected in this regional survey will be used to assess status and trends in kelp bed health and spatial extent. The regional nature of the survey will allow the status of kelp beds local to the discharge to be compared to regional trends.

The Permittee shall participate in the Central Region Kelp Survey Consortium (CRKSC) Monitoring Program to conduct regional kelp bed monitoring in Southern California coastal waters. The CRKSC design is based upon quarterly measures of kelp canopy extent using aerial imaging. The Permittee shall provide up to $10,000 per year in financial support to the CRKSC (annual level of support will depend on the number of participants in the program). The Permittee shall participate in the regional management and technical committees

responsible for the development of the survey design and the assessment of kelp bed resources in the Bight.

Participation in this survey provides data to the SMBRC's Kelp Beds program.

IX. OTHER MONITORING REQUIREMENTS

A. Outfall and Diffuser Inspection

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

Each ocean outfall (001 and 002) shall be externally inspected a minimum of once per year. In addition, the 1-Mile Outfall diversion structure including the surge chamber shall be internally inspected a minimum of once per year prior to the beginning of the rainy season. The Permittee shall submit the Standard Operating Procedure (SOP) for inspecting the surge chamber and 1-Mile Outfall diversion structure to the Regional Water Board and the USEPA within 90 days of the effective date of the Order/Permit. Inspections shall include general observations including any collection of debris within the diversion structure surge chamber, and photographic/videographic records of the exterior outfall pipes and adjacent ocean bottom. The pipes shall be visually inspected by a diver, manned submarine, or remotely operated vehicle. A summary report of the inspection findings shall be provided. This written report, augmented with videographic and/or photographic images, will provide a description of the observed condition of the discharge pipes from shallow water to their respective termini.

B. Stormwater Overflow Reporting

The Permittee shall report the frequency of all stormwater overflows from the North, Central, and South Storm drains that result in discharges to the 1-Mile Outfall. A running summary table of the dates and times of each stormwater overflow shall be reported in the annual report. This data will be used to determine the frequency of stormwater discharges to the 1-Mile Outfall.

C. CEC Monitoring Special Study

The Permittee shall propose a special study that evaluates flame retardants and hormone concentrations in the effluent and mass loadings to the receiving water. The Permittee shall submit a Special Study Work Plan for approval by the Regional Water Board Executive Officer and the USEPA Water Division Director within one year of the effective date of this Order and submit the special study report no later than two years before the permit expires.

D. Biosolids and Sludge Management

The Permittee must comply with all Clean Water Act and regulatory requirements of 40 CFR § 257, 258, 501, and 503, including all applicable monitoring, record keeping, and reporting requirements. The Permittee must comply with the requirements in Attachment H of this Order/Permit.

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. The Permittee shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.
2. If there is no discharge during any reporting period, the report shall so state.
3. Each monitoring report shall contain a separate section titled "Summary of Non-compliance" which discusses the compliance record and the corrective actions taken or

planned that may be needed to bring the discharge into full compliance with waste discharge requirements. This section shall clearly list all non-compliance with discharge requirements as well as all excursions of effluent limitations.

4. The Permittee shall inform the Regional Water Board and USEPA well in advance of any proposed construction or maintenance activity, or modification to the POTW that could potentially affect compliance with applicable requirements.

5. The date and time of sampling (as appropriate) shall be reported with the analytical values determined.

6. The laboratory conducting analyses shall be certified by the State Water Resources Control Board, Division of Drinking Water, Environmental Laboratory Accreditation Program (ELAP), in accordance with CWC section 13176, or approved by the Regional Water Board Executive Officer, in consultation with the State Water Board's Quality Assurance Program, and USEPA for that particular parameter and must include quality assurance/quality control (QA/QC) data in their reports. A copy of the laboratory certification shall be provided each time a new/renewal certification is obtained from ELAP and must be submitted with the annual summary report. Each monitoring report must affirm in writing that: "All analyses were conducted at a laboratory certified for such analyses by the California Department of Public Health, or approved by the Regional Water Board Executive Officer (in consultation with the State Water Board's Quality Assurance Program) and USEPA, and in accordance with current USEPA guideline procedures or as specified in this MRP."

7. Non-detect levels reported for the Hyperion effluent are generally higher than effluent limitations or water quality objectives for DDT, chlordane, PCBs and PAHs. Therefore, the Permittee shall strive for lower analytical detection levels than those specified in Appendix II of the 2015 Ocean Plan to facilitate pollutant load quantification for the DDT and PCBs TMDL.

8. Upon request by the Permittee, the Regional Water Board, in consultation with the State Water Board's Quality Assurance Program and/or USEPA, may establish an ML that is not contained in Appendix II of the 2015 Ocean Plan, to be included in the Permittee's NPDES permit, in any of the following situations:

   a. When the pollutant under consideration is not included in Appendix II;

   b. When the Permittee agrees to use a test method that is more sensitive than those specified in 40 CFR § 136 (most recent revision);

   c. When the Permittee agrees to use an ML lower than those listed in Appendix II;

   d. When the Permittee demonstrates that the calibration standard matrix is sufficiently different from that used to establish the ML in Appendix II and proposes an appropriate ML for their matrix; or

   e. When the Permittee uses a method whose quantification practices are not consistent with the definition of an ML. Examples of such methods are the USEPA-approved method 1613 for dioxins and furans, method 1624 for volatile organic substances, and method 1625 for semi-volatile organic substances. In such cases, the Discharger, Regional Water Board, State Water Board and USEPA shall agree on a lowest quantifiable limit, and that limit will substitute for the ML for reporting and compliance determination purposes.

9. Records and reports of marine monitoring surveys conducted to meet receiving water monitoring requirements shall include, at a minimum, the following information:

a. A description of climatic and receiving water characteristics at the time of sampling (weather observations, unusual or abnormal amounts of floating debris, discoloration, wind speed and direction, swell or wave action, time of sampling or measurements, tidal stage and height, etc.).

b. The date, exact place and description of sampling stations, including differences unique to each station (e.g., date, time, station location, depth, and sample type).

c. A list of the individuals participating in field collection of samples or data and description of the sample collection and preservation procedures used in the various surveys.

d. A description of the specific method used for laboratory analysis, the date(s) the analyses were performed and the individuals participating in these analyses.

e. An in-depth discussion of the results of the survey. All tabulations and computations shall be explained.

10. The Permittee shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with this Order/Permit.

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

B. Self-Monitoring Reports (SMRs)

1. The Permittee shall electronically submit SMRs using the State Water Board's California Integrated Water Quality System (CIWQS) Program website (http://www.waterboards.ca.gov/water_issues/programs/ciwqs/). The CIWQS website will provide additional information for SMR submittal in the event there will be a planned service interruption for electronic submittal.

2. The Permittee shall report in the SMR the results for all monitoring specified in this Order/Permit. The Permittee shall submit monthly, quarterly, semiannual, and annual SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order/Permit. SMRs are to include all new monitoring results obtained since the last SMR was submitted. If the Permittee monitors any pollutant more frequently than required by this Order/Permit, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.

3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule, except where specific monitoring periods and reporting dates are required elsewhere in the Order/Permit:

Table E-15. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins	Monitoring Period	SMR Due Date
Continuous	Order/Permit effective date	All	Submit with monthly SMR
Hourly	Order/Permit effective date	Hourly	Submit with monthly SMR
Daily	Order/Permit effective	(Midnight through 11:59 PM) or	Submit with monthly SMR

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

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

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

   a. Sample results greater than or equal to the reported ML shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).

   b. Sample results less than the reported ML, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.

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

   c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.

d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.

5. **Compliance Determination.** Compliance with effluent limitations for reportable pollutants shall be determined using sample reporting protocols defined above and Attachment A of this Order/Permit. For purposes of reporting and administrative enforcement by the Regional Water Board and State Water Board, the Permittee shall be deemed out of compliance with effluent limitations if the concentration of the reportable pollutant in the monitoring sample is greater than the corresponding effluent limitation and greater than or equal to the reported Minimum Level (ML).

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

   a. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.

   b. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

7. The Permittee shall submit SMRs in accordance with the following requirements:

   a. The Permittee shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the Facility is operating in compliance with interim and/or final effluent limitations. The Permittee is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Permittee shall electronically submit the data in a tabular format as an attachment.

   b. The Permittee shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify instances of non-compliance or exceedances of effluent limitations in the Order/Permit; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.

C. Discharge Monitoring Reports (DMRs)

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

D. Other Reports

1. Pretreatment Report

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

2. The Permittee shall report the results of any special studies, chronic toxicity testing, TRE/TIE, Pollutant Minimization Program (PMP), and Pollution Prevention Plan required by Special Provisions – section VI.C. The Permittee shall report the progress in satisfaction of compliance schedule dates specified in Special Provisions – VII.C.8. The Permittee shall submit reports in compliance with SMR reporting requirements described in subsection X.B. above.

3. Hauling Reports

   a. In the event wastes are transported to a different disposal site during the reporting period, the following shall be reported:

      i. Types of wastes and quantity of each type;

      ii. Name and either the address or the State registration number for each hauler of wastes (or the method of transport if other than by hauling); and

      iii. Location of the final point(s) of disposal for each type of wastes.

   b. If no wastes are transported off site during the reporting period, a statement to that effect shall be submitted.

4. Annual Summary Report

   By April 15 of each year, the Permittee shall submit an annual report containing a discussion of the previous year's influent/effluent analytical results (including the average and peak flow for the year), Santa Monica Bay shoreline bacterial monitoring data, and a recycled water progress report describing any updates to the development of increased recycled water production. The annual report shall contain an overview of any plans for upgrades to the treatment plant's collection system, the treatment processes, the outfall system, or any changes that may affect the quality of the final effluent. In addition, a running summary table (including data from the current year and previous years) of the dates and times that the North, South and Central Storm Drain Sumps overflowed into the 1-mile outfall is also required. The Permittee shall submit annual reports to the Regional Water Board and USEPA in accordance with the requirements described in subsection X.B.7. above.

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

   a. A list of the pollutant(s) that triggered reasonable potential;

b. The Basin Plan or CTR criteria that was exceeded for each given pollutant;

c. The concentration of the pollutant(s);

d. The test method used to analyze the sample; and,

e. The date and time of sample collection.

5. Receiving Water Monitoring Report

An annual summary of the receiving water monitoring data collected during each sampling year (January-December) shall be prepared and submitted so that it is received by the Regional Water Board and USEPA by August 1st of the following year. This annual summary shall include a compliance summary and discussion of plant performance over the year as well as a brief discussion of the monitoring results.

A detailed Receiving Water Monitoring Biennial Assessment Report of the data collected during the two previous calendar sampling years (January-December) shall be prepared and submitted so that it is received by the Regional Water Board and USEPA Region IX by August 1st of every other year. This report shall include an annual data summary, a description of the nearfield zone, and an in-depth analysis of the biological and chemical data following recommendations in *Design of 301(h) Monitoring Programs for Municipal Wastewater Discharges to Marine Water* (EPA, November 1982; 430/982-010; pages 74-91) and the Model Monitoring Program Guidance Document (Schiff, K.C., J.S. Brown and S.B. Weisberg, 2001. *Model Monitoring Program for Large Ocean Dischargers in Southern California.* SCCWRP Tech. Rep #357. Southern California Coastal Water Research Project, Westminster, CA. 101 pp.). Data shall be tabulated, summarized, graphed where appropriate, analyzed, interpreted, and generally presented in such a way as to facilitate ready understanding of its significance. Spatial and temporal trends shall be examined and compared. The relationship of physical and chemical parameters shall be evaluated. See also Section VIII of this MRP. All receiving water monitoring data shall be submitted in accordance with the California Environmental Data Exchange Network (CEDEN).

The first assessment report shall be due August 1, 2017, and cover the sampling periods of January-December 2015 and January-December 2016. Subsequent reports shall be due August 1, 2019, and August 1, 2021, to cover sampling periods from January 2017 to December 2018, and January 2019 to December 2020, respectively.

The Permittee shall also update the effluent and receiving water data in the evaluation of ocean degradation, pursuant to 40 C.F.R. 125.123 and in the biological evaluation pursuant to Section 7 of the Endangered Species Act (ESA). These reports shall be submitted with the Permittee's application for renewal of this Permit/Order. EPA will use the information, in whole or in part, to determine whether permit reauthorization is likely to cause unreasonable degradation of the marine environment or is likely to affect the continued existence of species protected by the ESA, or adversely modify their habitat.

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

7. Santa Monica Bay Bacteria Total Maximum Daily Load Reporting Requirement

The City of Los Angeles monitors bacteria at the Santa Monica Bay shoreline stations described in the *Santa Monica Bay Beaches Bacteria TMDLs*, as required under the Los Angeles County MS4 permit (Order No. R4-2012-0175, NPDES No. CAS004001). This

monitoring requirement is necessary to meet the requirements outlined in the *Santa Monica Bay Beaches Bacteria TMDLs*. Although duplicative sampling is not required, the Permittee shall upload monthly and annual Portable Document Format (PDF) reports to the California Integrated Water Quality System (CIWQS) summarizing the *Santa Monica Bay Beaches Bacteria TMDL*-based monitoring results and confirming that the final effluent has not contributed to any shoreline exceedances. The PDF reports shall be submitted concurrently with the NPDES monthly annual reports.

8. Outfall Inspection Report

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

   The first summary report shall be due August 1, 2017, covering the monitoring period from January 2016 – December 2016.

9. Technical Report on Preventive and Contingency Plans

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

   a. Identify the possible sources of accidental loss, untreated waste bypass, and contaminated drainage. Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks, and pipes should be considered.

   b. Evaluate the effectiveness of present facilities and procedures and state when they become operational.

   c. Describe facilities and procedures needed for effective preventive and contingency plans.

   d. Predict the effectiveness of the proposed facilities and procedures and provide an implementation schedule contingent interim and final dates when they will be constructed, implemented, or operational.

10. 1-Mile Outfall Effluent Discharge Reports

    The Permittee shall electronically submit to the Regional Water Board a written summary report of each effluent discharge to the 1-Mile Outfall within 5 days of the completion of the discharge. Each report shall include at a minimum, the rationale for the discharge; the date, time, and duration of the discharge; the flow rate and volume discharged; the type of water discharged; and confirmation that the required monitoring was conducted during the discharge event. In the event that the discharge endangers human health or the environment, the report shall be submitted within 24 hours of the completion of the discharge.

ATTACHMENT F – Fact Sheet

Contents

Tables

ATTACHMENT F – FACT SHEET

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

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

I. PERMIT INFORMATION

The following table summarizes administrative information related to the Facility.

Table F-1. Facility Information

WDID	4B190106002
Discharger	City of Los Angeles
Name of Facility	Hyperion Treatment Plant
Facility Address	12000 Vista del Mar Blvd. Playa del Rey, CA 90293 Los Angeles County
Facility Contact, Title and Phone	Timeyin Dafeta, Plant Manager, (310) 648-5555
Authorized Person to Sign and Submit Reports	Enrique Zaldivar, Director, (213) 485-2210
Mailing Address	12000 Vista del Mar Boulevard, Playa del Rey, CA 90293
Billing Address	12000 Vista del Mar Boulevard, Playa del Rey, CA 90293
Type of Facility	Publicly-Owned Treatment Works
Major or Minor Facility	Major
Threat to Water Quality	1
Complexity	A
Pretreatment Program	Yes
Reclamation Requirements	Producer
Facility Permitted Flow	450 million gallons per day
Facility Design Flow	450 million gallons per day
Watershed	Santa Monica Bay Watershed Management Area
Receiving Water	Pacific Ocean
Receiving Water Type	Ocean waters

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

For the purposes of this Order/Permit, references to the "Discharger" or "Permittee" in applicable federal and State laws, regulations, plans, or policies are held to be equivalent to references to the Discharger herein.

B. The Facility discharges wastewater to the Pacific Ocean, a water of the United States and of the State. The discharge was previously regulated by Order R4-2010-0200 and National Pollutant Discharge Elimination System (NPDES) No. CA0109991, adopted on November 04, 2010, and expired on December 23, 2015 and administratively extended until the adoption of

this Order/Permit. Attachment B provides a map of the area around the Facility. Attachment C1 provides a flow schematic of the Facility.

C. The Permittee filed a Report of Waste Discharge and submitted an application for reissuance of its WDRs and NPDES Order/Permit on June 08, 2015. Supplemental information was requested on July 16, 2015 and received on August 14, 2015. The application was deemed complete on September 17, 2015. A site visit was conducted on January 21, 2016, to observe operations and to collect additional data to develop permit limitations and requirements for waste discharge.

D. The Permittee is authorized to discharge subject to waste discharge requirements in this Order/Permit at the discharge location described in Table 2 of this Order/Permit.

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

F. **Dilution Credits.** On July 16, 2015, in addition to requesting additional information to complete the permit application, the Regional Water Board requested that the Permittee submit a dilution study work plan. This request to update the dilution ratio based on the current effluent water quality and ambient conditions in the Santa Monica Bay was made since the previous dilution ratio was based on data collected more than 30 years ago. In addition, the Regional Water Board requested that the Permittee consider the effect of increased recycled water production at Hyperion since this will impact the flow rate and density, and may impact the overall stratification of the discharge plume. The Permittee submitted the *Hyperion Treatment Plant 5-Mile and 1-Mile Outfall Dilution Study Work Plan* on August 14, 2015. The Regional Water Board and USEPA reviewed the work plan and the Regional Water Board requested that the Permittee address several concerns prior to proceeding. On November 09, 2015, the Permittee and the Regional Water Board discussed the concerns pertaining to the Dilution Study Work Plan and resolved any outstanding issues.

The 5-Mile Outfall Dilution Study, evaluating the mixing zone in accordance with the Ocean Plan, was originally submitted on January 31, 2016. The Regional Water Board requested several modifications on March 03, 2016, and the Permittee resubmitted the 5-Mile Outfall Dilution Study on April 06, 2016. Based on effluent water quality during the last five years and ambient water quality data from the past 10 years in the Santa Monica Bay, a dilution ratio of 96:1 was calculated using the CORMIX mixing zone modeling software with a design flow of 450 MGD and assuming that no currents of sufficient strength influence the initial dilution. The Permittee performed a sensitivity analysis to determine how changes in different parameters may affect the overall dilution ratio. The parameters analyzed include flow rate, temperature, density, seasonal stratification, and tide height. The results of the analysis suggest that the dilution ratio is most sensitive to changes in the flow rate and that higher flow rates typically result in lower dilution. The dilution ratio of 96:1 was the most conservative dilution ratio calculated based on the design capacity of 450 MGD under the most stratified conditions. Regional Water Board staff reviewed the study, consulted with the EPA, and approved the use of the revised dilution ratio of 96:1 for limited applications. The dilution ratio of 96:1 has only been applied to the final effluent limitations for ammonia and chronic toxicity due to anti-backsliding and antidegradation concerns and is discussed in greater detail in section V.D. of the Fact Sheet. All other pollutants have retained the dilution ratio of 84:1 from the previous permit for the 5-Mile Outfall.

The 1-Mile Outfall Dilution Study, evaluating the mixing zone in accordance with the Ocean Plan, was originally submitted on May 25, 2016. Due to the constraints of the CORMIX modeling software, the initial dilution of the 1-Mile Outfall could not be accurately modeled under the required conditions. The model was run using the observed waste flow characteristics and the receiving water density structure; however, the CORMIX model may not be appropriate due to the non-linear stratification profile and the stagnant conditions that occur in the model as a result of the absence of ambient currents. The momentum of the discharge is likely the main driver influencing initial dilution and CORMIX is not able to account for the momentum of the discharge when modeling initial dilution under the stagnant conditions that occurred in the absence of ambient currents. Due to these problems with the results of the 1-Mile Outfall Dilution Study submittal, the Regional Water Board staff did not approve the submittal and proposed to continue to apply the dilution ratio for the 1-Mile Outfall of 13:1. The City of Los Angeles agreed to this approach in an email on July 19, 2016.

II. BACKGROUND - CONSENT DECREE AND LEGAL ISSUES

A. The operations and discharges from the Hyperion Treatment Plant and Hyperion collection system are also regulated under the following enforcement actions:

1. Amended Consent Decree entered on February 19, 1987, in United States and State of California v. City of Los Angeles, No. CV 77-3047-HP (C.D. Cal.);
2. Settlement Agreement, Los Angeles Superior Court Case No. C 665238, dated January 29, 1990, in State of California v. City of Los Angeles; and
3. Regional Water Board Cease and Desist Order 98-073 adopted on September 14, 1998, amended by Order No. 00-128 adopted on August 31, 2000.

B. In 1987, the City entered into an Amended Consent Decree (No. CV 77-3047-HP) with USEPA and the Regional Water Board. The Amended Consent Decree required the City under time schedules to undertake the following:

1. Eliminate the discharge of sewage sludge into the Pacific Ocean from Hyperion Treatment Plant by December 31, 1987 (status: completed);
2. Comply with interim effluent limitations (status: interim limits are not applicable as of January 1, 1999);
3. Complete construction and begin operation of the Hyperion Energy Recovery System by June 30, 1989 (status: completed, but determined to be a technological failure and abandoned);
4. Achieve and thereafter maintain compliance with full secondary treatment at Hyperion Treatment Plant by December 31, 1998 (status: completed and achieved compliance before the deadline);
5. Prepare a storm water pollution reduction study and implement the recommended measures thereof (status: completed).

C. On June 7, 1991, the United States and the State of California filed a supplemental complaint under the existing Consent Decree CV 77-3047-HP (C.D. Cal.) for alleged pretreatment violations against the City. Settlement of the complaint had been concluded and modification to the Consent Decree was entered into court records on August 7, 2000. The settlement requires the City to implement the Westside Water Recycling Extension Project and the Santa Monica Bay Storm Drain Low-Flow Diversion Project. The Santa Monica Urban Runoff Recycling Facility (SMURRF), completed in 2000, is owned and operated by the City of Santa Monica. As the first full-scale, dry-weather runoff recycling facility in the U.S., SMURRF

reclaims dry-weather run-off from storm drains and treats the water for reuse in landscape irrigation and toilet flushing. Since the City of Los Angeles contributes about half of the runoff treated at SMURRF, the City of Los Angeles pays for half of the capital and operations and maintenance costs of SMURRF, pursuant to an agreement with the City of Santa Monica.

D. In October 1987, the California Attorney General, on behalf of the Regional Water Board, filed a complaint with the Los Angeles Superior Court (Case No. C 665238) for civil penalties regarding unpermitted discharges to Discharge Point 001 and raw sewage overflows to surface waters from the Hyperion collection system. A settlement agreement was entered into on January 29, 1990. In lieu of civil penalties, the City was required to implement 23 projects to improve and enhance its collection system and benefit the waters in the Greater Los Angeles Area. Twenty two of the 23 Settlement Agreement projects were completed. The remaining project deals with the Los Angeles Zoo Wastewater Treatment Facility. Two of the original three elements of the Zoo project (construction of the retention basin and pump station for collection of the Zoo's wastewater and diversion to the North Outfall Sewer force main) were completed in 1995. The City proposes to substitute Best Management Practices (BMPs) for the stormwater peripheral drainage system, the third element of the original design concept. After reviewing the study, the Regional Water Board rejected the City's proposal because the proposed BMPs cannot achieve the objectives of the original Settlement Agreement. In a letter dated November 5, 2008, the Regional Water Board approved the Fremont High School Stormwater Improvements Project (Freemont Project) as a substitute for the remaining project, the Los Angeles Zoo Perimeter Drain System (PDS). The Regional Water Board agreed that the PDS has ceased to be necessary due to the completion of the North East interceptor Sewer and East Central Interceptor Sewer. The Freemont Project includes the implementation of the following five BMPs: Stormwater Diversion, Pollutant Settlement, Sediment Forebay, Dry Extended Detention/Retention Basin, and "Smart" (programmable) Irrigation System.

E. Sanitary sewer overflows (SSO) have been a recurring problem in certain areas of the City; in particular, in the South Central area, where sewers do not have adequate capacity to absorb inflow and infiltration that occurs during wet weather. For the entire City, between the wet weather period of February 3, 1998 through May 14, 1998, there were 99 separate sanitary overflows resulting in 44 million gallons of raw sewage released. On September 14, 1998, the Regional Water Board issued Cease and Desist Order (CDO) No. 98-073 to the City, amended by CDO No. 00-128 adopted on August 31, 2000. The CDO requires the City to provide adequate capacity to its wastewater collection system by constructing additional sewer alignments and/or upgrading the existing sewer system over a seven-year period (1998 to 2005). Additionally, on August 5, 2004, the United States, the State of California, Santa Monica Baykeeper, a coalition of community groups and the City of Los Angeles lodged a settlement that would resolve the parties' Clean Water Act and Porter-Cologne Act litigation regarding the City of Los Angeles' SSOs and sewage odors. This settlement underwent public review and comment. The Settlement Agreement and Final Order was filed on October 28, 2004 and entered by the District Court on October 29, 2004, and is now being implemented. The Settlement Agreement and Final Order establish a ten-year program designed to reduce SSOs and sewage odors to the maximum extent feasible.

III. FACILITY DESCRIPTION

A. Description of Wastewater and Biosolids Treatment Controls

The Permittee owns and operates the Hyperion Treatment Plant located at 12000 Vista del Mar Boulevard, Playa del Rey, California. The plant has a 30-day (monthly) average daily dry weather design treatment capacity of 450 million gallons per day (MGD) and a wet weather

peak hydraulic capacity of approximately 850 MGD. Due to antidegradation and anti-backsliding concerns, the mass-based effluent limits continue to be based on a 420 MGD design flow rate. In 2014, the HTP treated an average effluent flow of approximately 230 MGD and approximately 37 MGD of the secondary treated effluent was sent to West Basin's Edward C. Little Water Recycling Plant for advanced treatment and reuse.

The HTP is part of a joint outfall system commonly known as the Hyperion Treatment System, which consists of the wastewater collection system, the Hyperion Treatment Plant and three upstream wastewater treatment plants: Donald C. Tillman Water Reclamation Plant (Tillman WRP), Los Angeles-Glendale Water Reclamation Plant (LAGWRP), Burbank Water Reclamation Plant (Burbank WRP) (owned and operated by a contract city), and their associated outfalls. The Hyperion treatment system collects, treats, and disposes of sewage from the entire city (except the Wilmington-San Pedro area, the strip north of San Pedro, and Watts) and from a number of cities and agencies under contractual agreements. Approximately 85% of the sewage and commercial/industrial wastewater comes from the City of Los Angeles. The remaining 15% comes from the contract cities and agencies. There are approximately four million people in the Hyperion treatment system service area. See Attachment C1 for a map of the Hyperion Treatment System Service Area.

Contract Cities and Agencies

a. Aneta Street Tax Zone
b. Army Reserve Center
c. Army Reserve Training
d. Barrington Post Office
e. City of Beverly Hills
f. City of Burbank
g. California National Guard (Federal Avenue Armory)
h. L.A. County Sanitation District #4 (W. Hollywood)
i. L.A. County Sanitation District #5 (Inglewood)
j. L.A. County Sanitation District #16 (Alhambra, Pasadena, S. Pasadena)
k. L.A. County Sanitation District 27 (Sunset Mesa)
l. City of Culver City
m. City of El Segundo
n. Federal Office Building
o. City of Glendale
p. Karl Holton Camp
q. Las Virgenes Municipal Water District
r. Marina Del Rey
s. City of San Fernando
t. City of Santa Monica
u. Terminal Island Treatment Service Area
v. Triunfo County Sanitation District
w. Universal City
x. Veterans Memorial Park
y. Veterans Administration - Sawtelle
z. West Los Angeles Community College

Sludge from the City's two upstream plants (Tillman WRP and LAGWRP) is returned to the wastewater collection system and flows to the Hyperion Treatment Plant for treatment. Discharges from Tillman WRP and LAGWRP are regulated by Order No. R4-2011-0196 (NPDES No. CA0056227) and Order No. R4-2011-0197 (NPDES No. CA0053953), respectively. In addition, sludge generated from the Burbank WRP is also returned to the City of Burbank sewer system for treatment at the Hyperion Treatment Plant. The influent to the Burbank WRP can be diverted/bypassed to the Hyperion Treatment Plant during periods of emergency. Discharges from the Burbank WRP are regulated under R4-2012-0059 (NPDES No. CA0055531).

The Hyperion Treatment Plant has provided full secondary treatment since December 1998. A process flow diagram of the Hyperion Treatment Plant treatment process is depicted in Attachment C1.

1. Wastewater Processing – consists of preliminary, advanced primary, and secondary treatment.

   a. *Preliminary Treatment* – The headworks removes coarse solids (bar screens) and, sand and silt (grit removal) from wastewater. The headworks consists of eight bar screens (with provisions for two additional bar screens) with ¾-inch openings with a total capacity of over 1000 MGD, a grit capture classifier and pumping equipment, and screen storage hoppers. The Permittee plans to replace the current ¾-inch screens with smaller 3/8-inch screens during this permit cycle.

   b. *Advanced Primary Treatment* – Includes primary sedimentation with coagulation and flocculation using ferric chloride, and surface skimming. The heavier solids settle and are scraped out of the primary sedimentation basin. The lighter solids float to the top and are skimmed off. The primary treatment process consists of four primary batteries consisting of a total of 26 primary sedimentation tanks, skimming system, raw sludge collection mechanism, and pumping apparatus.

   c. *Secondary Treatment* – Includes activated sludge biological treatment using high purity oxygen and secondary clarification. Activated sludge consists of microorganisms that consume non-settleable and dissolved organic contaminants which form a settleable floc. Secondary clarification removes the biological floc from the wastewater and the biological floc becomes part of the sludge. The secondary process is comprised of nine reactor modules each with a design capacity of 50 MGD, a cryogenic facility to produce high purity oxygen, 36 circular clarifiers each with a design capacity of about 30 MGD, and a Return Activated Sludge (RAS) pumping system.

   d. *Service Water facility* - The Hyperion Treatment Plant also contains a Service Water Facility that accepts approximately 11 MGD of secondary-treated effluent to produce service water for internal plant use. Approximately 5 MGD of the secondary effluent is directed through a filtration process and then used to provide cooling water at the on-site cryogenic facility. The spent cooling water from the cryogenic facility is combined with the final effluent before entering the Effluent Pumping Plant for discharge (See attachment C1). The spent cooling water is not expected to negatively impact effluent quality due to the low flow rate compared to total flow and the process is only expected to alter the temperature of the cooling water (no chemical addition). The Permittee is also required to monitor the temperature of the final effluent and this Order/Permit includes a final effluent limitation for temperature of 100°F. The remaining service water is disinfected and used as high pressure effluent for a variety of uses within the Facility such as line flushing, equipment seal water, sluice water at the headworks, chemical dilution, facility wash-down, and clarifier scum break-down. The Service Water Facility provides a lower cost alternative while also reducing the Permittee's reliance on imported potable water.

   e. *Solids Processing* - Solid fractions recovered from wastewater treatment processes include grit, primary screenings, primary sludge and skimming, thickened waste activated sludge, digested sludge screenings and digester cleaning solids. The fine solids (grit, primary screenings, digested sludge screenings, digester cleaning solids) that consist of primarily inorganic materials are hauled away to landfills. The remaining solid fractions (primary sludge and skimmings, thickened waste activated

sludge) are anaerobically digested onsite. The digested solids are screened and dewatered using centrifuges. Since January 1, 2003, the Hyperion Treatment Plant has implemented full thermophilic digestion to generate Class A "EQ" biosolids using 18 anaerobic digesters. The biosolids (treated sewage sludge) are beneficially reused offsite at the Green Acre Farm in Kern County for land application and composting projects. The digester gas is cleaned and a major part of the gas is currently exported to the Los Angeles Department of Water and Power's Scattergood Steam Generating Plant, located immediately adjacent to the Hyperion Treatment Plant. The exported digester gas is used as fuel in the generation of electricity. In return, the generating plant provides steam for digester heating for the Hyperion Treatment Plant. During interruptions in the export of steam from the Scattergood Steam Generation Plant, digester gas can be used as fuel for in-plant boilers that provide steam to heat the anaerobic digesters. Any remaining non-exported digester gas may be flared, if necessary, and is regulated under a flare operation permit from the South Coast Air Quality Management District (AQMD). Attachment B provides a map of the area around the facility.

The Hyperion Treatment Plant has an industrial wastewater Pretreatment Program which is approved by USEPA and the Regional Water Board. The City continues to implement the Pretreatment Program throughout the Hyperion Treatment Plant's service area. However, since Contract Cities and Agencies operate their respective collection systems that are tributary to the City's main trunk lines, some contract cities and agencies also perform certain nondomestic source control activities, e.g., Fats, Oils, and Grease (FOG) program.

The Hyperion Treatment Plant collects and treats in-plant storm water runoff except that, during intense storms, undisinfected storm water overflows may be discharged through Outfall 001. This storm water discharge is included in the State Water Board's NPDES General Permit No. CAS000001 and Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities contained in Order No. 2014-0057-DWQ, adopted on April 01, 2014. The City has developed and implemented a Storm Water Pollution Prevention Plan as required by the general permit.

Currently, the HTP accepts dry weather urban runoff that is diverted from storm drains into the City's collection system year-round via the low flow diversion (LFD) facilities except for storm events that generate greater than 0.1 inch of storm runoff and three days following the storm event, during which time LFD facilities are turned off. The LFD facilities' operation are in accordance with the six-year schedule for bacteria concentration during winter dry weather, contained in the *Santa Monica Bay Beaches Dry-weather Bacteria TMDL* (Resolution No. 02-004 and Resolution No. 2002-022) adopted by the Regional Water Board.

Water Reclamation. Approximately 37 MGD of the HTP's secondary effluent is sent to West Basin's Edward C. Little Water Recycling Plant (West Basin Plant) for advanced treatment and reuse. The West Basin Municipal Water District (West Basin) operates the West Basin Plant in El Segundo. West Basin is contractually entitled to receive up to 70 MGD of secondary effluent from HTP. The West Basin Plant provides tertiary treatment and/or advanced treatment such as microfiltration and reverse osmosis (RO) to the Hyperion secondary effluent to produce Title 22 and high purity recycled water. Title 22 recycled water is used for beneficial irrigation, industrial applications including cooling water and boiler feed water, and other purposes. The RO-treated recycled water is primarily injected into the West Coast Basin Barrier Project to control seawater intrusion.

The waste brine from the West Basin Plant is discharged to the ocean through Hyperion's 5-Mile Outfall (Discharge Point 002) via a waste brine line from the West Basin Plant. Although the waste brine is discharged through Hyperion's outfall, it is regulated under separate waste discharge requirements and NPDES permit.

The Hyperion Treatment Plant ceased the irrigation use of in-plant chlorinated secondary treated wastewater in January 1999. Instead, the plant started using tertiary recycled water from the West Basin Plant in August 1999.

B. Discharge Points and Receiving Waters

The HTP has three ocean outfalls; however, only two outfalls (i.e., 001 and 002) are authorized discharge points for discharging treated wastewater to the Pacific Ocean as described below:

1. Discharge Point 001

   Discharge Point 001 is commonly referred to as the "1-Mile Outfall". It is a 12-foot diameter outfall terminating approximately 5,364 feet (1.6 kilometers (km)) west-southwest of the treatment plant at a depth of approximately 50 feet (15 meters (m)) below the ocean surface (Latitude 33.918333 N, Longitude 118.447500 W). This outfall is only permitted for limited uses as described in the discharge prohibitions in section III of the Order/Permit. The Permittee is also required to notify the Regional Water Board and USEPA in advance of any planned preventative maintenance that results in discharges through Discharge Point 001. In addition to final effluent, the 1-Mile Outfall conveys overflow from the North, Central, and South Storm Drain Sumps, stormwater from the Vista Del Mar storm drains, and stormwater from the south county beach parking lot (See Attachment C2).

2. Discharge Point 002

   Discharge Point 002 is commonly referred to as the "5-Mile Outfall". It is a 12-foot diameter outfall terminating approximately 26,525 feet (8.1 km) west-southwest of the treatment plant at a depth of approximately 187 feet (57m) below the ocean surface. This outfall is located north of Discharge Point 001 and ends in a "Y" shaped diffuser consisting of two 3,840-foot legs (Latitude 33.911967 N, Longitude: 118.521450 W) (North terminus of "Y" structure – Latitude 33.919333 N, Longitude 118.528483 W; South terminus of "Y" structure – Latitude 33.900650 N, Longitude 118.527267 W). This is the only outfall permitted for the routine discharge of undisinfected secondary treated effluent.

3. Outfall No. 003

   This is a 20-inch diameter outfall terminating approximately 35,572 feet (10.8 km) west of the treatment plant, at the head of a submarine canyon at a depth of approximately 300 feet (91m) below the ocean surface (Latitude 33.927000 N, Longitude 118.553000 W). This outfall had been used to discharge sludge. Under the 1987 amended Consent Decree No. CV77-3047-HP, this outfall was deactivated in November 1987 when sludge discharge to the ocean was terminated. Near the head of this outfall, a spool piece was removed and the discharge pipe was blind-flanged to prevent any possible discharge of sewage or sludge into the Pacific Ocean. This outfall has not been maintained since it was taken out of service. Any discharge from this outfall is prohibited.

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

Effluent limitations contained in the existing Order/Permit for discharges from Discharge Points 002 and 001 and representative monitoring data from the term of the previous Order/Permit are as follows:

Table F-2. Historic Effluent Limitations and Monitoring Data at EFF-002 and EFF-001

Parameter	Units	Effluent Limitation in Order No. R4-2010-0200				Monitoring Data (From January 2010 – December 2015)[1]		
		Average Monthly	Average Weekly	Maximum Daily	Instant-aneous Maximum	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
Conventional/Non-Conventional								
BOD	mg/L	30	45	--	--	24	27	70
TSS	mg/L	30	45	--	--	25	29	86
Oil & Grease	mg/L	25	40	--	75	5	5	5
Settleable Solids	mL/L	1.0	1.5	--	3.0	0.1	0.1	0.1
Nitrate-N	mg/L	--	--	--	--	0.7	--	--
Nitrite-N	mg/L	--	--	--	--	2.0	--	--
pH	pH Unit	6.0 – 9.0				6.4	6.7	7.4
Temperature	°F	--	--	--	100	89	91	99
Turbidity	NTU	75	100	--	225	11	12	37
Marine Aquatic Life Protection								
Arsenic	µg/L	--	--	--	--	10.2	--	10.2
Cadmium	µg/L	--	--	--	--	0.38	--	0.38
Chromium (VI)	µg/L	--	--	--	--	<2	--	<2
Copper[2]	µg/L	16	--	140	160	51.4	--	51.4
Lead	µg/L	--	--	--	--	7.60 (DNQ)	--	7.60 (DNQ)
Mercury	µg/L	--	--	--	--	0.013	--	0.013
Nickel	µg/L	--	--	--	--	13.6	--	13.6
Selenium	µg/L	--	--	--	--	3.73	--	3.73
Silver	µg/L	--	--	--	--	0.87	--	0.87
Zinc	µg/L	--	--	--	--	114	--	114
Cyanide	µg/L	--	--	--	--	9	--	9
Total Residual Chlorine[2]	µg/L	28	--	112	840	130	--	130
Ammonia-N[2]	mg/L	8.4	--	34	84	49.9	--	49.9
Phenolic Compounds (non-chlorinated)	µg/L	--	--	--	--	<2.82	--	<2.82

[1] This summary includes the combined monitoring data for Discharge Point 001 and 002.

[2] Indicates effluent limitations and/or water quality data applicable only to Discharge Point 001.

Parameter	Units	Effluent Limitation in Order No. R4-2010-0200				Monitoring Data (From January 2010 – December 2015)[1]		
		Average Monthly	Average Weekly	Maximum Daily	Instant-aneous Maximum	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
Phenolic Compounds (chlorinated)	µg/L	--	--	--	--	0.95 (DNQ)	--	0.95 (DNQ)
Endosulfan	µg/L	--	--	--	--	0.04	--	0.04
Hexachlorocyclohexane (HCH)	µg/L	--	--	--	--	<0.005	--	<0.005
Endrin	µg/L	--	--	--	--	<0.007	--	<0.007
Acute Toxicity[3]	TUa	--	--	2.8	--	3.7	--	3.7
Chronic Toxicity[2]	TUc	--	--	13[4]	--	27	--	27
Chronic Toxicity[3]	TUc	--	--	84	--	83.3	--	83.3
Radioactivity								
Gross Alpha	pCi/L	--	--	--	--	14.6		14.6
Gross Beta	pCi/L	--	--	--	--	14.1		14.1
Human Health Toxicants – Non Carcinogens								
Acrolein	µg/L	--	--	--	--	<1.62	--	<1.62
Antimony	µg/L	--	--	--	--	3.02	--	3.02
Bis (2-Chloroethoxy) methane	µg/L	--	--	--	--	<0.16	--	<0.16
Bis (2-Chloroisopropyl) ether	µg/L	--	--	--	--	<0.33	--	<0.33
Chlorobenzene	µg/L	--	--	--	--	<0.15	--	<0.15
Chromium III	µg/L	--	--	--	--	5.24 (DNQ)	--	5.24 (DNQ)
Di-n-Butyl Phthalate	µg/L	--	--	--	--	1.61 (DNQ)	--	1.61 (DNQ)
Dichlorobenzenes	µg/L	--	--	--	--	0.25 (DNQ)	--	0.25 (DNQ)
Diethyl phthalate	µg/L	--	--	--	--	<0.62	--	<0.62
Dimethyl phthalate	µg/L	--	--	--	--	<0.64	--	<0.64
4,6-dinitro-2-methylphenol	µg/L	--	--	--	--	<1.67	--	<1.67
2,4-dinitrophenol	µg/L	--	--	--	--	<2.82	--	<2.82
Ethylbenzene	µg/L	--	--	--	--	<0.16	--	<0.16
Fluoranthene	µg/L	--	--	--	--	<0.04	--	<0.04
Hexachlorocyclopentadiene	µg/L	--	--	--	--	<3.83	--	<3.83
Nitrobenzene	µg/L	--	--	--	--	0.52 (DNQ)	--	0.52 (DNQ)
Thallium	µg/L	--	--	--	--	1.01 (DNQ)	--	1.01 (DNQ)

[3] Indicates effluent limitation and/or water quality data applicable only to Discharge Point 002.

[4] Resolution No. R15-008 granted an interim maximum daily final effluent limitation of 27 TUc was for a 5-week period during the 2015 Effluent Pumping Plant Header Replacement Project.

Parameter	Units	Effluent Limitation in Order No. R4-2010-0200				Monitoring Data (From January 2010 – December 2015)[1]		
		Average Monthly	Average Weekly	Maximum Daily	Instant-aneous Maximum	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
Toluene	µg/L	--	--	--	--	1.33 (DNQ)	--	1.33 (DNQ)
Tributyltin	µg/L	--	--	--	--	1.6 (DNQ)	--	1.6 (DNQ)
1,1,1-trichloroethane	µg/L	--	--	--	--	<0.2	--	<0.2
Human Health Toxicants - Carcinogens								
Acrylonitrile	µg/L	--	--	--	--	<0.27	--	<0.27
Aldrin	µg/L	--	--	--	--	<0.004	--	<0.004
Benzene	µg/L	--	--	--	--	<0.22	--	<0.22
Benzidine	µg/L	--	--	--	--	<5	--	<5
Beryllium[2]	µg/L	0.46	--	--	--	0.05 (DNQ)	--	0.05 (DNQ)
Bis (2-Chloroethyl) ether	µg/L	--	--	--	--	<0.18	--	<0.18
Bis(2-ethylhexyl)-phthalate	µg/L	--	--	--	--	2 (DNQ)	--	2 (DNQ)
Carbon tetrachloride	µg/L	--	--	--	--	<0.27	--	<0.27
Chlordane[2]	µg/L	0.0003	--	--	--	<0.09	--	<0.09
Chlordane[3]	µg/L	0.0019	--	--	--	<0.09	--	<0.09
Chlorodibromomethane	µg/L	--	--	--	--	1.59 (DNQ)	--	1.59 (DNQ)
Chloroform	µg/L	--	--	--	--	5.07	--	5.07
DDT[2]	µg/L	0.0024	--	--	--	<0.007	--	<0.007
DDT[3]	µg/L	0.014	--	--	--	<0.007	--	<0.007
1,4-Dichlorobenzene	µg/L	--	--	--	--	<0.35	--	<0.35
3,3'-Dichlorobenzidine	µg/L	--	--	--	--	<2.78	--	<2.78
1,2-dichloroethane	µg/L	--	--	--	--	<0.08	--	<0.08
1,1-dichloroethylene	µg/L	--	--	--	--	<0.2	--	<0.2
Dichlorobromomethane	µg/L	--	--	--	--	1 (DNQ)	--	1 (DNQ)
Dichloromethane	µg/L	--	--	--	--	1.96 (DNQ)	--	1.96 (DNQ)
1,3-dichloropropene	µg/L	--	--	--	--	<0.15	--	<0.15
Dieldrin	µg/L	--	--	--	--	<0.005	--	<0.005
2,4-Dinitrotolulene	µg/L	--	--	--	--	<0.21	--	<0.21
1,2-Diphenylhydrazine	µg/L	--	--	--	--	<0.17	--	<0.17
Halomethanes	µg/L	--	--	--	--	0.94 (DNQ)	--	0.94 (DNQ)
Heptachlor	µg/L	--	--	--	--	<0.008	--	<0.008
Heptachlor epoxide	µg/L	--	--	--	--	<0.006	--	<0.006
Hexachlorobenzene	µg/L	--	--	--	--	<0.21	--	<0.21
Hexachlorobutadiene	µg/L	--	--	--	--	<0.57	--	<0.57

Parameter	Units	Effluent Limitation in Order No. R4-2010-0200				Monitoring Data (From January 2010 – December 2015)[1]		
		Average Monthly	Average Weekly	Maximum Daily	Instant-aneous Maximum	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
Hexachloroethane	µg/L	--	--	--	--	<0.27	--	<0.27
Isophorone	µg/L	--	--	--	--	0.62 (DNQ)	--	0.62 (DNQ)
N-Nitrosodimethylamine	µg/L	--	--	--	--	1.61 (DNQ)	--	1.61 (DNQ)
N-Nitrosodi-N-propylamine	µg/L	--	--	--	--	<0.18	--	<0.18
N-Nitrosodiphenylamine	µg/L	--	--	--	--	<0.24	--	<0.24
Polycyclic Aromatic Hydrocarbons (PAHs)[2]	µg/L	0.12	--	--	--	0.05 (DNQ)	--	0.05 (DNQ)
Polychlorinated Biphenyls (PCBs)[2]	µg/L	0.0030	--	--	--	<0.49	--	<0.49
PCBs[3]	µg/L	0.002	--	--	--	<0.49	--	<0.49
TCDD equivalents[2]	pg/L	0.055	--	--	--	<110	--	<110
TCDD equivalents[3]	pg/L	0.33	--	--	--	<110	--	<110
1,1,2,2-tetrachloroethane	µg/L	--	--	--	--	<0.14	--	<0.14
Tetrachloroethylene	µg/L	--	--	--	--	1.84 (DNQ)	--	1.84 (DNQ)
Toxaphene	µg/L	--	--	--	--	<0.1	--	<0.1
Trichloroethylene	µg/L	--	--	--	--	<0.16	--	<0.16
1,1,2-trichloroethane	µg/L	--	--	--	--	<0.1	--	<0.1
2,4,6-Trichlorophenol	µg/L	--	--	--	--	0.12 (DNQ)	--	0.12 (DNQ)
Vinyl chloride	µg/L	--	--	--	--	<0.26	--	<0.26

D. Compliance Summary

1-Mile Outfall Monitoring

During the planned maintenance of the 1-Mile Outfall gates between January 2010 and April 2015, secondary effluent was discharged through Discharge Point 001 on the following dates: February 24, 2010, November 02, 2010, September 21, 2011, January 23, 2013, May 15, 2013, November 20, 2013, January 09, 2014, April 30, 2014, October 09, 2014, and April 29, 2015. The Permittee conducted the necessary notifications to the Regional Water Board and USEPA and conducted the required monitoring on most days except as described below.

On September 21, 2011, there was a scheduled testing of the diversion gates for Discharge Point 001. Staff was prepared to conduct the required monitoring; however, there was a malfunction of the gates and only one of the three gates opened. The monitoring staff was notified that the gates failed to open so the additional monitoring required when there is discharge to the 1-Mile Outfall was aborted. Although monitoring was aborted, one of the gates leaked 4.3 MGD from the 1-Mile Outfall for approximately 12 hours. No monitoring was conducted.

1-Mile Outfall 6-Week Diversion

On September 10, 2015, the Regional Water Board adopted Resolution No. R15-008 to permit the Discharger to temporarily bypass disinfected secondary effluent from the 5-Mile Outfall to the 1-Mile Outfall at the Hyperion Treatment Plant for a total of 6 weeks. On September 18, 2015, the USEPA conditionally approved a temporary bypass from the 5-Mile Outfall. Approval of this resolution was necessary for the Permittee to repair or replace the Effluent Pumping Plant (EPP) piping and the 120-inch gravity valve. A complete shutdown of the 5-Mile Outfall and effluent pumping system was required to perform the work.

On September 15, 2015, the Permittee executed an unplanned partial diversion of chlorinated secondary effluent from the HTP to the 1-Mile Outfall while concurrently discharging to the 5-Mile Outfall due to heavy rain and high influent flows. The effluent pumps could not be used to handle the excessive flow due to the discharge valves leaking from two pumps that were out of service. With the 5-Mile Outfall still in service and only using gravity flow, the excess flow was diverted to the 1-Mile Outfall from 10:13 am to 3:13 pm. The Permittee notified the Regional Water Board and the Governor's Office of Emergency Services.

On the afternoon and evening of September 15, 2015, tampon applicators were first noticed on the beach by supporters of Heal the Bay and in the water by the Permittee in a boat in the vicinity of the 1-Mile Outfall.

On September 21, 2015, HTP executed a planned, full diversion (EPP diversion) of chlorinated secondary effluent from the 5-Mile Outfall to the 1-Mile Outfall to initiate the Effluent Pumping Plant Header Replacement Project (EPP Project) as described in Resolution R15-008.

Heal the Bay reported that a "concerning number of plastic tampon applicators and other sanitary trash" appeared along the high tide line at Dockweiler Beach the morning of September 23, 2015. The City of Los Angeles mobilized to clean the beach and the County of Los Angeles Department of Public Health declared an official beach closure at Dockweiler Beach from Ballona Creek to Grand Avenue at 9 pm on Wednesday, September 23, 2015. As the Permittee began an investigation into the source of the floating debris in the ocean and the debris that washed up on shore, the Permittee began taking precautionary measures to minimize any potential for additional debris from exiting the Hyperion Treatment Plant by installing a net over the 1-Mile Outfall and screens in the secondary effluent channel.

The Regional Water Board issued an order for a technical report under Water Code section 13267 to the Permittee on October 07, 2015, requiring additional information necessary to determine the cause of the release of the debris from the treatment plant and to determine effective preventative measures. The Permittee submitted a *Technical Report on the Unauthorized Discharge of Materials of Sewage Origin into the Pacific Ocean* on January 04, 2016. The technical report provided substantial evidence that the release of these materials of sewage origin was due to a raw sewage spill dating back to 2005. Rather than being flushed out of the in-plant storm drain system at the time of the spill, debris from the sewage spill remained in the storm drain, the surge chamber, and the 1-Mile Outfall until finally being flushed during the discharge from the 1-Mile Outfall in 2015.

Sanitary Sewer Overflows (SSO) and Spills

The Permittee has reported a number of spills and/or overflows in the HTP Service area during the previous permit term. Between May 2010 and December 2015, the Permittee reported that there were a total of 379 SSOs and spills in the Hyperion service area (totaling 852,976 gallons of spill, of which 464,091 gallons were recovered. Appropriate enforcement is being evaluated by the Regional Water Board and USEPA.

Acute Toxicity

The monthly acute toxicity test initiated on April 10, 2012, exceeded the acute toxicity permit limit of 2.8 TUc, and accelerated testing was initiated. The first accelerated test initiated on April 24, 2012, also exceeded the permit limit. Accelerated testing continued; however, the second and third accelerated tests did not result in an exceedance of the permit limit. The fourth accelerated test was initiated on June 5, 2012, exceeded the acute toxicity permit limit, and triggered a TRE/TIE. The fifth accelerated test and the first initial TRE/TIE study was initiated on June 19, 2012, and exceeded the permit limit. The results of the TRE/TIE indicated that ammonia was likely the source of the toxicity in the sample. The sixth, seventh, eighth, ninth, and tenth accelerated tests and TRE/TIE studies conducted in July, August, and September 2012 were all in compliance with the acute toxicity limit. The eleventh accelerated test and TRE/TIE study was initiated on October 02, 2012, and the effluent test results were compliant with the acute toxicity permit limit. This was the sixth consecutive accelerated test result within compliance; therefore, accelerated monitoring was discontinued and routine monitoring resumed.

The samples used throughout the accelerated monitoring and TRE/TIE studies were evaluated for un-ionized ammonia (toxic form of ammonia). The results indicated that the samples with the highest unionized ammonia concentrations also exceeded the acute toxicity permit limit. The samples that did not exceed the permit limit for acute toxicity also had lower concentrations of unionized ammonia. In addition, the TRE/TIE investigation suggests that ammonia was the cause of toxicity because the toxicity was removed using the CO_2 and zeolite manipulations.

On February 04, 2014, the monthly acute toxicity test was initiated and exceeded the final effluent limitation for acute toxicity. Accelerated testing was initiated on February 18, 2014; however, the first test was invalid due to failure to meet the Test Acceptability Criteria. The second, third, and fourth accelerated tests were initiated in March and April 2014, and all three tests were in compliance with the acute toxicity limit. The fifth and sixth accelerated tests were initiated on April 15, 2014, and April 29, 2014, and both exceeded the permit limit. Two initial TRE/TIE studies were conducted in May and June 2014, and the results suggest that ammonia was the primary toxicant in the Hyperion effluent. Four additional accelerated tests were conducted in July and August, and all four were in compliance with the permit limits. Since this was the sixth consecutive test within compliance of the acute toxicity limitation, accelerated monitoring was discontinued and routine compliance monitoring resumed.

Table F-3 lists the Hyperion Treatment Plant's violations of subdivisions (h) and (i) of California Water Code section 13385, from January 2010 to January 2015. For additional information about the alleged violations listed in the table, please refer to the SWRCB Public Reports webpage http://www.waterboards.ca.gov/water_issues/programs/ciwqs/publicreports.shtml; choose the "MMP Report" link located under the "Enforcement Reports" category. Once in the Public Reports search page, enter the search criteria that correspond to the Hyperion Treatment Plant to access the list of violations.

Table F-3. List of Violations

Violation ID	Occurrence Date	Mandatory Minimum Penalty (MMP) Action	Violation Description
927808	04/23/12	Pending	Acute Toxicity Exceedance
927809	04/09/12	Pending	Acute Toxicity Exceedance
933412	06/04/12	Pending	Acute Toxicity Exceedance
933414	06/17/12	Pending	Acute Toxicity Exceedance
970087	04/28/14	Pending	Acute Toxicity Exceedance
970088	04/14/14	Pending	Acute toxicity Exceedance
985115	02/03/14	Pending	Acute Toxicity Exceedance

E. Discharge Plume

The City has conducted offshore water quality monitoring in Santa Monica Bay since 1987.

The movement of the Hyperion Treatment Plant's wastewater plume is dictated by the depth of the thermocline or stratification and the direction and strength of highly variable currents in Santa Monica Bay. Under typical conditions, the plume is detected within 2 km (6,562 feet) of the outfall terminus of Discharge Point 002, although it has been detected as far as 8 km (2,6247 feet) away from the outfall. Also, the plume has almost always been detected below the thermocline at a depth ranging from 10 m (33 feet) to 55 m (180 feet). Infrequently, during winter storm conditions, the plume has been detected at the surface in the vicinity of the outfall. On rare occasions, it has been impossible to detect the plume.

As the waters of Santa Monica Bay approach the shore, the thermocline intersects the rising sea bottom. This point is typically 1000 m (3,281 feet) or more offshore and is the theoretical limit of the approach of the plume to the shoreline. The plume has never been detected less than 2.5 km (8,202 feet) from shore, at the 45 m (148 feet) depth contour.

The City of Los Angeles has conducted shoreline and nearshore/inshore water quality monitoring in Santa Monica Bay since the late 1940s. The monitoring results indicated that effluent from the 5-Mile Outfall does not reach the shoreline and that elevated bacterial counts are associated with runoff from storm drains and discharges from piers. In addition, the 1-Mile Outfall is not expected to impact the shoreline bacteria counts because final effluent is disinfected prior to being discharged from the 1-Mile Outfall, the 1-Mile Outfall is infrequently used, and the volume of final effluent discharged is minimal. The Permittee has recently completed its 2015 Effluent Pumping Plant Header Replacement Project during which the Permittee needed to discharge to the 1-Mile Outfall for a total of 6 weeks. The Permittee is currently compiling and reviewing the data collected during this project, and will submit a final report on April 26, 2017.

Shoreline monitoring requirements have been transferred to the monitoring program of the municipal storm water for Los Angeles County (Order No. R4-2012-0175, NPDES No.

CAS004001) adopted by this Regional Water Board on November 08, 2012, and subsequently amended on June 16, 2015.

F. Receiving Water Description

The receiving water into which Hyperion Treatment Plant discharges is part of the Santa Monica Bay watershed. The watershed is home to unique wetland, sand dune, and open-ocean ecosystems that support a rich diversity of wildlife and serve as migration stopovers for marine mammals and birds. The Bay and its beaches are invaluable recreational resources and important sources of revenue for the region. The Bay is heavily used for fishing, swimming, surfing, diving, and other activities classified as water contact and noncontact recreation.

Over the years, the beneficial uses of the Bay have been impaired to various degrees due to pollution, resource over-exploitation, and habitat destruction. The primary problems of concern include acute health risk associated with swimming in runoff-contaminated surf zone waters, chronic (cancer) risk associated with consumption of certain sport fish species in areas impacted by DDT and PCB contamination, pollutant loading from point sources, urban runoff, and other nonpoint sources in light of projected population increases and their impacts on marine ecosystem, health of fishery resources, and degradation of natural habitats, and population decline of key species. (Santa Monica Bay Restoration Commission. 2004. “State of the Bay: 2004 Progress and Challenges”, 45 pages; Santa Monica Bay Restoration Project. 1998. “Taking the Pulse of the Bay - State of the Bay 1998”).

Section 403 of the Clean Water Act (CWA) requires dischargers to comply with specific Ocean Discharge Criteria established to address impacts on marine resources, including fisheries and endangered species. The City of Los Angeles submitted a report on May 29, 2003, to demonstrate compliance with the section 403 Ocean Discharge Criteria. Based upon an evaluation of previous receiving water monitoring data and reports from other agencies, the City concluded that no unreasonable degradation of the marine environment is occurring with the current discharge receiving full secondary treatment and compliance with applicable water quality standards achieved.

G. Planned Changes

The Digestor Gas Utilization Project (DGUP) is currently under construction and is scheduled for start-up by January 2017. The DGUP will fully utilize digester gas to generate ample electricity to serve the current needs of HTP (approximately 20 MW), while concurrently producing steam for use in the biosolids digestion process. The Service Water Facility will provide approximately 25 MGD of cooling water for the DGUP and the spent cooling water will be combined with the final effluent before entering the Effluent Pumping Plant for discharge (See Attachment C1). The spent cooling water is not expected to negatively impact effluent quality due to the low flow rate compared to total flow and the process is only expected to alter the temperature of the cooling water (no chemical addition). In addition, the Permittee is required to monitor the temperature of the final effluent and this Order/Permit contains a final effluent limitation for temperature of 100°F.

The Permittee is also expanding its recycled water system and plans on submitting a Notice of Intent to receive coverage under the State Water Resources Control Board's General Water Reclamation Requirements for Recycled Water Use (Order WQ 2016-0068-DDW). As the Permittee increases recycled water production at Hyperion and its upstream treatment plants, pollutants in the final effluent may become more concentrated. An increase in pollutant concentration is a concern to the Regional Water Board and USEPA because of the potential impact this may of on the beneficial uses of the receiving water. Section VII.C.2.a of this Order requires the Permittee to conduct a special study to evaluate the projected effect of water conservation and recycling on effluent acute toxicity and ammonia.

IV. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

A. Legal Authorities

This Order/Permit is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and Chapter 5.5, Division 7 of the California Water Code (CWC) (commencing with Section 13370). It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order/Permit also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, Chapter 4, Division 7 of the California Water Code (commencing with Section 13260). Although Discharge Point 002 is beyond the limit of State-regulated ocean waters, effluent plume migration into State waters warrants joint regulation of the discharge by USEPA and the Regional Water Board.

B. California Environmental Quality Act (CEQA)

Under CWC section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code 21100-21177.

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

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

Table F-4. Basin Plan Beneficial Uses

Water Body Designation	Receiving Water Name	Beneficial Use(s)
180701040601 (Formerly Hydro. Unit No. 405.12)	Dockweiler Beach	Existing: Industrial service supply (IND), navigation (NAV), water contact recreation (REC-1), non-contact water recreation (REC-2), commercial and sport fishing (COMM), marine habitat (MAR), and wildlife habitat (WILD). Potential: Spawning, reproduction, and/or early development (SPWN).
180701040601 (Formerly Hydro. Unit No. 405.12)	Pacific Ocean Nearshore Zone	Existing: IND, NAV, REC-1, REC-2, COMM, MAR, WILD, preservation of biological habitats (BIOL), RARE, migration of aquatic organisms (MIGR), SPWN, and SHELL. Potential: None.
180701040601 (Formerly Hydro. Unit No. 405.12)	Pacific Ocean Offshore Zone	Existing: IND, NAV, REC-1, REC-2, COMM, MAR, WILD, RARE, MIGR, SPWN, and SHELL. Potential: None.

2. **California Thermal Plan.** In 1972, the State Water Board adopted the Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California (hereinafter Thermal Plan), as amended. This plan contains temperature objectives for coastal and inland surface waters. Requirements of this Order/Permit implement the Thermal Plan.

3. **California Ocean Plan.** In 1972, the State Water Board adopted the *Water Quality Control Plan for Ocean Waters of California, California Ocean Plan* (hereinafter Ocean Plan), as amended. The latest amendment became effective on January 28, 2016. The Ocean Plan is applicable, in its entirety, to point source discharges to the ocean waters of the State. Ocean Plan beneficial uses applicable to ocean waters of the State are shown in Table F-5.

Table F-5. Ocean Plan Beneficial Uses

Discharge Point	Receiving Water	Beneficial Use(s)
001, 002	Pacific Ocean	IND, REC-1, REC-2, NAV, COMM, mariculture, preservation and enhancement of designated Area of Special Biological Significance (ASBS), RARE, MAR, MIGR, SPWN, and SHELL.

To protect the beneficial uses in ocean water, the Ocean Plan establishes water quality objectives and a program implementation. Requirements of this Order/Permit implement the 2015 Ocean Plan.

4. **Santa Monica Bay Restoration Plan**. The Hyperion Treatment Plant discharges to Santa Monica Bay, one of the most heavily used recreational areas in California. Recognizing the importance of the Bay as a national resource, the State of California and USEPA nominated Santa Monica Bay in the National Estuary Program, and Congress subsequently included Santa Monica Bay in the program. The USEPA, with support from the Santa Monica Bay Restoration Commission (formerly the Santa Monica

Bay Restoration Project) developed the Bay Restoration Plan (BRP), which serves as a blueprint for restoring and enhancing the Bay. The Regional Water Board plays a lead role in the implementation of the BRP through adoption and enforcement of NPDES permits. Three of the proposed priorities of the BRP are reduction of pollutants of concern at the source (including municipal wastewater treatment plants), attainment of full secondary treatment at the City of Los Angeles' Hyperion Treatment Plant and the County Sanitation Districts of Los Angeles County's Joint Water Pollution Control Plant, and implementation of the mass emission approach for discharges of pollutants to the Bay.

5. **Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards become effective for CWA purposes (40 CFR § 131.21, 65 Federal Register 24641 (April 27, 2000)). Under the revised regulation (also known as the Alaska Rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.

6. **Stringency of Requirements for Individual Pollutants.** This Order/Permit contains restrictions on individual pollutants that are no more stringent than required by the federal CWA and California Ocean Plan. Individual pollutant restrictions consist of technology-based effluent limitations (TBELs) and water quality-based effluent limitations (WQBELs). The TBELs consist of restrictions on BOD, TSS, pH, and percent removal of BOD and TSS, which implement the minimum applicable federal technology-based requirements for POTWs. In addition, effluent limitations more stringent than federal technology-based requirements consisting of restrictions on oil and grease, settleable solids, and turbidity are necessary to implement State treatment standards in Table 2 of the 2015 Ocean Plan. This Order/Permit's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

   WQBELs for chronic toxicity, PCBs, copper, total residual chlorine, ammonia, DDT, and PAHs, have been scientifically derived to implement WQOs that protect beneficial uses. Both the beneficial uses and the WQOs have been approved pursuant to federal law and are the applicable federal water quality standards. All beneficial uses and WQOs contained in the Basin Plan and the Ocean Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any WQOs and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to 40 CFR § 131.21(c)(1). Collectively, this Order/Permit's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

7. **Antidegradation Policy.**

   Federal regulation 40 CFR § 131.12 requires that state water quality standards include an antidegradation policy consistent with the federal antidegradation policy. The State Water Board established California's antidegradation policy in State Water Board Resolution 68-16 ("Statement of Policy with Respect to Maintaining the Quality of the Waters of the State"). Resolution 68-16 is deemed to incorporate the federal antidegradation policy where the federal policy applies under federal law. Resolution 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements,

and incorporates by reference, both the state and federal antidegradation policies. The discharges permitted in this Order/Permit are consistent with the antidegradation provisions of 40 CFR § 131.12 and State Water Board Resolution 68-16 and is described in further detail in Section V.D.2. of this Fact Sheet.

8. **Anti-Backsliding Requirements.** CWA sections 402(o) and 303(d), and 40 CFR § 122.44(l) restrict backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed. The applicability of these requirements to this Order/Permit is discussed in detail in section V.D.1. of this Fact Sheet.

   In conformance with reasonable potential analysis procedures identified in State Water Board and USEPA documents, effluent limitations for some constituents are not carried forward in this Order/Permit because there is not presently reasonable potential for the constituents to cause or contribute to an exceedance of water quality standards. Without reasonable potential, there is no longer a need to maintain prior WQBELs under NPDES regulations, antibacksliding provisions, and antidegradation policies. The accompanying monitoring and reporting program requires continued data collection and if monitoring data show reasonable potential for a constituent to cause or contribute to an exceedance of water quality standards, the Order/Permit will be reopened to incorporate WQBELs. Such an approach ensures that the discharge will adequately protect water quality standards for designated beneficial uses and conform with antidegradation policies and antibacksliding provisions.

9. **Endangered Species Act (ESA) Requirements.** This Order/Permit does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California ESA (Fish and Wildlife Code, sections 2050 to 2097) or the Federal ESA (16 USC sections 1531 to 1544). EPA makes a “may affect, not likely to adversely affect” determination for the southern California steelhead, North American green sturgeon, the scalloped hammerhead shark, blue whale, fin whale, humpback whale, gray whale, leatherback turtle, loggerhead turtle, white abalone, and olive ridley sea turtle. EPA makes a “no effect” determination for the remaining listed species under the National Marine Fisheries Service and the U.S. Fish and Wildlife Service jurisdictions. These effect determinations are explained in the biological evaluation. EPA is consulting with the United States Fish and Wildlife Service and the National Marine Fisheries Service. This Order/Permit requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state. The Permittee is responsible for meeting all requirements of the applicable ESA.

10. **Monitoring and Reporting.** 40 CFR § 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. CWC sections 13267 and 13383 authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP) establishes monitoring and reporting requirements to implement federal and state requirements. This MRP is provided in Attachment E.

11. **Federal Permit Renewal Contingency.** The renewal of the Permittee’s permit by USEPA is contingent upon determination by the U.S. Fish and Wildlife Service and NOAA National Marine Fisheries Service that the proposed discharge is consistent with the: (1) federal Endangered Species Act; (2) the Magnuson-Stevens Fishery Conservation and Management Act (MSA); and (3) the Regional Water Board’s

certification/concurrence that the discharge will comply with applicable State water quality standards.

USEPA's reissuance of NPDES No. CA0109991 to the City of Los Angeles for Hyperion Treatment Plant is subject to requirements of the MSA and ESA. In November 2015, USEPA requested updated information related to: (1) essential fish habitat and managed and associated species, and (2) threatened and endangered species and their designated critical habitats, in the vicinity of the Hyperion outfalls from the National Marine Fisheries Service and the U.S. Fish and Wildlife Service (collectively, the Services). USEPA may decide that changes to this permit are warranted based on the results of the completed consultation and a reopener provision to this effect has been included in the Order/Permit.

Joint issuance of an NPDES permit which incorporates both federal requirements and State waste discharge requirements will serve as the State's concurrence that the discharge complied with State water quality standards. The California Coastal Commission has indicated that it is not necessary to obtain a consistency certification pursuant to the Coastal Zone Management Act for the issuance of a federal NPDES permit containing secondary treatment standards.

12. **Water Recycling.** In accordance with statewide policies concerning water reclamation[5], this Regional Water Board strongly encourages, wherever practicable, water recycling, water conservation, and use of storm water and dry-weather urban runoff. The Permittee shall investigate the feasibility of recycling, conservation, and/or alternative disposal methods of wastewater (such as groundwater injection), and/or use of storm water and dry-weather urban runoff.

13. **Standard and Special Provisions.** Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR § 122.41, and additional conditions applicable to POTWs in accordance with 40 CFR § 122.42, are provided in Attachment D. The Regional Water Board and USEPA have also included in this Order/Permit Special Provisions applicable to the Permittee. The rationale for the Special Provisions contained in this Order/Permit is provided in the attached Fact Sheet.

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

On June 28, 2007, USEPA approved California's 2006 CWA section 303(d) List of Water Quality Limited Segments (303(d) list). The 303(d) list identifies water bodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations by point sources (water quality limited bodies). The State Water Board proposed the California 2008-2010 Integrated Report from a compilation of the adopted Regional Water Boards' Integrated Reports containing 303(d) List of Impaired Waters and 305(b) Reports following recommendations from the Regional Water Boards and information solicited from the public and other interested parties. The Regional Water Boards' Integrated Reports were used to revise their 2006 303(d) List. On August 4, 2010, the State Water Board adopted the California 2008-2010 Integrated Report. On November 12, 2010, the USEPA approved California 2008-2010 Integrated Report Section 303(d) List of Impaired Waters requiring Total Maximum Daily Loads (TMDL) for the Los Angeles Region. The 303(d) List can be viewed at the following link:

[5] See, e.g., CWC sections 13000 and 13550-13557, State Water Board Resolution No. 77-1 (Policy with Respect to Water Reclamation in California), and State Water Board Resolution No. 2009-0011 (Recycled Water Policy).

http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml.

Santa Monica Bay (Offshore and Nearshore) is on the 303(d) list for the following pollutants/stressors from point and non-point sources: DDT (tissue & sediment), debris, fish consumption advisory, PCBs (tissue & sediment), and sediment toxicity. Total Maximum Daily Loads (TMDLs) for sediment toxicity and fish consumption advisory have not been scheduled for beaches in the Santa Monica Bay. The *Santa Monica Bay Beaches Bacteria TMDLs* were approved by USEPA in 2003, as described in section IV.E.7. of this Fact Sheet. The *Santa Monica Bay Nearshore and Offshore Debris TMDL* was approved by USEPA on March 20, 2012, and more details are provided in section IV.E.8. of this Fact Sheet. The *Santa Monica Bay TMDL for DDT and PCBs* was approved and adopted by USEPA on March 26, 2012, and is further described in section IV.E.9 of the Fact Sheet. The USEPA has determined that a TMDL is not required for the Santa Monica Bay sediment toxicity listing based on the lack of toxicity in regional surveys in 1994, 1998, 2003, 2008.

E. Other Plans, Polices and Regulations

1. **Secondary Treatment Regulations.** 40 CFR § 133 establishes the minimum levels of effluent quality to be achieved by secondary treatment. These limitations, established by USEPA, are incorporated into this Order/Permit, except where more stringent limitations are required by other applicable plans, policies, or regulations or to prevent backsliding.

2. **Storm Water**. CWA section 402(p), as amended by the Water Quality Act of 1987, requires NPDES permits for storm water discharges. Pursuant to this requirement, in 1990, USEPA promulgated 40 CFR § 122.26 that established requirements for storm water discharges under an NPDES program. To facilitate compliance with federal regulations, on November 1991, the State Water Board issued a statewide general permit, *General NPDES Permit No. CAS000001 and Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities.* This permit was amended in September 1992 and reissued on April 17, 1997 in State Water Board Order No. 97-03-DWQ, and superseded by Order No. 2014-0057-DWQ on April 01, 2014. to regulate storm water discharges associated with industrial activity.

   General NPDES permit No. CAS000001 is applicable to storm water discharges from Hyperion's premises. The Permittee collects storm water runoff at Hyperion and directs it to a lift station where it is pumped to the facility headworks for treatment. When the flow of storm water exceeds the capacity of the storm water pump stations, the excess water is discharged to the 1-Mile Outfall. The Permittee is required to report any storm water overflows that discharge to the 1-Mile Outfall. On May 28 2015, the Permittee filed a Notice of Intent to comply with the requirements of the general permit. The Permittee developed and currently implements a Storm Water Pollution Prevention Plan (SWPPP), to comply with the State Board's Order No. 2014-0057-DWQ.

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

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

4. **Pretreatment.** Section 402 of the CWA and implementing regulations at 40 CFR § 403 establish pretreatment requirements for POTWs which receive pollutants from non-domestic users. This Order/Permit contains pretreatment program requirements pursuant to 40 CFR § 403 that are applicable to the Permittee.

5. **Sewage Sludge/Biosolids Requirements.** Section 405 of the CWA and implementing regulations at 40 CFR § 503 require that producers of sewage sludge/biosolids meet certain reporting, handling, and use or disposal requirements. The State has not been delegated the authority to implement this program; therefore, USEPA is the implementing agency. This Order/Permit contains sewage sludge/biosolids requirements pursuant to 40 CFR § 503 that are applicable to the Permittee.

6. **Watershed Management.** This Regional Water Board has been implementing a Watershed Management Approach (WMA) to address water quality protection in the Los Angeles Region, as detailed in the Watershed management initiative (WMI). The WMI is designed to integrate various surface and ground water regulatory programs while promoting cooperative, collaborative efforts within a watershed. It is also designed to focus limited resources on key issues and use sound science. Information about watersheds in the region can be obtained at the Regional Water Board's website at http://www.waterboards.ca.gov/losangeles/water_issues/programs/regional_program/watershed/index.shtml. The WMA emphasizes cooperative relationships between regulatory agencies, the regulated community, environmental groups, and other stakeholders in the watershed to achieve the greatest environmental improvements with the resources available.

   The Regional Water Board has prepared and periodically updates its Watershed Management Initiative Chapter and the latest version was updated December 2007. This document contains a summary of the region's approach to watershed management. It addresses each watershed and the associated water quality problems and issues. It describes the background and history of each watershed, current and future activities, and addresses TMDL development. The information can be accessed on our website: http://www.waterboards.ca.gov/losangeles.

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

7. **Santa Monica Bay Beaches Bacteria Total Maximum Daily Loads (TMDLs).** The Regional Water Board has adopted two TMDLs to reduce bacteria at Santa Monica Bay beaches during dry and wet weather. The Regional Water Board adopted the Dry Weather and Wet Weather TMDLs on January 24, 2002 and December 12, 2002, respectively (Resolution Nos. 2002-004 and 2002-022). These TMDLs were approved by the State Water Board, State OAL and USEPA Region 9 and became effective on July 15, 2003.

   In these TMDLs, waste load allocations (WLAs) are expressed as the number of sample days at a shoreline monitoring site that may exceed the single sample targets for total coliform, fecal coliform and *Enterococcus* identified under "Numeric Target" in the TMDLs. Waste load allocations are expressed as allowable exceedance days because the bacterial density and frequency of single sample exceedances are the most relevant to public health protection at beaches. The final shoreline compliance point for the WLAs in the TMDLs is the wave wash where there is a freshwater outlet (i.e., publicly owned storm drain or natural creek) to the beach, or at ankle depth at beaches without a freshwater outlet.

   The City of Los Angeles, as the owner of Hyperion Treatment Plant, is identified as a responsible jurisdiction in these TMDLs. In these TMDLs, Hyperion Treatment Plant is assigned a WLA of zero days of exceedance of the single sample bacterial objectives during all three identified periods – summer dry weather, winter dry weather and wet weather. Hyperion Treatment Plant's WLA of zero exceedance days requires that no discharge from its outfalls cause or contribute to any exceedances of the single sample bacteria objectives at the shoreline compliance points identified in the TMDL and subsequently approved Coordinated Shoreline Monitoring Plan (dated April 7, 2004) submitted by responsible agencies and jurisdictions under the TMDLs. The shoreline monitoring data collected as part of the Los Angeles County MS4 Order No. R4-2012-0175 will be used to demonstrate compliance with the WLAs in these TMDLs.

8. **Santa Monica Bay Inshore and Offshore Debris TMDL.** The Regional Water Board adopted the *Santa Monica Bay Inshore and Offshore Debris TMDL* on November 04, 2010, to eliminate trash in the Santa Monica Bay. The Waste Load Allocations (WLAs) assigned in this TMDL are applicable to Municipal Separate Storm Sewer System (MS4) permittees. These WLAs are regulated under the Los Angeles County MS4 permit No. R4-2012-0175.

9. **Santa Monica Bay TMDL for DDTs and PCBs**

   The USEPA adopted the *Santa Monica Bay Total Maximum Daily Loads for DDT and PCBs* on March 26, 2012. The concentrations of DDT and PCBs in the wastewater effluent are currently at or near the detection limits; however, due to historic discharges of DDT and PCBs to the Santa Monica Bay, these constituents continue to persist in the environment, particularly in the ocean sediments. The concentrations of PCBs and DDT in surface sediments have decreased substantially since the 1970s as much of the contamination has been carried away by currents, buried below the active sediment layer, or degraded as a result of natural processes. Despite the decreasing trend, the concentrations of DDT and PCBs in surface sediments today are at levels that can still accumulate in fish tissues at levels of concern for safe human health consumption. The

City of Los Angeles' Hyperion Treatment Plant is identified as a responsible jurisdiction in this TMDL and as such, the TMDL sets Average Monthly and Average Annual WLAs for DDT and PCBs for the Hyperion Treatment Plant. These WLAs have been incorporated into this Order/Permit as final effluent limitations.

V. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

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

A. Discharge Prohibitions

Discharge prohibitions in this Order/Permit are based on the requirements in section III.I of the 2015 Ocean Plan.

B. Technology-Based Effluent Limitations (TBELs)

1. Scope and Authority

Technology-based effluent limitations require a minimum level of treatment for industrial/municipal point sources based on currently available treatment technologies while allowing the Permittee to use any available control techniques to meet the effluent limits. The 1972 CWA required POTWs to meet performance requirements based on available wastewater treatment technology. Section 301 of the CWA established a required performance level--referred to as "secondary treatment" --that all POTWs were required to meet by July 1, 1977. More specifically, section 301(b)(1)(B) of the CWA required that USEPA develop secondary treatment standards for POTWs as defined in section 304(d)(1). Based on this statutory requirement, USEPA developed national secondary treatment regulations which are specified in 40 CFR § 133. These technology-based regulations apply to all POTWs and identify the minimum level of effluent quality to be attained by secondary treatment in terms of $BOD_5$20°C, TSS, and pH.

2. Applicable Technology-Based Effluent Limitations (TBELs)

Section 301(b) of the CWA and implementing USEPA permit regulations at 40 CFR § 122.44 require that permits include conditions meeting applicable technology-based requirements at a minimum, and more stringent effluent limitations necessary to meet minimum federal technology-based requirements based on Secondary Standards at 40 CFR § 133 and Best Professional Judgment (BPJ) in accordance with 40 CFR § 125.3. Secondary treatment is defined in terms of three parameters – $BOD_5$20°C, TSS, and pH. The following summarizes the technology-based requirements for secondary treatment, which are applicable to the Facility:

Table F-6. Summary of TBELs in 40 CFR § 133.102

Parameter	Units	Effluent Limitations	
		Average Monthly	Average Weekly
$BOD_5$20°C	mg/L	30	45
TSS	mg/L	30	45
Removal Efficiency for BOD and TSS	%	85	--
pH	6.0 to 9.0 pH units		

Also, Table 2 of the 2015 Ocean Plan establishes the following technology-based effluent limitations, which are applicable to the Facility:

Table F-7. Summary of TBELs for POTWs established by the 2012 Ocean Plan

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Instantaneous Maximum
Oil & Grease	mg/L	25	40	75
TSS	mg/L	--	--	--
Settleable Solids	mL/L	1.0	1.5	3.0
Turbidity	NTU	75	100	225
Removal Efficiency for TSS	%	75[6]	--	--
pH	6.0 to 9.0 pH units			

All technology-based effluent limitations from Order No. R4-2010-0200 for $BOD_5$20°C, TSS, oil and grease, settleable solids, pH, and turbidity are retained in this Order/Permit. Limitations for $BOD_5$20°C, TSS, and pH are based on secondary treatment standards established by the USEPA at 40 CFR § 133. Limitations for oil and grease, settleable solids, and turbidity are based on requirements in the 2015 Ocean Plan. All technology-based effluent limitations are not dependent upon the dilution ratio. In addition to the concentration-based effluent limitations, mass-based effluent limitations are based on the 1994 design flow rate of 420 million gallons per day for the Hyperion Treatment Plant in the 1994 permit.

The following table summarizes the technology-based effluent limitations for the discharge from the Facility:

Table F-8. Summary of TBELs for the Hyperion Treatment Plant

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
$BOD_5$20^{0}C	mg/L	30	45	--	--	--
	lbs/day[7]	105,000	160,000	--	--	--
	% removal	85	--	--	--	--
TSS	mg/L	30	45	--	--	--

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

[7] The mass emission rates are calculated using 420 MGD consistent with the water quality-based limits in the previous permit: lbs/day = 0.00834 x Ce (effluent concentration, ug/L) x Q (flow rate, MGD). During wet-weather storm events in which the flow exceeds 420 MGD, the mass discharge rate limitations shall not apply, and concentration limitations will provide the only applicable effluent limitations.

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
	lbs/day[7]	105,000	160,000	--	--	--
	% removal	85	--	--	--	--
Oil and Grease	mg/L	25	40	--	--	75
	lbs/day[7]	88,800	140,000	--	--	281,000
Settleable Solids	mL/L	1.0	1.5	--	--	3.0
Turbidity	NTU	75	100	--	--	225
pH	pH unit	--	--	--	6.0	9.0

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

Section 301(b) of the CWA and 40 CFR § 122.44(d) require that permits include limitations more stringent than applicable technology-based requirements where necessary to achieve water quality standards and State requirements. 40 CFR § 122.44(d)(1)(i) requires that permits include water quality-based effluent limitations (WQBELs) for all pollutants which are or may be discharged at levels having the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives or criteria within a standard. USEPA has applied CWA section 403(c) and 40 CFR § 125, Subpart M, following 40 CFR § 122.

The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria that are contained in other State plans and policies, or any applicable water quality standards contained in the Ocean Plan. Where reasonable potential has been established for a pollutant, but there is no numeric objective or criterion for the pollutant, WQBELs must be established using: 1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; 2) an indicator parameter for the pollutant of concern; or 3) a calculated numeric water quality criterion, supplemented with other relevant information, as provided in 20 CFR 122.44(d)(1)(vi).

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

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

3. Expression of WQBELS

Pursuant to 40 CFR § 122.45(d)(2), for POTW continuous discharges, all permit effluent limitations, standards, and prohibitions, including those necessary to achieve water quality standards, shall, unless impracticable, be stated as average weekly and average monthly

discharge limitations. It is impracticable to include only average weekly and average monthly effluent limitations in the Order/Permit because a single daily discharge of certain pollutants, in excess amounts, can cause violations of water quality objectives. The effects of pollutants on aquatic organisms are often rapid. For many pollutants, an average weekly or average monthly effluent limitation alone is not sufficiently protective of beneficial uses. As a result, maximum daily effluent limitations, as referenced in 40 CFR § 122.45(d), are included in the Order/Permit for certain constituents.

The WQBELs for marine aquatic life toxics contained in this Order/Permit are based on Table 1 water quality objectives contained in the 2015 Ocean Plan that are expressed as six-month median, daily maximum, and instantaneous maximum water quality objectives. However, in the existing Order/Permit (Order No. R4-2010-0200), the calculated effluent limitations based on 6-month median objectives for marine aquatic life toxics in the 2005 Ocean Plan were prescribed as monthly average limitations. Applying the antibacksliding regulations, this Order/Permit retains the same approach and sets effluent limitations derived from six-month median water quality objectives for marine aquatic life toxics in the 2015 Ocean Plan as average monthly limitations. The 2010 Order included average monthly final effluent limitations based on the six-month median water quality objectives in the Ocean Plan and the average monthly final effluent limitations are retained in this Order for those pollutants that continue to have reasonable potential to exceed the water quality objectives to prevent backsliding. The six-month median final effluent limitations for ammonia at Discharge Point 002 were also based on the six-month median water quality objectives in the Ocean Plan; however, since the 2010 Order did not include an average monthly final effluent limitation for ammonia at Discharge Point 002, a monthly average final effluent limitation is not required to be consistent with the Ocean Plan or to prevent backsliding. In addition, the 2015 Ocean Plan specifies that for the six-month median for intermittent discharges, the daily value shall be considered to equal zero for days on which no discharge occurred. Since several average monthly effluent limitations in this Order/Permit were based on 6-month median water quality objectives in the 2015 Ocean Plan, a footnote was added to the effluent limitations table to specify how compliance with these effluent limitations will be determined. To be consistent with the 2015 Ocean Plan, maximum daily and instantaneous maximum limitations are also prescribed in this Order/Permit.

4. **Determining the Need for WQBELs**

Order No. R4-2010-0200 contains effluent limitations for non-conventional and toxic pollutant parameters in Table 1 of the Ocean Plan. For this Order/Permit, the need for effluent limitations based on water quality objectives in Table 1 of the 2015 Ocean Plan was reevaluated in accordance with the Reasonable Potential Analysis (RPA) procedures contained in Appendix VI of the 2015 Ocean Plan. This statistical RPA method (RPcalc version 2.2) accounts for the averaging period of the water quality objective, accounts for and captures the long-term variability of the pollutant in the effluent, accounts for limitations associated with sparse data sets, accounts for uncertainty associated with censored data sets, and assumes a lognormal distribution of the facility-specific effluent data. The program calculates the upper confidence bound (UCB) of an effluent population percentile after complete mixing. In the evaluation employed in this Order/Permit, the UCB is calculated as the one-sided, upper 95 percent confidence bound for the 95th percentile of the effluent distribution after complete mixing. The calculated $UCB_{95/95}$ is then compared to the appropriate objective to determine the potential for an exceedance of that objective and the need for an effluent limitation. For constituents that have an insufficient number of monitoring data or a substantial number of non-detected data with a

reporting limit higher than the respective water quality objective, the RPA result is likely to be inconclusive. The Ocean Plan requires that the existing effluent limitations for these constituents be retained in the new Order/Permit, otherwise the permit shall include a reopener clause to allow for subsequent modification of the permit to include an effluent limitation if monitoring establishes that the discharge causes, has the reasonable potential to cause, or contributes to an excursion above a water quality objective. For Discharge Point 001, inconclusive results were reported for chlordane, DDT, PAHs, PCBs, and TCDD equivalents. For Discharge Point 002, inconclusive results were reported for chlordane, PCBs, and TCDD equivalents. The final effluent limitations for chlordane and TCDD equivalents from the previous permit were removed from this Order because the results of the reasonable potential analysis were inconclusive, the permit includes a reopener to incorporate a new limit based on reasonable potential, the pollutants have consistently been not detected in the final effluent, and the Permittee has made an effort to achieve lower detection limits than are required in the 2015 Ocean Plan or 40 CFR 136. In addition to the RPA procedures, a TMDL has been established for DDT and PCBs, therefore the Order/Permit includes WQBELs for these pollutants. The MRP (Attachment E) of this Order/Permit also requires the Permittee to continue to monitor all pollutants with effluent limits.

Using this statistical procedure, in combination with effluent data provided by the Permittee from January 2010 to December 2015 for both outfalls, and minimum initial dilution ratios of 13:1 for Discharge Point 001 and, 84:1 and 96:1 for Discharge Point 002, Regional Water Board staff and USEPA have determined that the following constituents, have reasonable potential to exceed Ocean Plan Water Quality Objectives and therefore, require the following effluent limitations for both outfalls: chronic toxicity and ammonia. . For discharge point 001, copper, chlorine, and PAHs also have reasonable potential therefore the permit also includes final effluent limitations for these pollutants for discharges to the 1-Mile Outfall.

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

5. **WQBEL Calculations**

From the Table 1 water quality objectives in the 2015 Ocean Plan, effluent limitations are calculated according to the following equation for all pollutants, except for acute toxicity (if applicable):

$$\mathbf{C_e = C_o + D_m(C_o - C_s)}$$

where

C_e = the effluent limitation (μg/L)

C_o = the water quality objective to be met at the completion of initial dilution (μg/L)

C_s = background seawater concentration (μg/L) (see Table below)

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

The D_m is based on observed waste flow characteristics, receiving water density structure, and the assumption that no currents of sufficient strength to influence the initial dilution process flow across the discharge structure. In this Order/Permit, dilution ratios of 84:1,

96:1 have been applied to Discharge Point 002 and a dilution ratio of 13:1 has been applied to Discharge Point 001.

Initial dilution is the process that results in the rapid and irreversible turbulent mixing of wastewater with ocean water around the point of discharge. For a submerged buoyant discharge, characteristic of most municipal and industrial wastes that are released from the submarine outfalls, the momentum of the discharge and its initial buoyancy act together to produce turbulent mixing. Initial dilution in this case is completed when the diluting wastewater ceases to rise in the water column and first begins to spread horizontally. As site-specific water quality data is not available, in accordance with Table 1 implementing procedures, C_s equals zero for all pollutants, except the following:

Table F-9. Pollutants with Background Seawater Concentrations

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

The calculation of WQBELs for copper and ammonia are demonstrated below for Discharge Point 001, as examples:

Table F-10. Ocean Plan Water Quality Objectives (C_o) for Copper and Ammonia

Constituents	6-Month Median	Daily Maximum	Instantaneous Maximum	30 Day Average
Copper	3 μg/L	12 μg/L	30 μg/L	--
Ammonia	0.60 mg/L	2.4 mg/L	6 mg/L	--

Using the equation, $\mathbf{C_e=C_o+D_m(C_o-C_s)}$, effluent limitations are calculated as follows before rounding to two significant digits. All calculations are based on discharge through Discharge Point 001 and, therefore, a dilution ratio (D_m) of 13:1 is applied.

Copper

C_e = 3 + 13(3-2) = 16 μg/L (prescribed as Average Monthly, see section 3 above)

C_e = 12 + 13(12-2) = 142 μg/L (rounded to 140 μg/L prescribed as Daily Maximum)

C_e = 30 + 13(30-2) = 394 μg/L (However, this Order/Permit maintains the effluent limitation of 160 μg/L from Order No. R4-2005-0020, per the anti-backsliding requirements; 160 μg/L is prescribed as Instantaneous Maximum.)

Ammonia

C_e = 0.6 + 13(0.6) = 8.4 mg/L (prescribed as Average Monthly, see section 3 above)

C_e = 2.4 + 13(2.4) = 33.6 mg/L (rounded to 34 mg/L prescribed as Daily Maximum)

C_e = 6.0 + 13(6.0) = 84.0 mg/L (rounded to 84 mg/L prescribed as Instantaneous Maximum)

Based on the implementing procedures described above, effluent limitations have been calculated for all Table 1 pollutants (excluding acute toxicity and chronic toxicity) from the 2015 Ocean Plan and incorporated into this Order/Permit when applicable.

6. **Whole Effluent Toxicity (WET)**

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

A total of 87 chronic and 89 acute WET tests were conducted on Hyperion final effluent between January 2010 and December 2015. No exceedances of the maximum daily final effluent limitations were reported for chronic toxicity; however, the discharge did exhibit reasonable potential to exceed the water quality objectives for chronic toxicity at Discharge Point 001 based on 2015 Ocean Plan procedures for calculating reasonable potential. There were seven exceedances of the acute toxicity final effluent limitation of 2.8 TUa for Discharge Point 002 during this time period; therefore the discharge has reasonable potential to exceed the acute toxicity WQO.

The 2010 permit contained final effluent limitations for acute and chronic toxicity at Discharge Point 002. The 2010 permit also contained a final effluent limitation for chronic toxicity and an acute toxicity trigger at Discharge Point 001. The 2017 permit contains final effluent limitations for chronic toxicity for both discharge points, expressed as a maximum daily effluent limitation. Since chronic toxicity is a more stringent requirement than acute toxicity, removal of the numeric acute toxicity effluent limitation does not constitute backsliding. Although Discharge Point 002 did not exhibit reasonable potential to exceed the water quality objectives for chronic toxicity, it did exhibit reasonable potential to exceed the water quality objectives for acute toxicity. Since the acute toxicity final effluent limitation was removed from the 2017 Order/Permit, and chronic toxicity is protective of both acute and chronic toxicity, a chronic toxicity limit was retained in this Order/Permit.

The Ocean Plan addresses the application of chronic and acute toxicity requirements based on minimum probable dilutions (D_m) for ocean discharges. Following the 2015 Ocean Plan, dischargers are required to conduct chronic toxicity monitoring for ocean discharges with D_m factors ranging from 99 to 349 and Regional Water Boards may require acute toxicity monitoring in addition to chronic toxicity monitoring. Dischargers with D_m factors below 99 are required to conduct only chronic toxicity testing. The D_m for Discharge Point 001 is 13 and that of Discharge Point 002 is 84, and 96 for ammonia and chronic toxicity. Since D_m is less than 99 for Discharge Point 001, a chronic toxicity final effluent limitation has been assigned to Discharge Point 001. No acute toxicity final effluent limitations have been assigned to Discharge Point 001 consistent with 40 CFR § 122.44(d)(1)(v), and because the chronic toxicity final effluent limitation is protective of both chronic and acute toxicity.

The Ocean Plan establishes a daily maximum chronic toxicity objective of 1.0 TUc = 100/(No Observed Effect Concentration (NOEC)), using a 5-concentration hypothesis test, and a daily maximum acute toxicity objective of 0.3 TUa = 100/LC50, using a point

estimate model. This Order/Permit includes final effluent limitations using the Test of Significant Toxicity (TST) hypothesis testing approach. This statistical approach is consistent with the Ocean Plan in that it provides maximum protection to the environment since it more reliably identifies acute and chronic toxicity than the current NOEC hypothesis-testing approach (See *2015 California Ocean Plan, Section III.F and Appendix I*).

On July 07, 2014, the Chief Deputy of the Water Quality Division announced that the State Water Board would be releasing a revised version of the Chronic Toxicity Plan for public comment within a few weeks. Regional Water Board staff awaits its release. Because effluent data exhibited reasonable potential to cause or contribute to an exceedance of the water quality objective for acute or chronic toxicity, the Hyperion Treatment Plant 2017 Order/Permit contains numeric chronic toxicity effluent limitations for both discharge points. Compliance with the chronic toxicity requirement contained in the 2017 Order/Permit shall be determined in accordance to sections VIII.J. Nevertheless, this Order/Permit contains a reopener to allow the Regional Water Board and USEPA to modify the permit in the future, if necessary, to make it consistent with any new policy, plan, law, or regulation.

For this permit, chronic toxicity in the discharge is evaluated using a maximum daily effluent limitation that utilizes USEPA's 2010 TST hypothesis testing approach. The chronic toxicity effluent limitations are expressed as "Pass" for each maximum daily individual result.

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

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

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

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

D. Final Effluent Limitation Considerations

1. Anti-Backsliding Requirements

The final effluent limitations in this Order/Permit are at least as stringent as the effluent limitations in the previous Order/Permit, Order No. R4-2010-0200, with a few exceptions. Section 402(o)1/303(d)(4) of the Clean Water Act (CWA) provides statutory exceptions to the general prohibition of backsliding contained in CWA section 402(o)(1)/303(d)(4).

The final effluent limitations for beryllium for Discharge Point 001 were removed because new monitoring data indicated that the final effluent did not have reasonable potential to cause or contribute to an exceedance of the applicable water quality objectives. Beryllium is not present in the final effluent at concentrations that exceed the applicable water quality objectives. The final effluent limitations for chlordane and TCDD equivalents were removed because the results of the reasonable potential analysis were inconclusive, the permit includes a reopener to incorporate a new limit based on reasonable potential, chlordane and TCDD equivalents have consistently not been detected in the final effluent, and the Permittee has made an effort to achieve lower detection limits than are required in the 2015 Ocean Plan and 40 CFR 136. To maintain consistent water quality, beryllium, chlordane, and TCDD equivalents have been assigned a concentration-based performance goal and a mass emission benchmark in this permit. The removal of the final effluent limitations for beryllium, chlordane, and TCDD equivalents will therefore not authorize a change in the mass emission rates or a relaxation in the treatment of the discharge and meets the backsliding exception under CWA section 402(o)(1)/303(d)(4)(B).

The final effluent limitations for acute toxicity for Discharge Point 001 and 002 were replaced with chronic toxicity final effluent limitations. The chronic toxicity IWC for the 1-Mile Outfall has been carried over from the 2010 Order. However, the chronic toxicity final effluent limitations for Discharge Point 002 were also revised based on a new dilution ratio. The dilution ratio for Discharge Point 002 increased from 84:1 to 96:1 for chronic toxicity based on the results of the 5-Mile Outfall Dilution Study completed and approved in 2016. The resulting IWC for chronic toxicity decreased slightly from 1.19% effluent in the 2010 permit to 1.04% effluent (see section V.C.6.) in the 2017 permit. Although the IWC was reduced, the chronic toxicity final effluent limitation continues to be consistent with the Ocean Plan Water Quality Objectives and will not unreasonably affect present and anticipated beneficial uses of the Santa Monica Bay. This is consistent with the antidegradation policy and therefore meets the backsliding exception under CWA section 402(o)(1)/303(d)(4).

In addition, the final effluent limitations for ammonia in this Order/Permit for Discharge Point 002 are more stringent than those in Order R4-2010-0200 because the previous Order/Permit did not include final effluent limitations for ammonia at Discharge Point 002. Since there were no previous effluent limits for ammonia for Discharge Point 002, using the increased dilution ratio of 96:1 for ammonia, does not constitute backsliding.

The 84:1 dilution ratio for Discharge Point 002 in the previous Order/Permit has been retained for all of the other final effluent limitations in this Order/Permit.

2. Antidegradation Policy

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

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

The final effluent limitations from the previous order have been retained in this Order/Permit, with the exception of beryllium, chlordane, and TCDD equivalents. Under CWA sections 403(o)(1)/303(d)(4)(B) for waters in attainment, removal of the final effluent limitations for beryllium is consistent with the State's antidegradation policy because the discharge is in compliance with existing water quality objectives for beryllium in the Pacific Ocean. Removal of the final effluent limitations for chlordane and TCDD equivalents is also consistent with the antidegradation policy because neither pollutant has been detected in the final effluent for the past three permit cycles and neither pollutant caused or contributed to an exceedance of the applicable water quality objectives. In addition, chlordane was removed from the 303(d) list for the Santa Monica Bay in 2006 since it is not likely to cause or contribute to a toxic effect in the sediment. The remaining final effluent limitations in Order/Permit R4-2010-0200 were not removed because the pollutants continue to show reasonable potential to cause or contribute to an exceedance of the water quality objectives in the Ocean Plan.

This Order/Permit includes chronic toxicity and ammonia final effluent limitations for Discharge Point 002. Based on the *5-Mile Outfall Dilution Study* submitted in April 2016, this Order/Permit also includes an increase in initial dilution from 84:1 to 96:1 for both chronic toxicity and ammonia. All other final effluent limitations (and the reasonable potential analyses) are calculated using the previous dilution ratio of 84:1 for Discharge Point 002 and 13:1 for Discharge Point 001, including chronic toxicity and ammonia associated with discharges from Discharge Point 001. This increase in initial dilution for ammonia and chronic toxicity for Discharge Point 002 is consistent with State and federal antidegradation policies in that it does not result in an increase to any final effluent limitations for Discharge Point 002, nor does it result in a relaxation of the quality of treatment. New final effluent limitations for ammonia are included at Discharge Point 002 to further limit toxicity. These new final effluent limitations for ammonia are more protective than the performance goals in the previous Order/Permit because they are enforceable, ensuring that any increase in the ammonia concentration will be maintained below the water quality objectives outside the zone of initial dilution. The increase in allowable dilution for chronic toxicity slightly decreases the in-stream waste concentration from 1.19% to 1.04%, but this is not expected to make a difference in determining toxicity. Consistent with the antidegradation policy, State Water Board Resolution 68-16, an abbreviated antidegradation analysis is appropriate because any lowered water quality is insignificant, as degradation is confined to a limited area, and effluent limits will ensure beneficial uses are not unreasonably affected.

The mass-based final effluent limitations and mass emission benchmarks continue to be based on the 1994 design flow rate of 420 MGD, even though the design flow rate of the treatment plant has increased to 450 MGD after full secondary treatment was implemented. The increased treatment capacity was accompanied by a significant improvement in the final effluent quality; therefore, the treatment plant was able to continue meeting the mass-based final effluent limitations. Since the mass-based final effluent limitations continue to be based on a lower flow rate than is permitted to be

discharged, the quantity of pollutants discharged and the quality of the discharge are expected to remain relatively constant or improve during the permit term.

The mass emission benchmarks are an additional incentive for the Permittee to maintain the current treatment quality since they set final effluent targets for the Permittee to meet based on current performance. Most mass emission benchmarks in this Order/Permit are more stringent due to improved performance; however, the mass emission benchmarks for some constituents have increased. Since the mass emission benchmarks are based on performance and do not exceed the water quality objectives for the receiving water, the increase of any mass emission benchmarks is not expected to result in additional degradation.

3. Stringency of Requirements for Individual Pollutants

This Order/Permit contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based effluent limitations consist of restrictions on BOD_5, TSS, and pH. Restrictions on BOD_5, TSS, and pH are discussed in section V.B.2 of this Fact Sheet. This Order/Permit's technology-based pollutant restrictions implement the minimum applicable federal technology-based requirements.

Water quality-based effluent limitations have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. The scientific procedures for calculating individual water quality-based effluent limitations for priority pollutants are based on the 2015 Ocean Plan, which became effective on January 28, 2016. All beneficial uses and water quality objectives contained in the Basin Plan were approved under State law and approved by USEPA. Collectively, this Order/Permit's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA and applicable water quality standards.

Table F-11. Summary of Final Effluent Limitations for Discharge Point 002

Parameter	Units	Effluent Limitations[8]				Performance Goal[9]	Basis
		Average Monthly[10]	Average Weekly	Max Daily[11]	Instant-aneous Max[12]		
$BOD_5 20^{\circ}C$	mg/L	30	45	--	--	--	Existing/ Secondary treatment standard
	lbs/day[13]	105,000	160,000	--	--		
	% removal	85	--	--	--		
TSS	mg/L	30	45	--	--	--	Existing/ Secondary treatment standard
	lbs/day[13]	105,000	160,000	--	--		
	% removal	85	--	--	--		
pH	pH unit	6.0 (instantaneous minimum) – 9.0 (instantaneous maximum)				--	Existing/ Secondary Treatment Standard/ Ocean Plan
Oil and Grease	mg/L	25	40	--	75	--	Existing/ Carry-over; Ocean Plan
	lbs/day[13]	88,000	140,000	--	--		Existing/ Ocean Plan

[8] The minimum dilution ratios used to calculate effluent limitations for nonconventional and toxic pollutants for Discharge Point 002 are 84:1 for all pollutants except ammonia and toxicity, and 96:1 for ammonia and toxicity (i.e. 84 and 96 parts seawater to one part effluent, respectively).

[9] The performance goals are based upon the actual performance data of Hyperion Treatment Plant and are specified only as an indication of the treatment efficiency of the plant. They are not considered effluent limitations or standards for the treatment plant. The Permittee shall make best efforts to maintain, if not improve, the effluent quality at the level of these performance goals. The Executive Officer of the Regional Water Board and the USEPA may modify any of the performance goals if the Permittee requests and has demonstrated that the change is warranted.

[10] The average monthly effluent limitations for ammonia at Discharge Point 002 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.

[11] The maximum daily effluent limitations shall apply to flow weighted 24-hour composite samples.

[12] The instantaneous maximum effluent limitations shall apply to grab samples.

[13] The mass emission rates are calculated using 420 MGD, consistent with water-quality based limits in the previous permit.: lbs/day = 0.00834 x Ce (effluent concentration in ug/L) x Q (flow rate in MGD). During storm events when flow exceeds 420 MGD, the mass emission rate limitations shall not apply.

Parameter	Units	Effluent Limitations[8]				Performance Goal[9]	Basis
		Average Monthly[10]	Average Weekly	Max Daily[11]	Instant-aneous Max[12]		
Settleable Solids	mL/L	1.0	1.5	--	3.0	--	Existing/ Carry-over; Ocean Plan
Turbidity	NTU	75	100	--	225	--	Existing/ Carry-over; Ocean Plan Existing/ Ocean Plan
Marine Aquatic Life Toxicants							
Arsenic	µg/L	--	--	--	--	3.0	No RP
Cadmium	µg/L	--	--	--	--	0.38	No RP
Chromium (VI)	µg/L	--	--	--	--	25	No RP
Copper	µg/L	--	--	--	--	19	No RP
Lead	µg/L	--	--	--	--	2.5	No RP
Mercury	µg/L	--	--	--	--	0.0090	No RP
Nickel	µg/L	--	--	--	--	11	No RP
Selenium	µg/L	--	--	--	--	3.2	No RP
Silver	µg/L	--	--	--	--	0.50	No RP
Zinc	µg/L	--	--	--	--	42	No RP
Cyanide	µg/L	--	--	--	--	9.0	No RP
Ammonia as Nitrogen	mg/L	58[14]	--	233	582	--	RP/ Toxicity
	lbs/day[13]	203,000	--	820,000	$2x10^6$	--	
Phenolic compounds (non-chlorinated)[15]	µg/L	--	--	--	--	5.0	No RP
Phenolic compounds (chlorinated)[15]	µg/L	--	--	--	--	0.95	No RP
Endosulfan[15]	µg/L	--	--	--	--	0.04	No RP
Endrin	µg/L	--	--	--	--	0.05	No RP
HCH[15]	µg/L	--	--	--	--	0.025	No RP
Chronic Toxicity (TST)	Pass or Fail, % Effect		--	Pass	--	--	RP/ Ocean Plan

[14] This is a 6-month median final effluent limitation.

[15] See Attachment A for definitions of terms.

Parameter	Units	Effluent Limitations[8]				Performance Goal[9]	Basis
		Average Monthly[10]	Average Weekly	Max Daily[11]	Instant-aneous Max[12]		
Radioactivity							
Gross alpha	pCi/L	--	--	--	--	15	No RP
Gross beta	pCi/L	--	--	--	--	14.1	No RP
Human Health Toxicants – Non Carcinogens							
Acrolein	µg/L	--	--	--	--	25	No RP
Antimony	µg/L	--	--	--	--	2.6	No RP
Bis(2-chloroethoxy) methane	µg/L	--	--	--	--	25	No RP
Bis(2-chloroiso-propyl) ether	µg/L	--	--	--	--	10	No RP
Chlorobenzene	µg/L	--	--	--	--	10	No RP
Chromium (III)	µg/L	--	--	--	--	5.2	No RP
Di-n-butyl-phthalate	µg/L	--	--	--	--	1.6	No RP
Dichloro-benzenes[15]	µg/L	--	--	--	--	0.25	No RP
Diethyl phthalate	µg/L	--	--	--	--	10	No RP
Dimethyl phthalate	µg/L	--	--	--	--	10	No RP
4,6-dinitro-2-methylphenol	µg/L	--	--	--	--	25	No RP
2,4-Dinitrophenol	µg/L	--	--	--	--	25	No RP
Ethylbenzene	µg/L	--	--	--	--	10	No RP
Fluoranthene	µg/L	--	--	--	--	0.25	No RP
Hexachloro-cyclopentadiene	µg/L	--	--	--	--	25	No RP
Nitrobenzene	µg/L	--	--	--	--	0.52	No RP
Thallium	µg/L	--	--	--	--	1.0	No RP
Toluene	µg/L	--	--	--	--	1.3	No RP
Tributyltin	ng/L	--	--	--	--	1.6	No RP
1,1,1-Trichloro-ethane	µg/L	--	--	--	--	10	No RP
Human Health Toxicants – Carcinogens							
Acrylonitrile	µg/L	--	--	--	--	8.5	No RP
Aldrin	µg/L	--	--	--	--	0.0019	No RP
Benzene	µg/L	--	--	--	--	10	No RP

Parameter	Units	Effluent Limitations[8]				Performance Goal[9]	Basis
		Average Monthly[10]	Average Weekly	Max Daily[11]	Instant-aneous Max[12]		
Benzidine	µg/L	--	--	--	--	0.0059	No RP
Beryllium	µg/L	--	--	--	--	0.02	No RP
Bis(2-chloroethyl) ether	µg/L	--	--	--	--	4	No RP
Bis(2-ethylhexyl) phthalate	µg/L	--	--	--	--	2	No RP
Carbon tetrachloride	µg/L	--	--	--	--	10	No RP
Chlordane[15]	µg/L	--	--	--	--	0.002	Inconclusive No RP
Chlorodibromo-methane	µg/L	--	--	--	--	1.6	No RP
Chloroform	µg/L	--	--	--	--	5.1	No RP
DDT[15]	µg/L	0.0101	--	--	--	--	TMDL
	g/yr	5,850[16]	--	--	--	--	
1,4-Dichloro-benzene	µg/L	--	--	--	--	10	No RP
3,3'-Dichloro-benzidine	µg/L	--	--	--	--	1	No RP
1,2-Dichloro-ethane	µg/L	--	--	--	--	10	No RP
1,1-Dichloro-ethylene	µg/L	--	--	--	--	10	No RP
Dichlorobromo-methane	µg/L	--	--	--	--	1	No RP
Dichloro-methane	µg/L	--	--	--	--	2.0	No RP
1,3-Dichloro-propene	µg/L	--	--	--	--	10	No RP
Dieldrin	µg/L	--	--	--	--	0.0034	No RP
2,4-Dinitrotoluene	µg/L	--	--	--	--	25	No RP
1,2-Diphenyl-hydrazine	µg/L	--	--	--	--	5	No RP
Halomethanes[15]	µg/L	--	--	--	--	0.94	No RP
Heptachlor	µg/L	--	--	--	--	0.0043	No RP
Heptachlor epoxide	µg/L	--	--	--	--	0.0017	No RP
Hexachloro-benzene	µg/L	--	--	--	--	0.018	No RP

[16] This is an annual average final effluent limitation.

Parameter	Units	Effluent Limitations[8]				Performance Goal[9]	Basis
		Average Monthly[10]	Average Weekly	Max Daily[11]	Instant-aneous Max[12]		
Hexachloro-butadiene	µg/L	--	--	--	--	5	No RP
Hexachloro-ethane	µg/L	--	--	--	--	5	No RP
Isophorone	µg/L	--	--	--	--	0.62	No RP
N-Nitroso-dimethylamine	µg/L	--	--	--	--	1.6	No RP
N-Nitrosodi-N-propylamine	µg/L	--	--	--	--	25	No RP
N-Nitroso-diphenylamine	µg/L	--	--	--	--	5	No RP
PAHs[15]	µg/L	--	--	--	--	0.05	No RP
Total PCBs	µg/L	0.000271	--	--	--	--	TMDL
	g/yr	157[16]	--	--	--	--	
TCDD equivalents[15]	pg/L	--	--	--	--	0.33	Inconclusive No RP
1,1,2,2-Tetrachloro-ethane	µg/L	--	--	--	--	10	No RP
Tetrachloro-ethylene	µg/L	--	--	--	--	1.8	No RP
Toxaphene	µg/L	--	--	--	--	0.018	No RP
Trichloro-ethylene	µg/L	--	--	--	--	10	No RP
1,1,2-Trichloroethane	µg/L	--	--	--	--	10	No RP
2,4,6-Trichlorophenol	µg/L	--	--	--	--	0.12	No RP
Vinyl chloride	µg/L	--	--	--	--	10	No RP

Table F-12. Summary of Final Effluent Limitations for Discharge Point 001

Parameter	Units	Effluent Limitations[17]				Basis
		Average Monthly[18]	Average Weekly	Max Daily[19]	Instant-aneous Max[20]	
$BOD_5$20°C	mg/L	30	45	--	--	Existing/ Secondary treatment standard
	lbs/day[21]	105,000	160,000	--	--	
	% removal	85	--	--	--	
Total Suspended Solids (TSS)	mg/L	30	45	--	--	Existing/ Secondary treatment standard
	lbs/day[21]	105,000	160,000	--	--	
	% removal	85	--	--	--	
pH	pH unit	6.0 (instantaneous minimum) – 9.0 (instantaneous maximum)				Existing/ Secondary Treatment Standard/ Ocean Plan
Oil and Grease	mg/L	25	40	--	75	Existing/ Carry-over; Ocean Plan Existing/ Ocean Plan
	lbs/day[21]	88,000	140,000	--	--	
Settleable Solids	mL/L	1.0	1.5	--	3.0	Existing/ Carry-over; Ocean Plan
Turbidity	NTU	75	100	--	225	Existing/ Carry-over; Ocean Plan Existing/ Ocean Plan

[17] The minimum dilution ratios used to calculate effluent limitations for nonconventional and toxic pollutants based on water quality objectives are 84:1 (i.e., 84 parts seawater to one part effluent) and 13:1 for Discharge Points 002 and 001, respectively.

[18] Some of the average monthly effluent limitations for Discharge Point 001 are based on the 6-month median water quality objectives in the 2015 Ocean Plan (copper, chlorine residual, ammonia, and PAHs). 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.

[19] The maximum daily effluent limitations shall apply to flow weighted 24-hour composite samples.

[20] The instantaneous maximum effluent limitations shall apply to grab samples.

[21] The mass emission rates are calculated using 420 MGD, consistent with water-quality based limits in the previous permit: lbs/day = 0.00834 x Ce (effluent concentration in ug/L) x Q (flow rate in MGD). During storm events when flow exceeds 420 MGD, the mass emission rate limitations shall not apply.

Parameter	Units	Effluent Limitations[17]				Basis
		Average Monthly[18]	Average Weekly	Max Daily[19]	Instant-aneous Max[20]	
Marine Aquatic Life Toxicants						
Copper	µg/L	16	--	140	160	RP; Existing; Carry-over; Ocean Plan
	lbs/day[21]	56	--	490	560	
Chlorine Residual	mg/L	28	--	112	840	Ocean Plan
	lbs/day[21]	98	--	320	2900	
Ammonia as Nitrogen	mg/L	8.4	--	34	84	RP; Existing; Carry-over Ocean Plan
	lbs/day[21]	29,000	--	120,000	290,000	
Chronic Toxicity (TST)	Pass or Fail, % Effect	--	--	Pass	--	RP/ Ocean Plan
Human Health Toxicants – Carcinogens						
DDT[22]	µg/L	0.0101	--	--	--	TMDL
	g/yr	5,850[23]	--	--	--	
PAHs[22]	µg/L	0.12	--	--	--	Inconclusive; Carry-over; Ocean Plan
	lbs/day[21]	0.43	--	--	--	
Total PCBs[22]	µg/L	0.000271	--	--	--	TMDL
	g/yr	157[23]	--	--	--	

E. Interim Effluent Limitations (Not Applicable)

F. Land Discharge Specifications (Not Applicable)

G. Recycling Specifications (Not Applicable)

VI. PERFORMANCE GOALS

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

Pursuant to this provision and to implement the recommendation of the Water Quality Advisory Task Force (*Working Together for an Affordable Clean Water Environment, A final report presented to the California Water Quality Control Board, Los Angeles Region by Water Quality Advisory Task Force, September 30, 1993)* that was adopted by the Regional Water Board on November 1, 1993, performance goals that are more stringent than those based on Ocean Plan objectives are prescribed in this Order/Permit. This approach is consistent with the

[22] See Attachment A for definitions of terms.

[23] This is an annual average final effluent limitation.

antidegradation policy in that it requires the Permittee to maintain its treatment level and effluent quality, recognizing normal variations in treatment efficiency and sampling and analytical techniques. However, this approach does not address substantial changes in treatment plant operations that could significantly affect the quality of the treated effluent.

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

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

Procedures for the Determination of Performance Goals

A. For constituents that have been routinely detected in the effluent (at least 20 percent detectable data), performance goals are based on the one-sided, upper 95 percent confidence bound for the 95th percentile of the effluent performance data ($UCB_{95/95}$) from January 2010 through December 2015 using the RPA protocol contained in the 2015 Ocean Plan. Effluent data are assumed log normally distributed. Performance goals are calculated according to the equation $C_{PG} = C_o+D_m(C_o-C_s)$ and setting $C_o = UCB_{95/95}$.

   1. If the maximum detected effluent concentration (MEC) is greater than the calculated performance goal, then the calculated performance goal is used as the performance goal; or

   2. If the maximum detected effluent concentration is less than the calculated performance goal, then the MEC is used as the performance goal.

   3. If the performance goal determined in part 1 or 2 is greater than the Water Quality Objective (WQO) in the 2015 Ocean Plan after considering dilution, then the WQO is used as the performance goal.

      For example, the performance goals for chloroform, arsenic, and heptachlor at Discharge Point 002 are calculated as follows:

      Chloroform
      $C_o = UCB_{95/95}$ = 0.065 µg/L ; D_m = 84; C_s = background seawater concentration = 0 µg/L; MEC = 5.07 µg/L; C_{PG} = Performance Goal = (0.065 µg/L) + 84(0.065 µg/L - 0 µg/L) = 5.5 µg/L.

      Since the MEC of 5.07 µg/L is less than the calculated PG of 5.5 µg/L, the prescribed performance goal for chloroform is 5.07 µg/L.

      Arsenic
      $C_o = UCB_{95/95}$ = 3 µg/L ; D_m = 84; C_s = background seawater concentration = 3 µg/L; MEC = 10.2 µg/L; C_{PG} = Performance Goal = (3 µg/L) + 84(3 µg/L - 3 µg/L) = 3 µg/L.

Since the MEC of 10.2 µg/L is greater than the calculated PG of 3 µg/L, the prescribed performance goal for arsenic is 3 µg/L.

Heptachlor

C_o = $UCB_{95/95}$ = N/A (all ND); C_o = WQO = 0.00005 µg/L; Dm = 84; C_s = background seawater concentration = 0 µg/L; MEC = N/A (all ND); C_{PG} = Performance Goal = (0.00005 µg/L) + 84(0.00005 µg/L - 0 µg/L) = 0.0043 µg/L.

Since there were no detections, the WQO is used to calculate the performance goal, so the prescribed performance goal for heptachlor is 0.0043 µg/L.

B. For constituents where monitoring data have consistently shown nondetectable levels (less than 20 percent detectable data), performance goals are set at five times the Minimum Levels listed in the 2015 Ocean Plan. If the maximum detected effluent concentration is less than the calculated value based on ML, then the MEC is used as the performance goal.

C. For constituents with effluent limitations, if the performance goal derived from the steps, above, exceeds respective effluent limitation, then a performance goal is not prescribed for that constituent.

Performance goals for Discharge Point 002 are prescribed in this Order/Permit. The listed performance goals are not enforceable effluent limitations or standards. The Permittee shall maintain, if not improve, its treatment efficiency. 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 Permittee shall submit a written report to the Regional Water Board and USEPA on the nature of the exceedance, the results of the investigation as to the cause of the exceedance, and the corrective actions taken or proposed corrective measures with timetable for implementation, if necessary.

VII. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

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

B. Groundwater (Not Applicable)

VIII. MASS EMISSION BENCHMARKS

To address the uncertainty due to potential increases in toxic pollutant loadings from the Hyperion Treatment Plant discharge to the marine environment during the five-year permit term and to establish a framework for evaluating the need for an antidegradation analysis to determine compliance with State and federal antidegradation requirements at the time of permit reissuance, 12-month average mass emission benchmarks have been established for effluent discharged through the 5-Mile Outfall (Discharge Point 002). These mass emission benchmarks are not enforceable water quality based effluent limitations. They may be re-evaluated and revised during the five-year permit term. The mass emission benchmarks (in metric tons per year; MT/yr) for the Hyperion Treatment Plant discharge were determined using the same procedure as described in Section VI of this Fact Sheet for the calculation of the Performance Goals. The concentration-based Performance Goals were calculated using data from January 2010 through December 2015 and were converted to mass-based Benchmarks using the Permittee's 1994 design flow rate of 420 MGD. The following equation was used for the calculation of the Mass Emission Benchmarks:

MT/yr = (C_e µg/L) x (Flow, Q, 10^6 gal/day) x (3.785 L/gal) x (365 days/yr) x (1 MT/10^{12} µg/L)

Mass Emission Caps were assigned to copper, lead, silver, and zinc, in previous orders to further protect the beneficial uses and to protect the Santa Monica Bay from further degradation; however, Mass Emission Benchmarks serve the same purpose and have been established for these metals of concern.

IX. RATIONALE FOR PROVISIONS

A. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR § 122.41, and additional conditions applicable to specified categories of NPDES permits in accordance with 40 CFR § 122.42, are provided in Attachment D to the Order/Permit. 40 CFR § 122.41(a) through (n) establish conditions that apply to all State-issued NPDES permits.

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

B. Special Provisions

1. Reopener Provisions

These provisions are based on 40 CFR § 123.25. The Regional Water Board and USEPA may reopen the Order/Permit to modify conditions and requirements. Causes for modifications can include, but are not limited to, the promulgation of new regulations, modification in sludge use or disposal practices, or adoption of new regulations by the State Water Board or Regional Water Board, including revisions to the Ocean Plan and Basin Plan.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

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

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

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

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

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

a. **Spill Clean-Up Contingency Plan (SCCP)**

Since spills or overflows are a common event at the POTW, this Order/Permit requires the Permittee to review and update, if necessary, its SCCP after each incident. The Permittee shall ensure that the up-to-date SCCP is readily available to the sewage system personnel at all times and that the sewage personnel are familiar with it.

b. **Pollutant Minimization Program (PMP)**

This provision is based on the requirements of section III.C.9 of the 2015 Ocean Plan.

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

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

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

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

b. **Pretreatment Program Requirements.** This permit contains pretreatment requirements consistent with applicable effluent limitations, national standards of performance, and toxic and performance effluent standards established pursuant to Sections 208(b), 301, 302, 303(d), 304, 306, 307, 403, 404, 405, and 501 of the CWA, and amendments thereto. This permit contains requirements for the implementation of an effective pretreatment program pursuant to Section 307 of the CWA; 40 CFR § 35 and 403; and/or Section 2233, Title 23, California Code of Regulations.

c. **Spill Reporting Requirements for POTWs.** This Order/Permit established a reporting protocol for how different types of spills, overflows, and bypasses of raw or partially treated sewage from the POTW shall be reported to regulatory agencies.

d. **Collection System.** The State Water Board issued General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order 2006-0003-DWQ (General Order) on May 2, 2006. The State Water Board amended the Monitoring and Reporting Program for the General Order through Order WQ 2013-0058-EXEC on August 6, 2013. The General Order requires public agencies that own or operate

sanitary sewer systems with sewer lines one mile of pipe or greater to enroll for coverage and comply with the General Order. The General Order requires agencies to develop sanitary sewer management plans and report all sanitary sewer overflows, among other requirements and prohibitions.

6. **Compliance Schedules (Not Applicable)**

X. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

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

A. Influent Monitoring

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

Influent monitoring in this Order/Permit follows the influent monitoring requirements in the previous Order/Permit with minor changes. The monitoring frequencies for some parameters have been increased due to RP for those parameters.

B. Effluent Monitoring

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

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

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

Criterion 1: Monitoring frequency will be monthly for those pollutants with reasonable potential to exceed water quality objectives (monitoring has shown an exceedance of the objectives);

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

Criterion 3: Monitoring frequency will be semiannually for those pollutants in which all of the historic effluent monitoring data are not detected and do not have reasonable potential to exceed water quality objectives.

Table F-13. Effluent Monitoring Frequency Comparison

Parameter[8]	Monitoring Frequency (2010 Permit)	Monitoring Frequency (2017 Permit)
Flow	Continuous	No Change
$BOD_5 20^oC$	Daily	No Change
Total Suspended Solids	Daily	No Change
pH	Weekly	No Change
Oil and Grease	Weekly	No Change
Temperature	Continuous	No Change
Total Organic Carbon	Monthly	No Change
Settleable Solids	Daily	No Change
Dissolved Oxygen	Weekly	No Change
Turbidity	Weekly	No Change
Nitrate Nitrogen	Quarterly	No Change
Organic Nitrogen	Quarterly	No Change
Total Phosphorous (as P)	Quarterly	No Change
Arsenic	Monthly	Quarterly
Cadmium	Monthly	Quarterly
Chromium (VI)	Monthly	Semiannually
Copper	Monthly	Quarterly for Discharge Point 002 and Monthly for Discharge Point 001
Lead	Monthly	Quarterly
Mercury	Monthly	Quarterly
Nickel	Monthly	Quarterly
Selenium	Monthly	Quarterly
Silver	Monthly	Quarterly
Zinc	Monthly	Quarterly
Cyanide	Monthly	Quarterly
Total Residual Chlorine (Discharge Point 001 Only)	Daily	No Change
Ammonia Nitrogen	Weekly	Monthly
Toxicity, Chronic	Monthly	No Change
Phenolic Compounds (non-chlorinated)	Quarterly	Semiannually
Phenolic Compounds (chlorinated)	Quarterly	No Change
Endosulfan	Quarterly	No Change
Endrin	Quarterly	Semiannually

Parameter[8]	Monitoring Frequency (2010 Permit)	Monitoring Frequency (2017 Permit)
HCH	Quarterly	Semiannually
Radioactivity (including gross alpha, gross beta, combined radium-226 & radium-228, tritium, strontium-90 and uranium)	Monthly	Quarterly
Acrolein	Quarterly	Semiannually
Antimony	Quarterly	No Change
Bis(2-chloroethoxy) methane	Quarterly	Semiannually
Bis(2-chloroisopropyl) ether	Quarterly	Semiannually
Chlorobenzene	Quarterly	Semiannually
Chromium (III)	Monthly	Quarterly
Di-n-butyl-phthalate	Quarterly	No Change
Dichlorobenzenes	Quarterly	No Change
Diethyl phthalate	Quarterly	Semiannually
Dimethyl phthalate	Quarterly	Semiannually
4,6-dinitro-2-methylphenol	Quarterly	Semiannually
2,4-Dinitrophenol	Quarterly	Semiannually
Ethylbenzene	Quarterly	Semiannually
Fluoranthene	Quarterly	Semiannually
Hexachlorocyclopentadiene	Quarterly	Semiannually
Nitrobenzene	Quarterly	No Change
Thallium	Quarterly	No Change
Toluene	Quarterly	No Change
Tributyltin	Quarterly	No Change
1,1,1-Trichloroethane	Quarterly	Semiannually
Acrylonitrile	Quarterly	Semiannually
Aldrin	Quarterly	Semiannually
Benzene	Quarterly	Semiannually
Benzidine	Quarterly	Semiannually
Beryllium	Quarterly	No Change
Bis(2-chloroethyl) ether	Quarterly	Semiannually
Bis(2-ethylhexyl) phthalate	Quarterly	No Change
Carbon tetrachloride	Quarterly	Semiannually
Chlordane	Quarterly	Semiannually
Chlorodibromomethane	Quarterly	No Change
Chloroform	Quarterly	No Change
DDT	Quarterly	No Change

Parameter[8]	Monitoring Frequency (2010 Permit)	Monitoring Frequency (2017 Permit)
1,4-dichlorobenzene	Quarterly	Semiannually
3,3'-dichlorobenzidine	Quarterly	Semiannually
1,2-Dichloroethane	Quarterly	Semiannually
1,1-Dichloroethylene	Quarterly	Semiannually
Dichlorobromomethane	Quarterly	No Change
Dichloromethane	Quarterly	No Change
1,3-Dichloropropene	Quarterly	Semiannually
Dieldrin	Quarterly	Semiannually
2,4-dinitrotoluene	Quarterly	Semiannually
1,2-diphenylhydrazine	Quarterly	Semiannually
Halomethanes	Quarterly	No Change
Heptachlor	Quarterly	Semiannually
Heptachlor epoxide	Quarterly	Semiannually
Hexachlorobenzene	Quarterly	Semiannually
Hexachlorobutadiene	Quarterly	Semiannually
Hexachloroethane	Quarterly	Semiannually
Isophorone	Quarterly	No Change
N-Nitrosodimethylamine	Quarterly	No Change
N-Nitrosodi-N-propylamine	Quarterly	Semiannually
N-Nitrosodiphenylamine	Quarterly	Semiannually
PAHs	Quarterly	No Change
PCBs as Aroclors	Quarterly	No Change
PCBs as Congeners	Annually	No Change
TCDD Equivalents	Quarterly	Semiannually
1,1,2,2-Tetrachloroethane	Quarterly	Semiannually
Tetrachloroethylene	Quarterly	No Change
Toxaphene	Quarterly	Semiannually
Trichloroethylene	Quarterly	Semiannually
1,1,2-Trichloroethane	Quarterly	Semiannually
2,4,6-Trichlorophenol	Quarterly	No Change
Vinyl chloride	Quarterly	Semiannually
Methyl-tert-butyl-ether	Quarterly	No Change

C. Whole Effluent Toxicity Testing Requirements

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

D. Receiving Water Monitoring

1. Surface Water

Receiving water monitoring is required to determine compliance with receiving water limitations and to characterize the water quality of the receiving water. Requirements are based on the Ocean Plan and the Basin Plan. The conceptual framework for the receiving water program has three components that comprise a range of spatial and temporal scales: (a) core monitoring; (b) regional monitoring; and (c) special studies.

a. Core monitoring is local in nature and focused on monitoring trends in water quality and the effect of the point source discharge on the receiving water. This includes effluent monitoring as well as many aspects of receiving water monitoring. In the monitoring program described below these core components are typically referred to as local monitoring.

b. Regional monitoring is focused on questions that are best answered by a region-wide approach that incorporates coordinated survey design and sampling techniques. The major objective of regional monitoring is to collect information required to assess how safe it is to swim in the ocean, how safe it is to eat seafood from the ocean, and whether the marine ecosystem is being protected. Key components of regional monitoring include elements to address pollutant mass emission estimations, public health concerns, monitoring of trends in natural resources, assessment of regional impacts from all contaminant sources, and protection of beneficial uses. The final design of regional monitoring programs is developed by means of steering committees and technical committees comprised of participating agencies and organizations and is not specified in this Order/Permit. Instead, for each regional component, the degree and nature of participation of the Permittee is specified. For this Order/Permit, these levels of effort are based upon the Permittee's past participation in regional monitoring programs.

   The Permittee shall participate in regional monitoring activities coordinated by the SCCWRP or any other appropriate agency approved by the Regional Water Board and USEPA. The procedures and time lines for the Regional Water Board and USEPA approval shall be the same as detailed for special studies, below.

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

   The Permittee, the Regional Water Board and USEPA shall consult annually to determine the need for special studies. Each year, the Permittee shall submit proposals for any proposed special studies to the Regional Water Board and USEPA by December 31, for the following year's monitoring effort (July through June). The following year, detailed scopes of work for proposals, including reporting schedules, shall be presented by the Permittee at a Spring Regional

Water Board meeting, to obtain the Regional Water Board approval and to inform the public. Upon approval by the Regional Water Board and USEPA, the Permittee shall implement its special study or studies.

d. The receiving water monitoring program contains the following core and regional components: Inshore and offshore water quality monitoring; benthic infauna and sediment chemistry monitoring; fish and macroinvertebrate (trawl and rig fishing) monitoring, including bioaccumulation/seafood safety; and kelp bed monitoring. Local and regional survey questions, sampling designs, monitoring locations, and other specific monitoring requirements are detailed in the MRP.

2. **Groundwater (Not Applicable)**

E. Other Monitoring Requirements

1. **Outfall and Diffuser Inspection**

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

2. **Biosolids and Sludge Management**

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

XI. PUBLIC PARTICIPATION

The Regional Water Board and the USEPA have considered the issuance of WDRs that will serve as an NPDES Order/Permit for the Hyperion Treatment Plant. As a step in the WDR and Order/Permit adoption process, the Regional Water Board and USEPA staff have developed tentative WDRs and NPDES Order/Permit and has encouraged public participation in the WDRs and Order/Permit adoption process.

A. Notification of Interested Parties

The Regional Water Board and USEPA have notified the Permittee and interested agencies and persons of its intent to prescribe WDRs and NPDES Order/Permit for the discharge and provided an opportunity to submit written comments and recommendations. Notification was provided through the following: (1) posted inside the Hyperion Treatment Plant at the entrance to the Technical Support Facility and at the entrance to the Environmental Learning Center, and (2) posted at the bulletin boards at the El Segundo Library and Beach Parking Lot Children Learning Center.

The public had access to the agenda and any changes in dates and locations through the Regional Water Board's website at: http://www.waterboards.ca.gov/losangeles/.

B. Written Comments

Interested persons were invited to submit written comments concerning the tentative WDRs and NPDES Order/Permit as provided through the notification process. Comments were due either in person or by mail to the Executive Office at the Regional Water Board and USEPA at the addresses on the cover page of this Order/Permit, or by email submitted to losangeles@waterboards.ca.gov and Mitschele.Becky@epa.gov.

To be fully responded to by staff and considered by the Regional Water Board and USEPA, the written comments were encouraged to be submitted to the Regional Water Board and

USEPA office by 5:00 p.m. on September 29, 2016; however, written and oral public comments were also accepted until the close of the public hearing at the Regional Water Board's regular Board meeting on October 13, 2016.

C. Public Hearing

The Regional Water Board and USEPA held a joint public hearing on the tentative WDRs and NPDES Order/Permit during its regular Board meeting on the following date and time, and at the following location:

Date:	October 13, 2016
Time:	9:00 a.m.
Location:	Metropolitan Water District of Southern California Board Room 700 North Alameda Street Los Angeles, California

Interested persons were invited to attend. At the public hearing, the Regional Water Board and USEPA heard testimony pertinent to the discharge, WDRs and NPDES Order/Permit. For accuracy of the record, important testimony was requested in writing; however, neither the Regional Water Board nor the USEPA adopted the WDRs and Order/Permit at that hearing.

The Regional Water Board will hold a second public hearing on the tentative WDRs and NPDES Order/Permit during its regular Board meeting on the following date and time, and at the following location:

Date:	February 02, 2017
Time:	9:00 a.m.
Location:	Metropolitan Water District of Southern California Board Room 700 North Alameda Street Los Angeles, California

Interested parties and persons are invited to attend; however, since the comment period ended on October 13, 2016, oral testimony pertinent to the waste discharge, WDRs and NPDES Order/Permit will not be allowed at the public hearing. The Regional Water Board will consider adoption of the Order/Permit at the second hearing.

The Regional Water Board's web address is www.swrcb.ca.gov/rwqcb4 where interested persons can access the current agenda for changes in Board meeting dates, times, and venues.

D. Reconsideration of Waste Discharge Requirements

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

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

For instructions on how to file a petition for review, see
http://www.waterboards.ca.gov/public_notices/petitions/water_quality/wqpetition_instr.shtml

E. Federal NPDES Permit Appeals

When a final NPDES permit is issued by USEPA, it will become effective 33 days following the date it is mailed to the Permittee, unless a request for review is filed. If a request for review is filed, only those permit conditions which are uncontested will go into effect pending disposition of the request for review. Requests for review must be filed within 33 days following the date the final permit is mailed and must meet the requirements of 40 CFR part 124.19. All requests for review should be addressed to the Environmental Appeals Board (EAB) as follows. Requests sent through the U.S. Postal Service (except by Express Mail) must be addressed to the EAB's mailing address, which is:

U.S. Environmental Protection Agency
Clerk of the Board
Environmental Appeals Board (MC 1103B)
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460-0001

All filings delivered by hand or courier, including Federal Express, UPS, and U.S. Postal Express Mail, should be directed to the following address:

Environmental Appeals Board
U.S. Environmental Protection Agency
Colorado Building
1341 G Street, N.W., Suite 600
Washington, D.C. 20460

Those persons filing a request for review must have filed comments on the draft permit, or participated in the public hearing. Otherwise, any such request for review may be filed only to the extent of changes from the draft to the final permit decision.

F. Information and Copying

The Report of Waste Discharge (ROWD), related documents, tentative effluent limitations and special conditions, comments received, and other information are on file and may be inspected at 320 West 4th Street, Suite 200, Los Angeles, California and 75 Hawthorne Street, San Francisco, California any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling (213) 576-6600, or USEPA at (415) 972-3524.

G. Register of Interested Persons

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

H. Additional Information

Requests for additional information or questions regarding this Order/Permit should be directed to Steven Webb at (213) 576-6793 or at Steven.Webb@waterboards.ca.gov or Becky Mitschele at Mitschele.Becky@epa.gov or (415) 972-3492.

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

INFORMATION AND DATA ACQUISITION

I. Operations and Performance Review

A. NPDES permit requirements
   1. Effluent limitations
   2. Special conditions
   3. Monitoring data and compliance history

B. POTW design criteria
   1. Hydraulic loading capacities
   2. Pollutant loading capacities
   3. Biodegradation kinetics calculations/assumptions

C. Influent and effluent conventional pollutant data
   1. Biochemical oxygen demand (BOD5)
   2. Chemical oxygen demand (COD)
   3. Suspended solids (SS)
   4. Ammonia
   5. Residual chlorine
   6. pH

D. Process control data
   1. Primary sedimentation - hydraulic loading capacity and BOD and SS removal
   2. Activated sludge - Food-to-microorganism (F/M) ratio, mean cell residence time (MCRT), mixed liquor suspended solids (MLSS), sludge yield, and BOD and COD removal
   3. Secondary clarification - hydraulic and solids loading capacity, sludge volume index and sludge blanket depth

E. Operations information
   1. Operating logs
   2. Standard operating procedures
   3. Operations and maintenance practices

F. Process side stream characterization data
   1. Sludge processing side streams
   2. Tertiary filter backwash
   3. Cooling water

G. Combined sewer overflow (CSO) bypass data
   1. Frequency
   2. Volume

H. Chemical coagulant usage for wastewater treatment and sludge processing
   1. Polymer
   2. Ferric chloride
   3. Alum

II. POTW Influent and Effluent Characterization Data

A. Toxicity
B. Priority pollutants
C. Hazardous pollutants
D. Superfund Amendments and Reauthorization Act (SARA) 313 pollutants,
E. Other chemical-specific monitoring results

III. Sewage Residuals (raw, digested, thickened and dewatered sludge and incinerator ash) Characterization Data

A. EP toxicity
B. Toxicity Characteristic Leaching Procedure (TCLP)
C. Chemical analysis

IV. Industrial Waste Survey (IWS)

A. Information on IUs with categorical standards or local limits and other significant non-categorical IUs
B. Number of IUs
C. Discharge flow
D. Standard Industrial Classification (SIC) code
E. Wastewater flow
    1. Types and concentrations of pollutants in the discharge
    2. Products manufactured
F. Description of pretreatment facilities and operating practices
G. Annual pretreatment report
H. Schematic of sewer collection system
I. POTW monitoring data
    1. Discharge characterization data
    2. Spill prevention and control procedures
    3. Hazardous waste generation
J. IU self-monitoring data
    1. Description of operations
    2. Flow measurements
    3. Discharge characterization data
    4. Notice of sludge loading
    5. Compliance schedule (if out of compliance)
K. Technically based local limits compliance reports
L. Waste hauler monitoring data manifests
M. Evidence of POTW treatment interferences (i.e., biological process inhibition)

ATTACHMENT H – BIOSOLIDS AND SLUDGE MANAGEMENT

BIOSOLIDS USE AND DISPOSAL REQUIREMENTS

(Note: "Biosolids" refers to non-hazardous sewage sludge as defined in 40 CFR §503.9. Sewage sludge that is hazardous, as defined in 40 CFR part 261, must be disposed of in accordance with the Resource Conservation and Recovery Act (RCRA).)

I. General Requirements

A. All biosolids generated by the Permittee shall be reused or disposed of in compliance with the applicable portions of:

1. 40 CFR part 503: for biosolids that are land applied, placed in surface disposal sites (dedicated land disposal sites or monofills), or incinerated; 40 CFR § 503 Subpart B (land application) applies to biosolids placed on the land for the purposes of providing nutrients or conditioning the soil for crops or vegetation. 40 CFR § 503 Subpart C (surface disposal) applies to biosolids placed on land for the purpose of disposal.
2. 40 CFR part 258: for biosolids disposed of in a municipal solid waste landfills.
3. 40 CFR part 257: for all biosolids use and disposal practices not covered under 40 CFR parts 258 or 503.

B. The Permittee is responsible for assuring that all biosolids from its facility are used or disposed of in accordance with 40 CFR part 503, whether the Permittee uses or disposes of the biosolids itself, or transfers their biosolids to another party for further treatment, reuse, or disposal. The Permittee is responsible for informing subsequent preparers, appliers, and disposers of requirements they must meet under 40 CFR part 503.

C. Duty to mitigate: The Permittee shall take all reasonable steps to prevent or minimize any biosolids use or disposal which may adversely impact human health or the environment.

D. No biosolids shall be allowed to enter wetland or other waters of the United States.

E. Biosolids treatment, storage, and use or disposal shall not contaminate groundwater.

F. Biosolids treatment, storage, use or disposal shall not create a nuisance such as objectionable odors or flies.

G. The Permittee shall assure that haulers transporting biosolids off site for further treatment, storage, reuse, or disposal take all necessary measures to keep the biosolids contained.

H. If biosolids are stored for over two years from the time they are generated, the Permittee must ensure compliance with all the requirements for surface disposal under 40 CFR part 503 Subpart C, or must submit a written request to USEPA with the information in part 503.20 (b), requesting permission for longer temporary storage.

I. Sewage sludge containing more than 50 mg/kg PCBs shall be disposed of in accordance with 40 CFR part 761.

J. Any off-site biosolids treatment, storage, use, or disposal site operated by the Permittee within Region 4 (Los Angeles Region of RWQCB) that is not subject to its own Waste Discharge Requirements shall have facilities adequate to divert surface runoff from the adjacent area, to protect the site boundaries from erosion, and to prevent any conditions that would cause drainage from the materials in the disposal site to escape from the site. Adequate protection is defined as protected from at least a 100-year storm and from the highest tidal stage that may occur.

K. There shall be adequate screening at the plant headworks and/or at the biosolids treatment units to ensure that all pieces of metal, plastic, glass, and other inert objects with a diameter greater than 3/8 inches are removed.

II. Inspection and Entry

The Regional Water Board, USEPA or an authorized representative thereof, upon the presentation of credentials, shall be allowed by the Permittee, directly or through contractual arrangements with their biosolids management contractors, to:

A. enter upon all premises where biosolids are produced by the Permittee and all premises where Permittee biosolids are further treated, stored, used, or disposed, either by the Permittee or by another party to whom the Permittee transfers the biosolids for further treatment, storage, use, or disposal;

B. have access to and copy any records that must be kept under the conditions of this permit or of 40 CFR part 503, by the Permittee or by another party to whom the Permittee transfers the biosolids for further treatment, storage, use, or disposal; and

C. inspect any facilities, equipment (including monitoring and control equipment), practices, or operations used in the production of biosolids and further treatment, storage, use, or disposal by the Permittee or by another party to whom the Permittee transfers the biosolids for further treatment, storage, use, or disposal.

III. Monitoring

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

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

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

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

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

B. Biosolids shall be monitored for the following constituents at the frequency stipulated in 40 CFR § 503.16: arsenic, cadmium, chromium, copper, lead, mercury, molybdenum, nickel, selenium, zinc, organic nitrogen, ammonia nitrogen, and total solids. If biosolids are removed for use or disposal on a routine basis, sampling should be scheduled for regular intervals throughout the year. If biosolids are stored for an extended period prior to use or disposal, sampling may occur at regular intervals, or samples of the accumulated stockpile may be collected prior to use or disposal, corresponding to the tons accumulated in the stockpile for that period.

C. Class 1 facilities (facilities with pretreatment programs or others designated as Class 1 by the Regional Administrator) and Federal facilities with > 5 MGD influent flow shall sample biosolids for pollutants listed under section 307 (a) of the Clean Water Act (as required in the

pretreatment section of the permit for POTWs with pretreatment programs). Class 1 facilities and Federal Facilities with > 5 MGD influent flow shall test dioxins/dibenzofurans using a detection limit of < 1 pg/g during their next sampling period if they have not done so within the past 5 years and once per 5 years thereafter.

D. The biosolids shall be tested annually or more frequently if necessary to determine hazardousness in accordance with California Law.

IV. Pathogen and Vector Control

A. Prior to land application, the Permittee shall demonstrate that the biosolids meet Class A or Class B pathogen reduction levels by one of the methods listed in 40 CFR § 503.32. Prior to disposal in a surface disposal site, the Permittee shall demonstrate that the biosolids meet Class B levels or shall ensure that the site is covered at the end of each operating day.

B. If pathogen reduction is demonstrated using a "Process to Further Reduce Pathogens," the Permittee shall maintain daily records of the operating parameters used to achieve this reduction. If pathogen reduction is demonstrated by testing for fecal coliform and/or pathogens, samples must be collected at the frequency specified in Table 1 of 40 CFR § 503.16. If Class B is demonstrated using fecal coliform, at least seven grab samples must be collected during each monitoring period and a geometric mean calculated from these samples. The following holding times between sample collection and analysis shall not be exceeded: fecal coliform – 6 hours when cooled to <4 degrees Celsius (extended to 24 hours when cooled to <4 degrees Celsius for Class A composted, Class B aerobically digested, and Class B anaerobically digested sample types); Salmonella spp. Bacteria – 24 hours when cooled to <4 degrees Celsius (unless using Method 1682 – 6 hours when cooled to 10 degrees Celsius); enteric viruses – 6 hours when cooled to <10 degrees Celsius (extended to one month when cooled to <4 degrees Celsius).

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

V. Surface Disposal

If biosolids are placed in a surface disposal site (dedicated land disposal site or monofill), a qualified groundwater scientist shall develop a groundwater monitoring program for the site, or shall certify that the placement of biosolids on the site will not contaminate an aquifer.

VI. Notifications

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

A. Notification of Non-compliance

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

B. Interstate Notification

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

C. Land Application Notification

A reuse/disposal plan shall be submitted to USEPA Region IX Coordinator and, in the absence of other state or regional reporting requirements, to the state permitting agency, prior to the use or disposal of any biosolids from this facility to a new or previously unreported site. The plan shall be submitted by the land applier of the biosolids and shall include a description and a topographic map of the proposed site(s) for reuse or disposal, names and addresses of the applier(s) and site owner(s), and a list of any state or local permits which must be obtained. For land application sites, the plan shall include a description of the crops or vegetation to be grown, proposed nitrogen loadings to be used for the crops, a determination of agronomic rates, and a groundwater monitoring plan or a description of why groundwater monitoring is not required.

If the biosolids do not meet 40 CFR § 503.13 Table 3 metals concentration limits, the Permittee must require their land applier to contact the state permitting authority to determine whether bulk biosolids subject to the cumulative pollutant loading rates in 40 CFR § 503.12(b)(2) have been applied to the site since July 20, 1993, and, if so, the cumulative amount of pollutants applied to date, and background concentration, if known. The Permittee shall then notify USEPA Region IX Coordinator of this information.

For biosolids that are land applied, the Permittee shall notify the applier in writing of the nitrogen content of the biosolids, and the applier's requirements under 40 CFR part 503, including the requirements that the applier certify that the requirement to obtain information in Subpart A, and that the management practices, site restrictions, and any applicable vector attraction reduction requirements Subpart D have been met. The Permittee shall require the applier to certify at the end of 38 months following application of Class B biosolids that those harvesting restrictions in effect for up to 38 months have been met.

D. Surface Disposal Notification

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

VII. Reporting

The Permittee shall submit an annual biosolids report to USEPA Region IX Biosolids Coordinator and the Los Angeles Regional Water Quality Control Board by February 19 of each calendar year. The report shall include:

A. The amount of biosolids generated that year, in dry metric tons, and the amount accumulated from previous years.

B. Results of all pollutant monitoring required in the Monitoring Section above. Results must be reported on a 100% dry weight basis.

C. Descriptions of pathogen reduction methods, and vector attraction reduction methods, as required in 40 CFR § 503.17 and 503.27, and certifications.

D. Results of any groundwater monitoring or certification by groundwater scientist that the placement of biosolids in a surface disposal site will not contaminate an aquifer.

E. Names and addresses of land appliers and surface disposal site operators, and volumes applied (dry metric tons).

F. Names and addresses of persons who received biosolids for storage, further treatment, disposal in a municipal waste landfill, deep well injection, or other reuse/disposal methods not covered above, and volumes delivered to each.

G. The Permittee shall submit, or require all parties contracted to manage their biosolids to submit, an annual biosolids report to USEPA Region IX Biosolids Coordinator by February 19 of each year for the period covering the previous calendar year. The report shall include:

   Names and addresses of land appliers and surface disposal site operators, name, location (latitude/longitude), and size (hectares) of site(s), volumes applied/disposed (dry metric tons), results of any groundwater monitoring; for land application: biosolids loading rates (metric tons per hectare), nitrogen loading rates (kg/ha),calculated plant available nitrogen, dates of applications, crops grown, dates of seeding and harvesting and certifications that the requirement to obtain information in 40 CFR § 503.12(e)(2), management practices in § 503.14, site restrictions in § 503.32(b)(5) have been met; for biosolids exceeding 40 CFR §503.13 Table 3 metals concentrations, the locations of sites where the biosolids were applied and cumulative metals loading at the sites to date; and for closed sites, the date of site closure and certifications of management practiced for three years following site closure.

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

ATTACHMENT I – PRETREATMENT REPORTING REQUIREMENTS

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

I. Pretreatment Requirements

A. The Permittee shall be responsible and liable for the performance of all Control Authority pretreatment requirements contained in Title 40 of the Code of Federal Regulations (40 CFR) part 403, including any subsequent regulatory revisions to 40 CFR part 403. Where 40 CFR part 403 or subsequent revision places mandatory actions upon the Permittee as Control Authority but does not specify a timetable for completion of the actions, the Permittee shall complete the required actions within six months from the issuance date of this permit or the effective date of the revisions to 40 CFR part 403, whichever is later. For violations of pretreatment requirements, the Permittee shall be subject to enforcement actions, penalties, fines and other remedies by the USEPA or other appropriate parties, as provided in the Clean Water Act (CWA). The Regional Water Board or USEPA may initiate enforcement action against a nondomestic user for noncompliance with applicable standards and requirements as provided in the CWA and/or the California Water Code.

B. The Permittee shall implement and enforce in its entire service area, including contributing jurisdictions, its approved pretreatment program, and all subsequent revisions which are hereby made enforceable conditions of this Order/Permit. The Permittee shall enforce the requirements promulgated under sections 307(b), 307(c), 307(d) and 402(b) of the CWA with timely, appropriate and effective enforcement actions. The Permittee shall cause all nondomestic users subject to federal categorical standards to achieve compliance no later than the date specified in those requirements or, in the case of a new nondomestic user, upon commencement of the discharge.

C. The Permittee shall perform the pretreatment functions as required in 40 CFR part 403 including, but not limited to:

1. Implement the necessary legal authorities as provided in 40 CFR § 403.8(f)(1);
2. Enforce the pretreatment requirements under 40 CFR § 403.5 and 403.6;
3. Implement the programmatic functions as provided in 40 CFR § 403.8(f)(2); and
4. Provide the requisite funding and personnel to implement the pretreatment program as provided in 40 CFR § 403.8(f)(3).

D. The Permittee shall submit an annual report to the Regional Water Board, State Water Board, and USEPA Pacific Southwest Region, describing its pretreatment activities over the previous year. In the event the Permittee is not in compliance with any conditions or requirements of this Order/Permit, or any pretreatment compliance inspection/audit requirements, then the Permittee shall also include the reasons for noncompliance and state how and when the Permittee shall comply with such conditions and requirements. This annual report shall cover operations from January 1 through December 31 and is due on March 1 of each year. The report shall contain, but not be limited to, the following information:

1. A summary of analytical results from representative sampling of the publicly-owned treatment works (POTW) influent and effluent, as described in Attachment E –

Monitoring and Reporting Program, for those pollutants USEPA has identified under section 307(a) of the CWA which are known or suspected to be discharged by nondomestic users. Representative grab sampling shall be conducted for pollutants that may degrade after collection, or where the use of automatic sampling equipment may otherwise result in unrepresentative sampling. Such pollutants include, but are not limited to, cyanide, oil and grease, volatile organic compounds, chlorine, phenol, sulfide, pH, and temperature. Sludge sampling and analysis are covered in the sludge section of this permit. The Permittee shall also provide any influent or effluent monitoring data for nonpriority pollutants which the Permittee believes may be causing or contributing to interference or pass through.

2. A discussion of upset, interference or pass-through incidents, if any, at the treatment plant which the Permittee knows or suspects were caused by nondomestic users of the POTW system. The discussion shall include the reasons why the incidents occurred, the corrective actions taken and, if known, the name and address of the nondomestic user(s) responsible. The discussion shall also include a review of the applicable pollutant limitations to determine whether any additional limitations, or changes to existing requirements, may be necessary to prevent pass through or interference;

3. An updated list of the Permittee's Significant Industrial Users (SIUs) including their names and addresses, and a list of deletions, additions and SIU name changes keyed to the previously submitted list. The Permittee shall provide a brief explanation for each change. The list shall identify the SIUs subject to federal categorical standards by specifying which set(s) of standards are applicable to each SIU. The list shall also indicate which SIUs are subject to local limitations;

4. The Permittee shall characterize the compliance status of each SIU by providing a list or table which includes the following information:

   a. Name of the SIU;

   b. Category, if subject to federal categorical standards;

   c. The type of wastewater treatment or control processes in place;

   d. The number of samples collected and inspections conducted by the Permittee during the year;

   e. The number of samples taken by the SIU during the year;

   f. For an SIU subject to discharge requirements for total toxic organics, whether all required certifications were provided;

   g. A list of the standards violated during the year. Identify whether the violations were for categorical standards or local limits;

   h. Whether the facility is in significant noncompliance (SNC) as defined at 40 CFR § 403.8(f)(2)(viii) at any time during the year; and

   i. A summary of enforcement or other actions taken during the year to return the SIU to compliance. Describe the type of action, final compliance date, and the amount of fines and penalties collected, if any. Describe any proposed actions for bringing the SIU into compliance.

5. A brief description of any programs the Permittee implements to reduce pollutants from nondomestic users that are not classified as SIUs;

6. A brief description of any significant changes in operating the pretreatment program which differ from the previous year including, but not limited to, changes concerning the

program's administrative structure, local limits, monitoring program or monitoring frequencies, legal authority, enforcement policy, funding levels, or staffing levels;

7. A summary of the annual pretreatment budget, including the cost of pretreatment program functions and equipment purchases; and
8. A summary of activities to involve and inform the public of the program including a copy of the newspaper notice, if any, required under 40 CFR § 403.8(f)(2)(viii).
9. A description of any changes in sludge disposal methods.
10. A discussion of any concerns not described elsewhere in the annual report.

E. Any substantial modifications to the approved Pretreatment Program, as defined in 40 CFR § 403.18(b), shall be submitted in writing to the Regional Water Board and USEPA and shall not become effective until the Regional Water Board and USEPA approval is attained.

F. Non-industrial Source Control and Public Education Programs

The Permittee shall continue to develop and implement its non-industrial source control program and public education program. The purpose of these programs is to reduce non-industrial toxic pollutants and pesticides into the POTW. These programs shall be periodically reviewed and addressed in the annual report.

II. LOCAL LIMITS EVALUATION

In accordance with 40 CFR § 122.44(j)(2)(ii), the Permittee shall provide a written technical evaluation of the need to revise local limits under 40 CFR § 403.5(c)(1) within 180 days of issuance or reissuance of the NPDES Order/Permit. Local limits shall be calculated to be protective of mass emission benchmarks in addition to water quality standards.

III. SIGNATORY REQUIREMENTS AND REPORT SUBMITTAL

A. Signatory Requirements.

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

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

B. Report Submittal.

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

A copy of the Annual Report must be sent to USEPA electronically to the following address: R9Pretreatment@epa.gov. The maximum file size is 20 megabytes.