CALIFORNIA
Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Los Angeles Regional Water Quality Control Board

November 27, 2018

Mr. Jason Golumbfskie-Jones
Installation Environmental Program Director
Naval Base Coronado
Box 357088
San Diego, CA 92135

ADOPTED WASTE DISCHARGE REQUIREMENTS (WDRs) AND NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR THE UNITED STATES NAVY, SAN CLEMENTE ISLAND WASTEWATER TREATMENT PLANT (NPDES NO. CA0110175, CI NO. 6432)

Dear Mr. Golumbfskie-Jones:

The Regional Water Quality Control Board, Los Angeles Region (Regional Water Board) staff transmitted a letter containing the revised tentative WDRs and NPDES permit for the United States Navy's San Clemente Island Wastewater Treatment Plant on October 29, 2018.

In accordance with administrative procedures, the Regional Water Board at a public hearing held on November 08, 2018, reviewed the revised tentative requirements, and considered all the factors in the case, and adopted WDRs and NPDES Order No. **R4-2018-0156**.

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

If you have any questions, please contact me at (213) 576-6616 or Steven Webb at (213) 576-6793.

Sincerely,

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

Enclosure
Adopted Order No. R4-2018-0156

cc: Environmental Protection Agency, Region 9, Permits Branch (WTR-5)
NOAA, National Marine Fisheries Service
Department of Interior, U.S. Fish and Wildlife Service
State Water Resources Control Board
State Water Resources Control Board, Division of Drinking Water
Department of Fish and Wildlife, Region 5
California State Parks and Recreation
California Coastal Conservancy
California Coastal Commission, South Coast Region
Heal the Bay
Environment Now
Natural Resources Defense Council
U.S. Army Corps of Engineers
Los Angeles County Department of Public Works
Los Angeles Waterkeeper

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION
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ORDER R4-2018-0156
NPDES NO. CA0110175

WASTE DISCHARGE REQUIREMENTS
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
FOR THE UNITED STATES NAVY, NAVY AUXILIARY LANDING FIELD, SAN CLEMENTE ISLAND WASTEWATER TREATMENT PLANT, LOS ANGELES COUNTY
DISCHARGE TO THE PACIFIC OCEAN VIA OUTFALL 002

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

Table 1. Discharger Information

Discharger	United States Navy
Name of Facility	San Clemente Island Wastewater Treatment Plant, collection system, and outfall
Facility Address	Navy Auxiliary Landing Field, San Clemente Island
	San Clemente Island
	Los Angeles County

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude (North)	Discharge Point Longitude (West)	Receiving Water
002	Secondary and Tertiary Treated Wastewater	33.00546°	-118.055083°	Pacific Ocean

Table 3. Administrative Information

This Order was adopted on:	**November 08, 2018**
This Order shall become effective on:	**January 01, 2019**
This Order shall expire on:	**December 31, 2024**
The Discharger shall file a Report of Waste Discharge as an application for reissuance of WDRs in accordance with title 23, California Code of Regulations, and an application for reissuance of a National Pollutant Discharge Elimination System (NPDES) permit no later than:	**180 days prior to the Order expiration date**
The U.S. Environmental Protection Agency (U.S. EPA) and the California Regional Water Quality Control Board, Los Angeles Region, have classified this discharge as follows:	**Minor discharge**

I, Deborah J. Smith, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on **November 08, 2018**.

Deborah J. Smith, Executive Officer

Adopted: 11/08/18

CONTENTS

TABLES

ATTACHMENTS

I. FACILITY INFORMATION

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

II. FINDINGS

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

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

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

C. Provisions and Requirements Implementing State Law. The provisions/requirements in subsections IV.B, IV.C, and V.B are included to implement state law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.

D. Notification of Interested Parties. The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of the notification are provided in the Fact Sheet.

E. Consideration of Public Comment. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet.

THEREFORE, IT IS HEREBY ORDERED, that this Order supersedes Order No. R4-2013-0111 except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the CWA and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order. This action in no way prevents the Regional Water Board from taking enforcement action for violations of the previous Order.

III. DISCHARGE PROHIBITIONS

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

B. 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.

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

D. Waste shall not be discharged to a designated Area of Special Biological Significance (ASBS). On March 21, 1974, the State Water Resources Control Board (State Water Board) designated the ocean waters off San Clemente Island to a depth of 300 feet or a distance of one nautical mile, whichever is greater, as an ASBS. This designation required the United States Navy (Navy) to phase out its existing discharges to the ASBS. In lieu of ceasing its discharge, the Navy requested that the State Water Board modify the ASBS boundaries to exclude certain zones. On November 01, 1976, the State Water Board held a public hearing to consider the Navy's request. Evidence presented at the hearing did not support exclusion of any zones identified by the Navy but it did support an action by the State Water Board to allow waste disposal at the existing location under limited conditions. The State Water Board adopted Resolution No. 77-11 on February 17, 1977, to authorize its Executive Officer to request that USEPA modify the Navy's NPDES permit to allow the discharge under the following conditions:

1. Provide secondary treatment;
2. Comply with the Ocean Plan;
3. Comply with effluent limits based on the existing monthly average daily flow (0.025 million gallons per day (mgd)), rather than treatment plant capacity, including a daily maximum for five-day BOD not to exceed 19 pounds per day (PPD).
4. Demonstrate through monitoring that the effluent: 1) does not alter natural water quality (that is, it is undetectable) beyond a radius of 1,000 feet from the outfall's terminus and 2) complies with Ocean Plan-based limitations; and,
5. Comply with Resolution No. 77-11.

The Navy has complied with the exception up to now, except for effluent violations as described in the Fact Sheet. The discharge from the tertiary treatment plant will comply with the secondary treatment requirement. If the Navy cannot comply with the conditions, then the Navy is subject to the existing Ocean Plan prohibition of discharges to an ASBS. Section III.J.1 of the Ocean Plan allows the State Water Board to grant exceptions provided that the exception "will not compromise protection of ocean waters for beneficial uses, and the public interest will be served." Prior to granting an exception, the State Water Board must hold a public hearing and comply with the California Environmental Quality Act (CEQA). Exceptions also require USEPA concurrence.

F. 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.

G. The bypass or overflow of untreated or partially treated 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 is prohibited.

I. The discharge of trash to surface waters of the State or the deposition of trash where it may be discharged into surface waters of the State is prohibited.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations and Performance Goals – Discharge Point 002

Effluent limitations for Discharge Point 002 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. Performance goals are based upon actual performance data for the SCI WWTP and are specified only as an indication of the treatment efficiency of the plant. They are not considered enforceable effluent limitations or standards for the plant. The Discharger shall maintain, if not improve, the effluent quality at or below the performance goal concentrations. Any two consecutive exceedances of the performance goals shall trigger an investigation into the cause of the exceedance. If the exceedance persists in three successive monitoring periods, the Discharger shall submit a written report to the Regional Water Board on the nature of the exceedance, the results of the investigation including the cause of the exceedance, the corrective actions taken, any proposed corrective measures, and a timetable for implementation, if necessary. The Executive Officer of the Regional Water Board may modify any of the performance goals if the Discharger submits a request and demonstrates that the change is warranted.

1. Final Effluent Limitations – Discharge Point 002

a. The Discharger shall maintain compliance with the following effluent limitations at Discharge Point 002, with compliance measured at Monitoring Location EFF-001 as described in the Monitoring and Reporting Program, Attachment E:

Table 4. Final Effluent Limitations and Performance Goals

Parameter	Units	Effluent Limitations[1]					Performance Goals
		Average Monthly[2]	Average Weekly	Maximum Daily[3]	Instantaneous Minimum	Instantaneous Maximum[4]	Average Monthly
Biochemical Oxygen Demand ($BOD_5$20°C)	mg/L	30	45	--	--	--	--
	lbs/day[5]	6.3	9.4	19	--	--	--
Total Suspended Solids (TSS)	mg/L	30	45	--	--	--	--
	lbs/day[5]	6.3	9.4	19	--	--	--

1 The minimum dilution ratio used to calculate effluent limitations for nonconventional and toxic pollutants for Discharge Point 002 is 136:1 (i.e. 136 parts seawater to one part effluent).

2 For intermittent discharges, the daily value used to calculate the average monthly value 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 a maximum flow rate of 0.025 mgd, consistent with the water-quality based limits in the previous permit: lbs/day = 0.00834 x Ce (effluent concentration in µg/L) x Q (flow rate in mgd). During storm events when flow exceeds 0.025 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 Minimum	Instan-taneous Maximum[4]	Average Monthly
Removal Efficiency for TSS	%	85[6]	--	--	--	--	--
Removal Efficiency for BOD	%	85[6]	--	--	--	--	--
Temperature	°F	--	--	--	--	100	--
pH	standard units	--	--	--	6.0	9.0	--
Oil and Grease	mg/L	25	40	--	--	75	--
	lbs/day[5]	5.2	8.3	--	--	15	--
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	--	--	--	--	--	1.0
Chromium (VI)	µg/L	--	--	--	--	--	25
Copper	µg/L	139	--	1,370	--	3,840	--
	lbs/day[5]	0.029	--	0.29	--	0.80	--
Lead	µg/L	--	--	--	--	--	2.5
Mercury	µg/L	--	--	--	--	--	2.5
Nickel	µg/L	--	--	--	--	--	8.0
Selenium	µg/L	--	--	--	--	--	1.1
Silver	µg/L	--	--	--	--	--	1.0
Zinc	µg/L	1,650	--	9,870	--	26,310	--
	lbs/day[5]	0.34	--	2.1	--	5.5	--
Cyanide	µg/L	--	--	--	--	--	27
Ammonia as Nitrogen	mg/L	--	--	--	--	--	6.4

[6] The removal efficiency final effluent limitation does not apply in situations where the concentration of the influent wastewater is too low to meet the 85% removal, per 40 CFR 133.103(d), so long as the Discharger satisfactorily demonstrates that (1) the treatment works is consistently meeting or will consistently meet, the final effluent limitations for BOD and TSS; (2) if the Discharger would have to achieve significantly more stringent limitations than would otherwise be required by the concentration-based standards to meet the percent removal requirements; and (3) the less concentrated influent is not the result of excessive inflow and infiltration (I/I). The wastewater will be considered the result of excessive I/I if the total flow to the FOTW (i.e., wastewater plus I/I) is less than 275 gallons per capita per day and is consistent with the definition in 40 CFR 35.2005(b)(16). This demonstration must be made in the monitoring reports.

Parameter	Units	Effluent Limitations[1]					Performance Goals
		Average Monthly[2]	Average Weekly	Maximum Daily[3]	Instan-taneous Minimum	Instan-taneous Maximum[4]	Average Monthly
Total Residual Chlorine[7]	mg/L	0.274	--	0.1[8]	--	8.2	--
	lbs/day[5]	0.06	--	0.021	--	1.7	
Chronic Toxicity[9,10] (TST)	Pass or Fail	--	--	Pass	--	--	--
Phenolic compounds (non-chlorinated)[11]	µg/L	--	--	--	--	--	5.0
Phenolic compounds (chlorinated)[11]	µg/L	--	--	--	--	--	5.0
Endosulfan[11]	µg/L	--	--	--	--	--	0.05
Endrin	µg/L	--	--	--	--	--	0.05
Hexachloro-cyclohexane (HCH)[11]	µg/L	--	--	--	--	--	0.025
Radioactivity							
Gross alpha	pCi/L	--	--	--	--	--	12
Gross beta	pCi/L	--	--	--	--	--	11
Human Health Toxicants – Noncarcinogens							
Acrolein	µg/L	--	--	--	--	--	25

7 These total chlorine residual final effluent limitations shall only apply to continuous discharges exceeding two hours. For intermittent discharges not exceeding two hours, final effluent limitations for total chlorine residual shall be determined using the procedures outlined in section III.C.4.a of the Ocean Plan, a minimum dilution ratio of 136:1, the water quality objectives in Table 1 of the Ocean Plan, and the following equation:

Log y = -0.43(log x) + 1.8

Where y = the water quality objective (in µg/L) to apply when chlorine is being discharged

x = duration of uninterrupted chlorine discharge in minutes

8 The total chlorine residual final effluent limitation was carried over from Order No. R4-2013-0111 per 40 CFR 122.44(l)(1).

9 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).

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

11 See section VII of this Order and Attachment A for definition of terms.

Parameter	Units	Effluent Limitations[1]					Performance Goals
		Average Monthly[2]	Average Weekly	Maximum Daily[3]	Instan-taneous Minimum	Instan-taneous Maximum[4]	Average Monthly
Antimony	µg/L	--	--	--	--	--	1.9
Bis(2-chloroethoxy) methane	µg/L	--	--	--	--	--	25
Bis(2-chloroiso-propyl) ether	µg/L	--	--	--	--	--	10
Chlorobenzene	µg/L	--	--	--	--	--	10
Chromium (III)	µg/L	--	--	--	--	--	2.5
Di-n-butyl-phthalate	µg/L	--	--	--	--	--	50
Dichloro-benzenes[11]	µg/L	--	--	--	--	--	5.0
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	--	--	--	--	--	5.0
Thallium	µg/L	--	--	--	--	--	5.0
Toluene	µg/L	--	--	--	--	--	10
Tributyltin	ng/L	--	--	--	--	--	3.9
1,1,1-Trichloro-ethane	µg/L	--	--	--	--	--	10
Human Health Toxicants – Carcinogens							
Acrylonitrile	µg/L	--	--	--	--	--	10
Aldrin	µg/L	--	--	--	--	--	0.003
Benzene	µg/L	--	--	--	--	--	10
Benzidine	µg/L	--	--	--	--	--	0.0095
Beryllium	µg/L	--	--	--	--	--	2.5
Bis(2-chloroethyl) ether	µg/L	--	--	--	--	--	5.0
Bis(2-ethylhexyl) phthalate	µg/L	--	--	--	--	--	39
Carbon tetrachloride	µg/L	--	--	--	--	--	10
Chlordane[11]	µg/L	--	--	--	--	--	0.0032
Chlorodibromo-methane	µg/L	--	--	--	--	--	22

Parameter	Units	Effluent Limitations[1]					Performance Goals
		Average Monthly[2]	Average Weekly	Maximum Daily[3]	Instan-taneous Minimum	Instan-taneous Maximum[4]	Average Monthly
Chloroform	µg/L	--	--	--	--	--	51
DDT	µg/L	--	--	--	--	--	0.023
1,4-dichloro-benzene	µg/L	--	--	--	--	--	10
3,3'-dichloro-benzidine	µg/L	--	--	--	--	--	1.0
1,2-dichloroethane	µg/L	--	--	--	--	--	10
1,1-dichloro-ethylene	µg/L	--	--	--	--	--	10
Dichlorobromo-methane	µg/L	--	--	--	--	--	39
Dichloro-methane	µg/L	--	--	--	--	--	10
1,3-dichloropropene	µg/L	--	--	--	--	--	10
Dieldrin	µg/L	--	--	--	--	--	0.0055
2,4-dinitrotoluene	µg/L	--	--	--	--	--	25
1,2-diphenyl-hydrazine	µg/L	--	--	--	--	--	5.0
Halomethanes	µg/L	--	--	--	--	--	10
Heptachlor	µg/L	--	--	--	--	--	0.0069
Heptachlor epoxide	µg/L	--	--	--	--	--	0.0027
Hexachloro-benzene	µg/L	--	--	--	--	--	0.029
Hexachloro-butadiene	µg/L	--	--	--	--	--	5.0
Hexachloro-ethane	µg/L	--	--	--	--	--	5.0
Isophorone	µg/L	--	--	--	--	--	5.0
N-Nitroso-dimethylamine	µg/L	--	--	--	--	--	25
N-Nitrosodi-N-propylamine	µg/L	--	--	--	--	--	25
N-Nitroso-diphenylamine	µg/L	--	--	--	--	--	5.0
Polycyclic Aromatic Hydrocarbons (PAHs)[11]	µg/L	--	--	--	--	--	0.25

Parameter	Units	Effluent Limitations[1]					Performance Goals
		Average Monthly[2]	Average Weekly	Maximum Daily[3]	Instan-taneous Minimum	Instan-taneous Maximum[4]	Average Monthly
Total Polychlorinated Biphenyls (PCBs)[11]	µg/L	--	--	--	--	--	0.0026
TCDD Equivalents[11]	pg/L	0.53	--	--	--	--	--
	lbs/day[5]	$1.1x10^{-10}$	--	--	--	--	--
1,1,2,2-Tetrachloro-ethane	µg/L	--	--	--	--	--	10
Tetrachloro-ethylene	µg/L	--	--	--	--	--	10
Toxaphene	µg/L	--	--	--	--	--	0.029
Trichloro-ethylene	µg/L	--	--	--	--	--	10
1,1,2-Trichloroethane	µg/L	--	--	--	--	--	10
2,4,6-Trichlorophenol	µg/L	--	--	--	--	--	40
Vinyl chloride	µg/L	--	--	--	--	--	10

b. **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.

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

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

ii. Settleable material or substances that may form sediments which will degrade benthic communities or other aquatic life.

iii. Substances that will accumulate to toxic levels in marine waters, sediments or biota.

iv. Substances that significantly decrease the natural light to benthic communities and other marine life.

v. Materials that result in aesthetically undesirable discoloration of the ocean surface.

2. Interim Effluent Limitations – Not Applicable

B. Land Discharge Specifications – Not Applicable

C. Recycling Specifications

Recycling specifications are not established in this Order but the Navy produces and reuses recycled water under Order No. R4-2015-0107.

V. RECEIVING WATER LIMITATIONS

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

A. Surface Water Limitations

1. Bacterial Characteristics

   a. State/Regional Water Board Contact Standards

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

      i. 30-day Geometric Mean Limits

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

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

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

      ii. Single Sample Maximum Limits (SSM)

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

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

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

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

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

      During a wet-weather event, storm water runoff may impact the shoreline, inshore, and offshore stations. The day of rain (0.1 inch and greater) plus three following days' worth of bacteriology data should be excluded from single sample and geometric mean limits.

   b. The Initial Dilution Zone for any wastewater outfall shall be excluded from designation as kelp beds for purposes of bacterial standards. Adventitious assemblages of kelp plants on waste discharge structures (e.g., outfall pipes and diffusers) do not constitute kelp beds for purposes of bacterial standards.

   c. State Water Resources Control Board, Division of Drinking Water (DDW) Standards

      DDW has established minimum protective bacteriological standards for coastal waters adjacent to public beaches and for public water-contact sports areas in

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

For beaches not covered under AB 411 regulations (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.

2. Shellfish Harvesting Standards

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

During a wet-weather event, storm water runoff may impact the shoreline, inshore, and offshore stations. The day of rain (0.1 inch and greater) plus three following days' worth of bacteriology data should be excluded from single sample and geometric mean limits.

3. 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.

4. 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;

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

j. cause the numeric water quality objectives established in the Ocean plan to be exceeded outside the zone of initial dilution.

5. 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.

6. Radioactivity

Discharge of radioactive waste shall not degrade marine life.

B. Groundwater Limitations – Not Applicable

VI. PROVISIONS

A. Standard Provisions

1. The Discharger shall comply with all Standard Provisions included in Attachment D.

2. **Regional Water Board Standard Provisions**. The Discharger shall comply with the following provisions. If there is any conflict, duplication, or overlap between provisions specified by this Order, the more stringent provision shall apply:

a. Neither the treatment nor the discharge of pollutants shall create a pollution, contamination, or nuisance as defined by section 13050 of the California Water Code (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, are prohibited.

c. All facilities used for collection, transport, treatment, or disposal of wastes shall be adequately protected against damage resulting from overflow, washout, or inundation from a storm or flood having a recurrence interval of once in 100 years.

d. Collection, treatment, and disposal systems shall be operated in a manner that precludes public contact with wastewater.

e. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of in a manner approved by the Executive Officer of the Regional Water Board.

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

g. Nothing in this Order shall be construed to preclude the institution of any legal action or relieve the Discharger from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation under authority preserved by section 510 of the CWA.

h. Nothing in this Order shall be construed to preclude the institution of any legal action or relieve the Discharger from any responsibilities, liabilities or penalties to which the Discharger is or may be subject to under section 311 of the CWA.

i. Discharge of wastes to any point other than specifically described in this Order is prohibited.

j. The Discharger shall comply with all applicable effluent limitations, national standards of performance, toxic effluent standards, and all federal regulations established pursuant to sections 301, 302, 303(d), 304, 306, 307, 316, 403, and 405 of the federal CWA and amendments thereto.

k. These requirements do not exempt the operator of the waste disposal facility from compliance with any other laws, regulations, or ordinances which may be applicable; they do not legalize this waste disposal facility; and they leave unaffected any further restraints on the disposal of wastes at this site which may be contained in other statutes or required by other agencies.

l. Oil or oily material, chemicals, refuse, or other polluting materials shall not be stored or deposited in areas where they may be picked up by rainfall and carried off 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 and be available at all times to operating personnel.

n. If there is any storage of hazardous or toxic materials or hydrocarbons at this Facility and if the Facility is not manned at all times, a 24-hour emergency response telephone number shall be prominently posted where it can easily be read from the outside.

o. The Discharger shall file with the Regional Water Board a Report of Waste Discharge at least 120 days before making any proposed change in the character, location or volume of the discharge.

p. The Discharger shall comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of storm water to storm drain systems or other water courses under their jurisdiction; including applicable requirements in municipal storm water management program developed to comply with NPDES permits issued by the Regional Water Board to local agencies.

q. In the event of any change in name, ownership, or control of these waste disposal facilities, the Discharger shall notify the Regional Water Board of such change and

shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to the Regional Water Board, 30 days prior to taking effect.

r. The CWC provides that any person who violates a waste discharge requirement or a provision of the CWC is subject to civil penalties of up to $5,000 per day, $10,000 per day, or $25,000 per day of violation, or when the violation involves the discharge of pollutants, is subject to civil penalties of up to $10 per gallon per day or $25 per gallon per day of violation, or some combination thereof, depending on the violation, or upon the combination of violations. Violation of any of the provisions of the NPDES program or of any provisions of this Order may subject the violator to any of the penalties described herein, or any combinations thereof, at the discretion of the prosecuting authority; except that only one kind of penalty may be applied for each kind of violation.

s. CWC section 13387 provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this Order, including monitoring reports or reports of compliance or noncompliance, or who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained in this Order is subject to a fine of not more than $25,000 or imprisonment of not more than two years, or both. For a second conviction, such a person shall be punished by a fine of not more than $25,000 per day of violation, or by imprisonment of not more than four years, or by both.

t. The discharge of any waste resulting from the combustion of toxic or hazardous wastes to any waste stream that ultimately discharges to waters of the United States is prohibited, unless specifically authorized elsewhere in this Order.

u. The Discharger shall notify the Executive Officer in writing no later than 6 months prior to planned discharge of any chemical, other than the products previously reported to the Executive Officer, which may be toxic to aquatic life. Such notification shall include:

   i. Name and general composition of the chemical,

   ii. Frequency of use,

   iii. Quantities to be used,

   iv. Proposed discharge concentrations, and

   v. USEPA registration number, if applicable.

v. Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges from this facility, may subject the Discharger to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.

w. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, effluent limitation, or receiving water limitation of this Order that may endanger health or the environment, the Discharger shall notify the Chief of the Watershed Regulatory Section at the Regional Water Board by telephone (213) 620-2083, or by fax at (213) 576-6660 within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in writing to the

Regional Water Board within five days, unless the Regional Water Board waives confirmation. The written notification shall state the nature, time, duration, and cause of noncompliance, and shall describe the measures being taken to remedy the current noncompliance and, prevent recurrence including, where applicable, a schedule of implementation. The written notification shall also be submitted via email with reference to CI-6432 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 Title 40 of the Code of Federal Regulations (40 CFR) § 123.45 specifies the Group I and II pollutants. Pursuant to CWC section 13385.1(a)(1), a "serious violation" is also defined as "a failure to file a discharge monitoring report required pursuant to section 13383 for each complete period of 30 days following the deadline for submitting the report, if the report is designed to ensure compliance with limitations contained in waste discharge requirements that contain effluent limitations."

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

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

B. Monitoring and Reporting Program (MRP) Requirements

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

C. Special Provisions

1. Reopener Provisions

a. This Order may be reopened and modified to include an effluent limitation based on future reasonable potential analysis conducted using monitoring data collected by the Discharger and evaluated by the Regional Water Board.

b. This Order 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.

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

d. This Order may be reopened and modified to revise effluent limitations as a result of future Basin Plan Amendments or the adoption of a Total Maximum Daily Load (TMDL).

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

f. This Order may be modified, revoked, and reissued or terminated in accordance with the provisions of 40 CFR § 122.44, 122.62 to 122.64, 125.62, and 125.64. Causes for taking such actions include, but are not limited to, failure to comply with any condition of this Order, endangerment to human health or the environment resulting from the permitted activity, or acquisition of newly obtained information which would have justified the application of different conditions if known at the time of Order adoption and issuance. The filing of a request by the Discharger for an Order modification, revocation, and issuance or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

g. This Order may be modified, revoked and reissued, or terminated for cause, including, but not limited to:

   i. Violation of any term or condition contained in this Order;

   ii. Obtaining this Order by misrepresentation, or by failure to disclose fully all relevant facts; or

   iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

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

i. If an applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under section 307(a) of the CWA for a toxic pollutant and that standard or prohibition is more stringent than any limitation on the pollutant in this Order, the Regional Water Board may institute proceedings under these regulations to modify or revoke and reissue the Order to conform to the toxic effluent standard or prohibition.

j. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the CWA, or amendments, thereto, the Regional Water Board will revise and modify this Order in accordance with such standards.

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

l. This Order will be reopened and modified to the extent necessary, to be consistent with new policies, a new state-wide plan, new laws, or new regulations.

m. This Order may be reopened and modified to incorporate new mass emission limitations based on the current SCI WWTP design capacity, provided that the Discharger complies with the requirements in the SCI WWTP ASBS exclusion/exception, and the Discharger requests and conducts an antidegradation analysis to demonstrate that the change is warranted.

n. This Order may be reopened and modified to incorporate the requirement to develop a pretreatment program pursuant to 40 CFR 403.8(a) if the Regional Water Board Executive Officer determines that a pretreatment program is necessary to address the introduction of any pollutants into the Federally-Owned Treatment Works (FOTW) or any substantial change in the volume or character of pollutants in the discharge.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

a. **Toxicity Reduction Requirements**

The Discharger shall prepare and submit a copy of the Discharger's initial investigation TRE work plan in accordance with Monitoring and Reporting Program section V.A.6.

b. **ASBS Compliance**

The Discharger shall monitor the water quality (at the boundary of the exclusion zone which is within 1,000 feet of the initial point of discharge) at a single down-current location, at the first trapping normal depth, to demonstrate that natural water quality is not altered in the ASBS outside of the exclusion zone in comparison to an unaffected reference site. Further details are in Attachment E (MRP).

c. **Evaluation of Minimum Initial Dilution**

State Water Board Ocean Unit staff applied data from the California Cooperative Oceanic Fisheries Investigations nearshore stations surveyed in the summers 2010 and 2011 to evaluate the minimum initial dilution for Discharge Point 002. Based on the results, State Water Board staff agreed with the original Navy report suggesting 136 as the value for minimum initial dilution as defined in the 2009 California Ocean Plan for use in the Order. However, neither the ambient data used by staff to model near-field mixing nor the ambient data used by the Navy's consultant represent actual site receiving water conditions.

As a result, the Navy collected salinity and temperature data throughout the water column near the outfall in areas unaffected by the plume for two summers during the previous permit cycle. The Navy shall use the data collected and any additional data shall be collected as needed to evaluate the initial dilution of the discharge plume and to determine the appropriateness of the 136:1 dilution ratio. The Navy shall submit a dilution study work plan to the Regional Water Board for approval by the Executive Officer within 180 days of the effective date of this permit describing the timeline and procedures that will be used in the study. At a minimum, the work plan shall include the dilution model being used, a description of the sensitivity analysis, ambient conditions, and all model inputs.

d. **Treatment Plant Capacity**

Generally, the Discharger shall submit a written report to the Executive Officer of the Regional Water Board within 90 days after the "30-day (monthly) average" daily dry-weather flow equals or exceeds 75 percent of the design capacity of waste treatment and/or disposal facilities. However, for the SCI WWTP, the authorized 0.025 mgd monthly average already exceeds the 75 percent capacity of the 0.03 mgd tertiary treatment plant. In the case of the SCI WWTP, the written report shall be prepared prior to any proposed WWTP changes or construction related to expansion on the island that could increase the daily flow rate to equal or exceed the design capacity. The Discharger's senior administrative officer shall sign a letter,

which transmits that report and certifies that the discharger's policy-making body is adequately informed of the report's contents. The report shall include the following:

i. The average daily flow for the calendar month, the date on which the peak flow occurred, the rate of that peak flow, and the total flow for the day;

ii. The Discharger's best estimate of when the monthly average daily dry-weather flow rate will equal or exceed the design capacity of the FOTW; 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.

3. Best Management Practices and Pollution Prevention

a. **Storm Water Pollution Prevention Plan – Not Applicable**

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

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

c. **Pollutant Minimization Program (PMP)**

Reporting protocols in the MRP (Attachment E) section X.B.4 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 Attachment A. These reporting protocols and definitions are used in determining the need to conduct a PMP as follows:

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

i. The concentration of the pollutant is reported as DNQ and the effluent limitation is less than the reported ML;

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

The goal of the PMP shall be to reduce all potential sources of a pollutant through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial

uses are being impacted. The Regional Water Board may consider cost-effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan (PPP), if required pursuant to CWC section 13263.3(d), shall be considered to fulfill the PMP requirements.

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

i. An annual review and semi-annual monitoring of potential sources of the reportable pollutant(s), which may include fish tissue monitoring and other bio-uptake sampling;

ii. Quarterly monitoring for the reportable pollutant(s) in the influent to the wastewater treatment system;

iii. Submittal of a control strategy designed to proceed toward the goal of maintaining concentrations of the reportable pollutant(s) in the effluent at or below the effluent limitation;

iv. Implementation of appropriate cost-effective control measures for the reportable pollutant(s), consistent with the control strategy; and

v. An annual status report that shall be sent to the Regional Water Board including:

(a) All PMP monitoring results for the previous year;

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

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

(d) A description of actions to be taken in the following year.

4. Construction, Operation and Maintenance Specifications

a. Wastewater treatment facilities subject to this Order shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to CCR, title 23, division 3, chapter 26 (CWC sections 13625 – 13633).

b. The Discharger shall maintain in good working order a sufficient alternate power source for operating the wastewater treatment and disposal facilities. All equipment shall be located to minimize failure due to moisture, liquid spray, flooding, and other physical phenomena. The alternate power source shall be designed to permit inspection and maintenance and shall provide for periodic testing. If such alternate power source is not in existence, the Discharger shall halt, reduce, or otherwise control all discharges upon the reduction, loss, or failure of the primary source of power.

c. The Discharger shall provide standby or emergency power facilities and/or storage capacity or other means so that in the event of plant upset or outage due to power failure or other cause, discharge of raw or inadequately treated sewage does not occur.

d. The Discharger shall update as necessary, the "Operation and Maintenance Manual (O&M Manual)" which it has developed for the treatment facility to conform to latest plant changes and requirements. The O&M Manual shall be readily available to operating personnel onsite. The O&M Manual shall include the following:

i. Description of the treatment plant personnel organization and listing of emergency contacts.

ii. Detailed description of safe and effective operation and maintenance of treatment processes, process control instrumentation and equipment.

iii. Process and equipment inspection and maintenance schedules.

iv. Description of safeguards to assure that, should there be reduction, loss, or failure of electric power, the Discharger will be able to comply with requirements of this Order.

v. Reference to the most current SCCP.

5. Special Provisions for Federally-Owned Treatment Works (FOTWs)

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

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

ii. The Discharger is separately required to comply with the requirements in State Water Board Order No. 2004-0012-DWQ, *General Waste Discharge Requirements 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 Discharger'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 Discharger's biosolids.

b. **Collection System Requirements**

The Discharger's collection system is part of the FOTW that is subject to this Order. As such, the Discharger must properly operate and maintain its collection system (40 CFR part 122.41(e)), report any noncompliance (40 CFR parts 122.41(l)(6) and (7)), and mitigate any discharge from the collection system in violation of the permit (40 CFR 122.41(d)). See attachment D, subsections I.D, V.E, V.H, and I.C, and the following section (Spill Reporting Requirements) of this Order.

6. Spill Reporting Requirements for FOTWs

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 to protect public health and beneficial uses. For certain spills, overflows and bypasses, the Discharger shall make notifications as required below:

i. In accordance with the requirements of Health and Safety Code section 5411.5, the Discharger shall provide notification to the local health officer or the director of environmental health with jurisdiction over the affected water body of any unauthorized release of sewage or other waste that causes, or probably will cause, a discharge to any waters of the state as soon as possible, but no later than **two hours** after becoming aware of the release.

ii. In accordance with the requirements of CWC section 13271, the Discharger shall provide notification to the California Office of Emergency Services (Cal OES) of the release of reportable amounts of hazardous substances or sewage that causes, or probably will cause, a discharge to any waters of the state as soon as possible, but not later than two hours after becoming aware of the release. The CCR, Title 23, section 2250, defines a reportable amount of sewage as being 1,000 gallons. The phone number for reporting these releases to the Cal OES is (800) 852-7550.

iii. The Discharger shall notify the Regional Water Board of any unauthorized release of sewage from its FOTW 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 Discharger has notified Cal OES and the local health officer or the director of environmental health with jurisdiction over the affected water body. The phone number for reporting these releases of sewage to the Regional Water Board is (213) 576-6657. The phone numbers for after hours and weekend reporting of releases of sewage to the Regional Water Board are (213) 305-2284 and (213) 305-2253.

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

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

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

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

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

(e) The name, organization, phone number and email address of the reporting representative.

b. **Monitoring**

For spills, overflows and bypasses reported under section VI.C.6.a, the Discharger shall monitor as required below:

To define the geographical extent of the spill's impact, the Discharger shall obtain grab samples from the receiving water for all spills, overflows or bypasses of any volume that reach any waters of the state (including surface and ground waters). If a grab sample cannot be obtained due to accessibility or safety concerns, the sample shall be obtained as soon as it becomes safe to do so. The Discharger shall analyze the samples for total coliform, fecal coliform, *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 conducted daily 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 VI.C.6.a shall be followed by:

i. As soon as possible, but **not later than twenty-four (24) hours** after becoming aware of an unauthorized discharge of sewage or other waste from its wastewater treatment plant to a water of the state, the Discharger shall submit a statement to the Regional Water Board by email at augustine.anijielo@waterboards.ca.gov. If the discharge is 1,000 gallons or more, this statement shall certify that Cal OES has been notified of the discharge in accordance with CWC section 13271. The statement shall also certify that the local health officer or director of environmental health with jurisdiction over the affected water bodies has been notified of the discharge in accordance with Health and Safety Code section 5411.5. The statement shall also include at a minimum the following information:

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

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

(c) The water body that received the discharge;

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

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

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

(g) The name of the local health officer or director of environmental health representative notified (if contacted directly); the date and time of notification; and the method of notification (e.g., phone, fax, email).

ii. A written preliminary report five (5) working days after disclosure of the incident is required. Submission to the Regional Water Board California Integrated Water Quality System (CIWQS) Sanitary Sewer Overflow (SSO) event number shall satisfy this requirement as required in Attachment I. Within 30 days after submitting the preliminary report, the Discharger shall submit the final written report to this Regional Water Board. (A copy of the final written report, for a given incident, already submitted pursuant to statewide General WDRs for Wastewater Collection System Agencies (SSO WDR), may be submitted to the Regional Water Board to satisfy this requirement.) The written report shall document the information required in paragraph “d” below, monitoring results and any other information required in provisions of the Standard Provisions document including corrective measures implemented or proposed to be implemented to prevent/minimize future occurrences. The Executive Officer for just cause can grant an extension for submittal of the final written report.

iii. The Discharger shall include a certification in the annual summary report (due according to the schedule in the MRP) that states that the sewer system emergency equipment, including alarm systems, backup pumps, standby power generators, and other critical emergency pump station components were maintained and tested in accordance with the Discharger’s preventive maintenance plan. Any deviations from or modifications to the plan shall be discussed.

d. **Records**

The Discharger shall develop and maintain a record of all spills, overflows or bypasses of raw or partially treated sewage from its collection system or treatment plant. This record shall be made available to the Regional Water Board 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 VI.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 in accordance with Attachment I.

e. **Activities Coordination**

Although not required by this Order, the Regional Water Board expects that the FOTW'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 if applicable, (ii) an MS4 NPDES permit that may contain spill prevention, sewer maintenance, reporting requirements and (iii) recommended coordination listed in Attachment I.

f. **Consistency with the 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 Discharger's collection system is part of the FOTW that is subject to this permit. As such, pursuant to federal regulations, the Discharger must properly operate and maintain its collection system (40 CFR § 122.41(e)), report any non-compliance (40 CFR § 122.41(l)(6) and (7)), and mitigate any discharge from the collection system in violation of this NPDES permit (40 CFR § 122.41(d)). As such, the Discharger must comply with all requirements in Attachment I.

The requirements contained in this Order in Attachment I, sections VI.C.3.b (SCCP), VI.C.4 (Construction, Operation and Maintenance Specifications), and VI.C.7 (Spill Reporting Requirements) are intended to be consistent with the requirements of the SSO WDR.

7. Other Special Provisions – Not Applicable

8. Compliance Schedules – Not Applicable

VII. COMPLIANCE DETERMINATION

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

A. General

Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined in the MRP and Attachment A of this Order. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the 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 Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

1. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both 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 Discharger 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 Discharger 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 Discharger will only be considered out of compliance for days when the discharge occurs. For any one calendar month during which no sample (daily discharge) is collected, no compliance determination can be made for that calendar month with respect to the AMEL.

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

If the analytical result of any single sample, monitored monthly, quarterly, semiannually, or annually, exceeds the AMEL for any parameter, the Discharger may collect up to four additional samples within the same calendar month. All analytical results shall be reported in

the monitoring report for that month. The concentration of pollutant (an arithmetic mean or a median) in these samples estimated from the "Multiple Sample Data Reduction" section above, will be used for compliance determination.

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

D. Average Weekly Effluent Limitation (AWEL)

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

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

E. Maximum Daily Effluent Limitation (MDEL)

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

F. Instantaneous Minimum Effluent Limitation

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

G. Instantaneous Maximum Effluent Limitation

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

H. Six-month Median Effluent Limitation

If the median of daily discharges over any 180-day period exceeds the six-month median effluent limitation for a given parameter, a potential violation will be flagged and the Discharger will be considered out of compliance for each day of that 180-day period for that

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

I. Annual Average Effluent Limitation

If the annual average of monthly discharges over a calendar year exceeds the annual average effluent limitation for a given parameter, a potential violation will be flagged and the Discharger will be considered out of compliance for each month of that year for that parameter. A potential violation of the annual average effluent limitation will be considered one violation for 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, using the TST statistical approach, results in "Fail."

The chronic toxicity MDEL is set at the IWC for the discharge (0.73%) 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 Discharger, USEPA, the State Water Board's Quality Assurance Officer, or the State Water Board's Environmental Laboratory Accreditation Program as needed.

K. Percent Removal

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

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

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

L. Mass and Concentration Limitations

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

M. Compliance with Single Constituent Effluent Limitations

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

N. Compliance with effluent limitations expressed as a sum of several constituents

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

O. 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 currently no WLAs assigned to SCI WWTP.

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* 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 Discharger's liability in accordance with the following conditions:

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

2. A Discharger may assert SOU to limit liability only for those violations which the Discharger submitted notice of the upset as required in Provision V.E.2 (b) of Attachment D – Standard Provisions.

3. For purpose outside of CWC section 13385 subdivisions (h) and (i), determination of compliance and civil liability (including any more specific definition of SOU, the

requirements for Dischargers to assert the SOU limitation of liability, and the manner of counting violations) shall be in accordance with USEPA Memorandum “Issuance of Guidance Interpreting Single Operational Upset” (September 27, 1989).

4. For purpose of CWC section 13385 (h) and (i), determination of compliance and civil liability (including any more specific definition of SOU, the requirements for Dischargers to assert the SOU limitation of liability, and the manner of counting violations) shall be in accordance with CWC section 13385 (f)(2).

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

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.

Best Management Practice (BMP)
BMPs are schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs may include, but are not limited to treatment requirements, operating procedures, or practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

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 taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

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

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

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

Detected, but Not Quantified (DNQ)
Sample results that are less than the reported Minimum Level, but greater than or equal to the laboratory's MDL. Sample results reported as DNQ are estimated concentrations.

Dichlorobenzenes
Shall mean the sum of 1,2- 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 headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. This definition includes but is not limited to: Humboldt Bay, Bodega Harbor, Tomales Bay, Drakes Estero, San Francisco Bay, Morro Bay, Los Angeles Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay.

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

Federally-Owned Treatment Works (FOTW)
A facility that is owned and operated by a department, agency, or instrumentality of the Federal Government treating wastewater, a majority of which is domestic sewage, prior to discharge (42 U.S. Code § 6939e(d)).

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

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

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

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

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

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

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

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

In-stream Waste Concentration (IWC)
The concentration of a toxicant or the parameter toxicity in the receiving water after mixing.

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

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

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

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

Median
The middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of

measurements (n) is odd, then the median = $X_{(n+1)/2}$. If n is even, then the median = ($X_{n/2}$ + $X_{(n/2)+1}$)/2 (i.e., the midpoint between the n/2 and n/2+1).

Method Detection Limit (MDL)
The minimum concentration of a substance that can be reported with 99 percent confidence that the measured concentration is distinguishable from method blank results, as defined in 40 C.F.R. part 136, Attachment B.

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 by measurement of light transmissivity or total irradiance, or both, according to the monitoring needs of the Regional Water Board.

Not Detected (ND)
Those sample results 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, 3,4-benzofluoranthene, benzo[k]fluoranthene, 1,12-benzoperylene, benzo[a]pyrene, chrysene, dibenzo[ah]anthracene, fluorene, indeno[1,2,3-cd] pyrene, phenanthrene and pyrene.

PCBs (polychlorinated biphenyls) as Aroclors
The sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254 and Aroclor-1260.

PCBs as Congeners
The sum of the following 41 individually quantified PCB congeners 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.

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

Phenolic Compounds (chlorinated)
The sum of 2-chlorophenol, 2,4-dichlorophenol, 4-chloro-3-methylphenol, 2,4,6-trichlorophenol, and pentachlorophenol.

Phenolic Compounds (non-chlorinated)
The sum of 2,4-dimethylphenol, 2-nitrophenol, 4-nitrophenol, 2,4-dinitrophenol, 4,6-dinitro-2-methylphenol, and phenol.

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

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

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

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

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

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

Significant Difference
Defined as a statistically significant difference in the means of two distributions of sampling results at the 95 percent confidence level.

Six-Month Median Effluent Limitation
The highest allowable moving median of all daily discharges for any 180-day period.

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

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

where:
x is the observed value;
μ is the arithmetic mean of the observed values; and
n is the number of samples.

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

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

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

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

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

Toxicity Reduction Evaluation (TRE)
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 Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate.

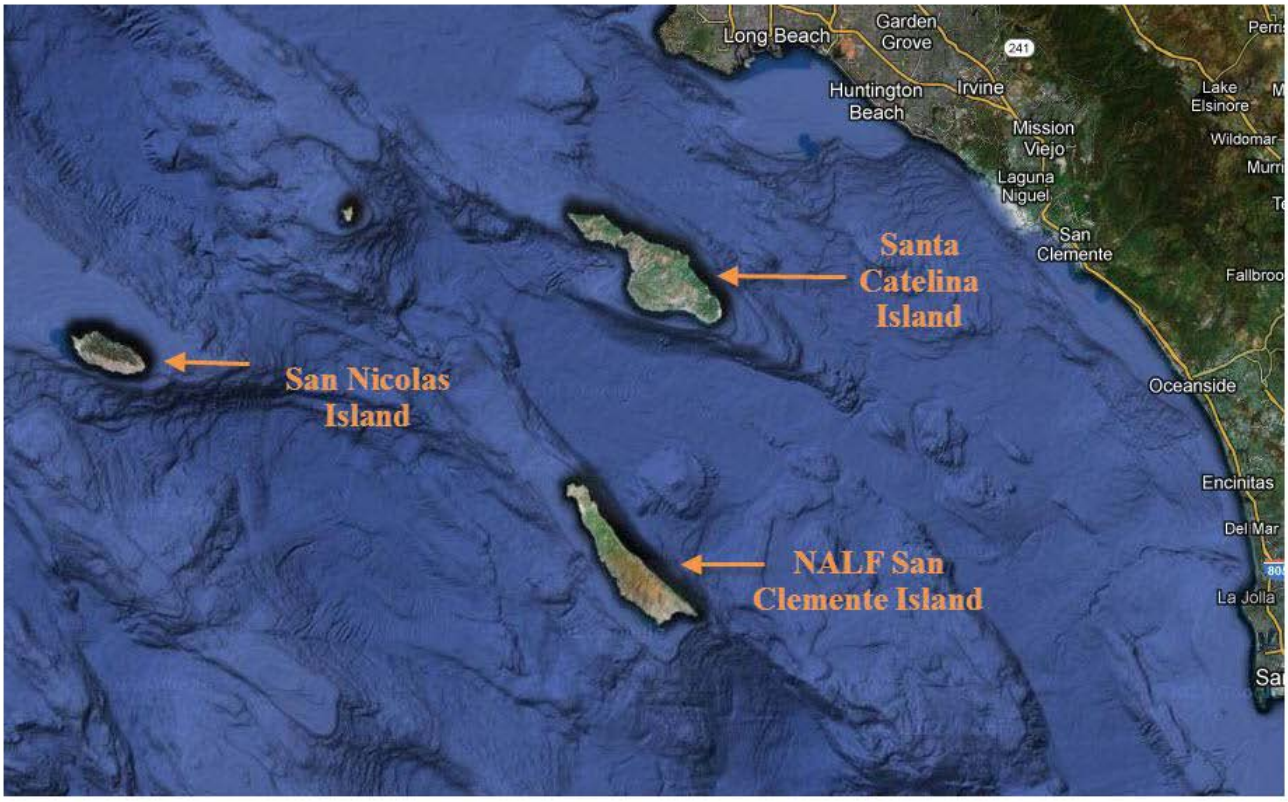
Trash
All improperly discarded solid material from any production, manufacturing, or processing operation including, but not limited to, products, product packaging, or containers constructed of plastic, steel, aluminum, glass, paper, or other synthetic natural materials.

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

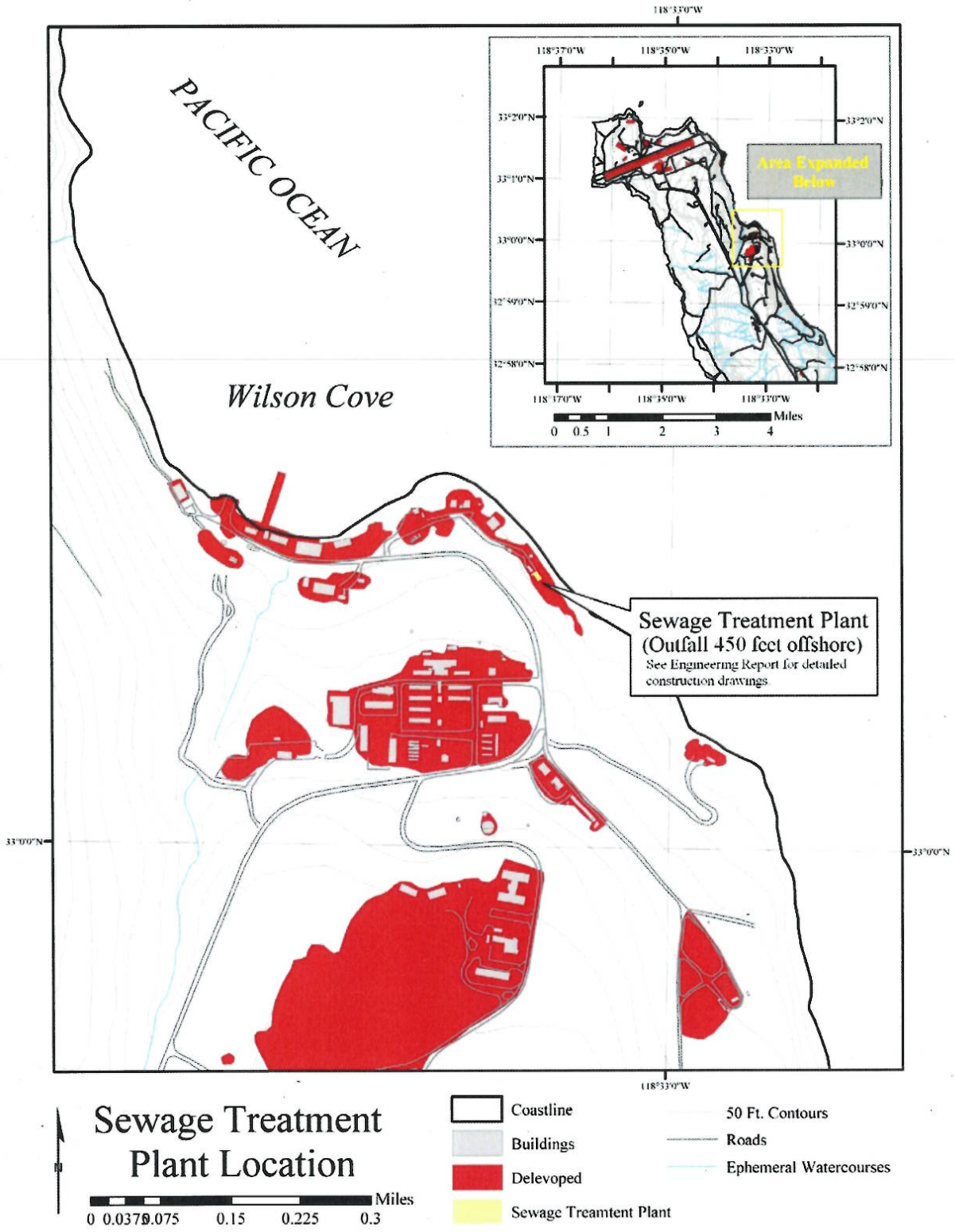
Water Recycling
The treatment of wastewater to render it suitable for reuse, the transportation of treated wastewater to the place of use, and the actual use of treated wastewater for a direct beneficial use or controlled use that would not otherwise occur.

ATTACHMENT B-1 – MAP OF SAN CLEMENTE ISLAND LOCATION

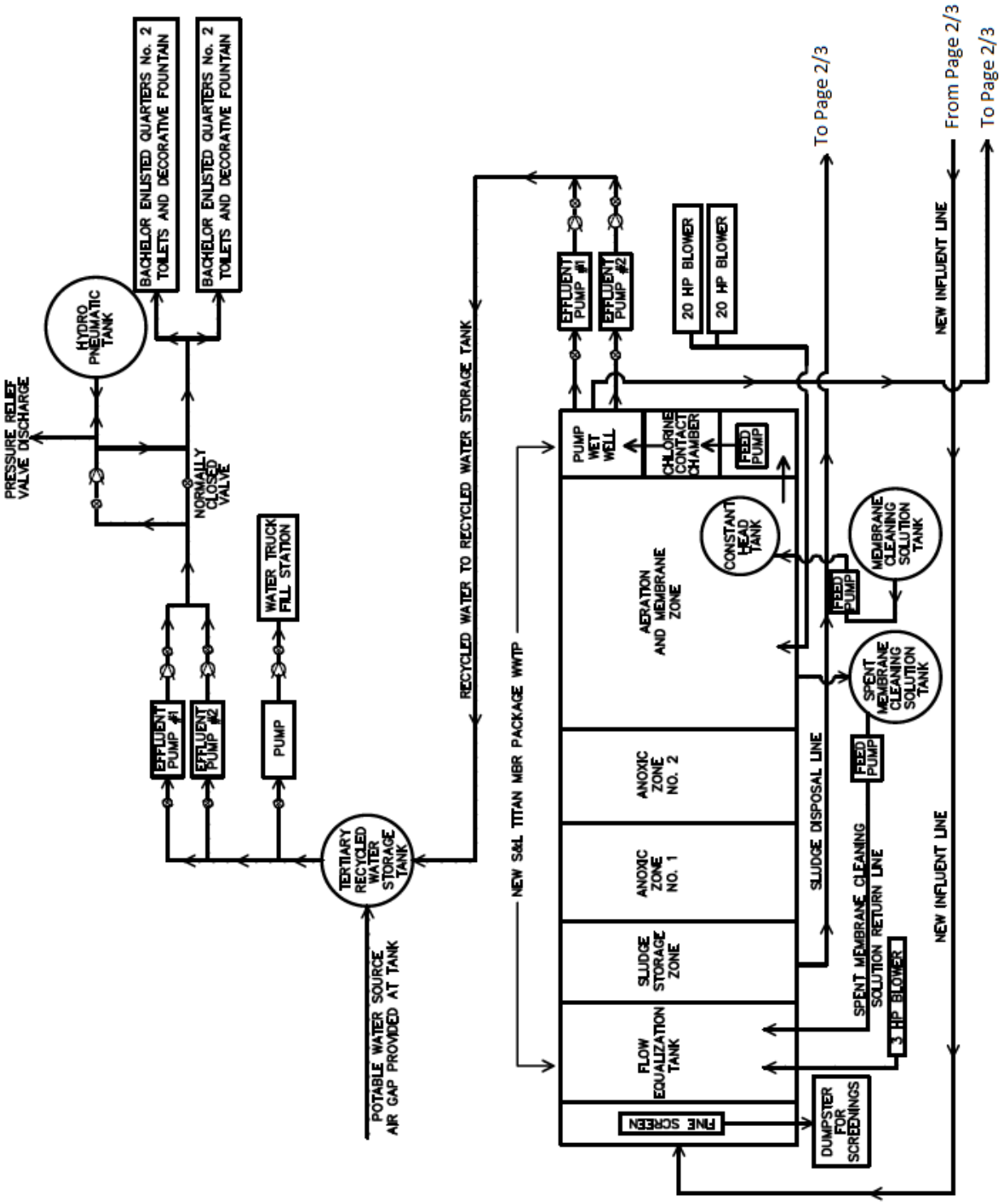
Location Map for NALF San Clemente Island



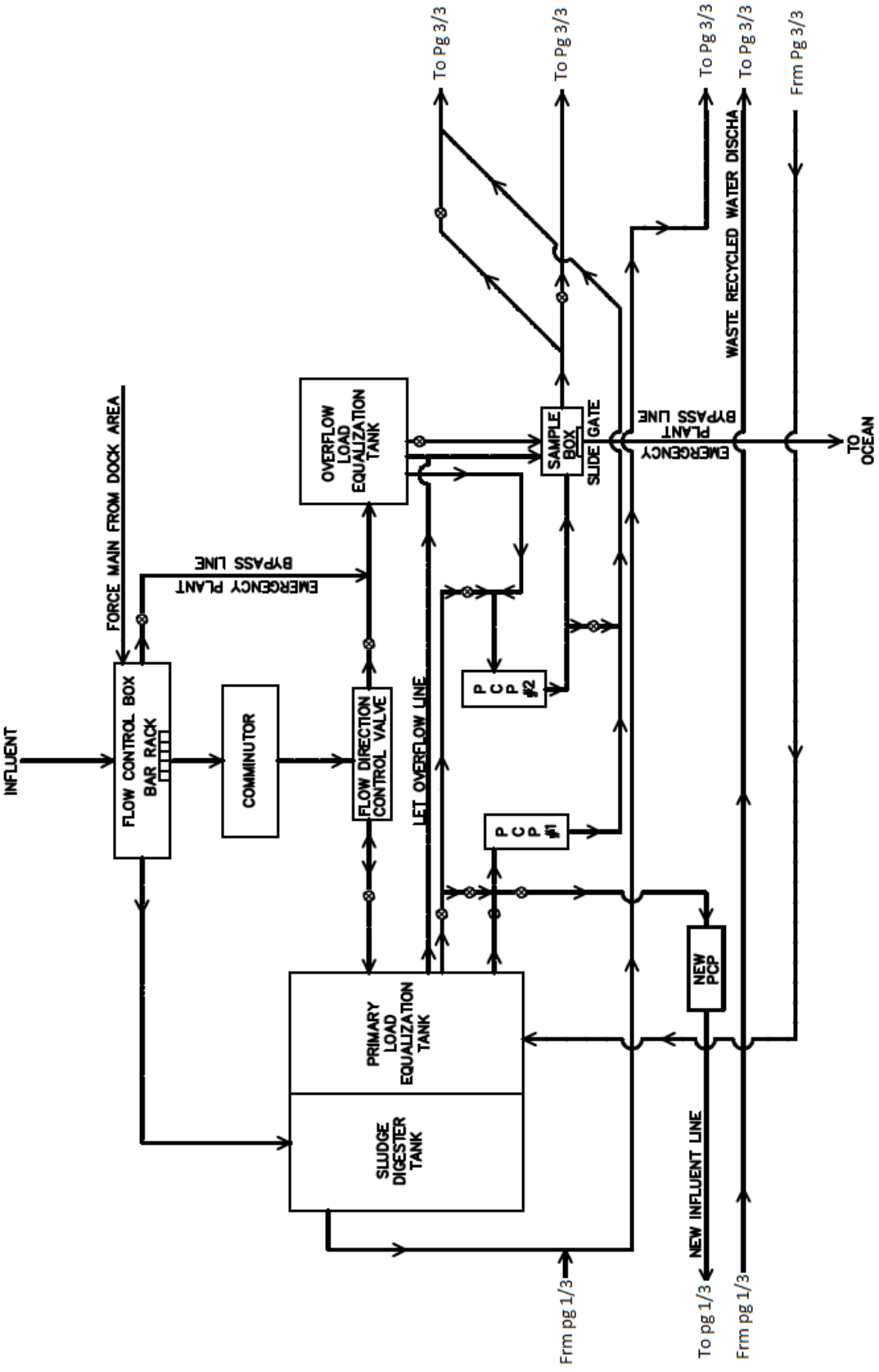
ATTACHMENT B-2 – SAN CLEMENTE ISLAND WATER SYSTEM



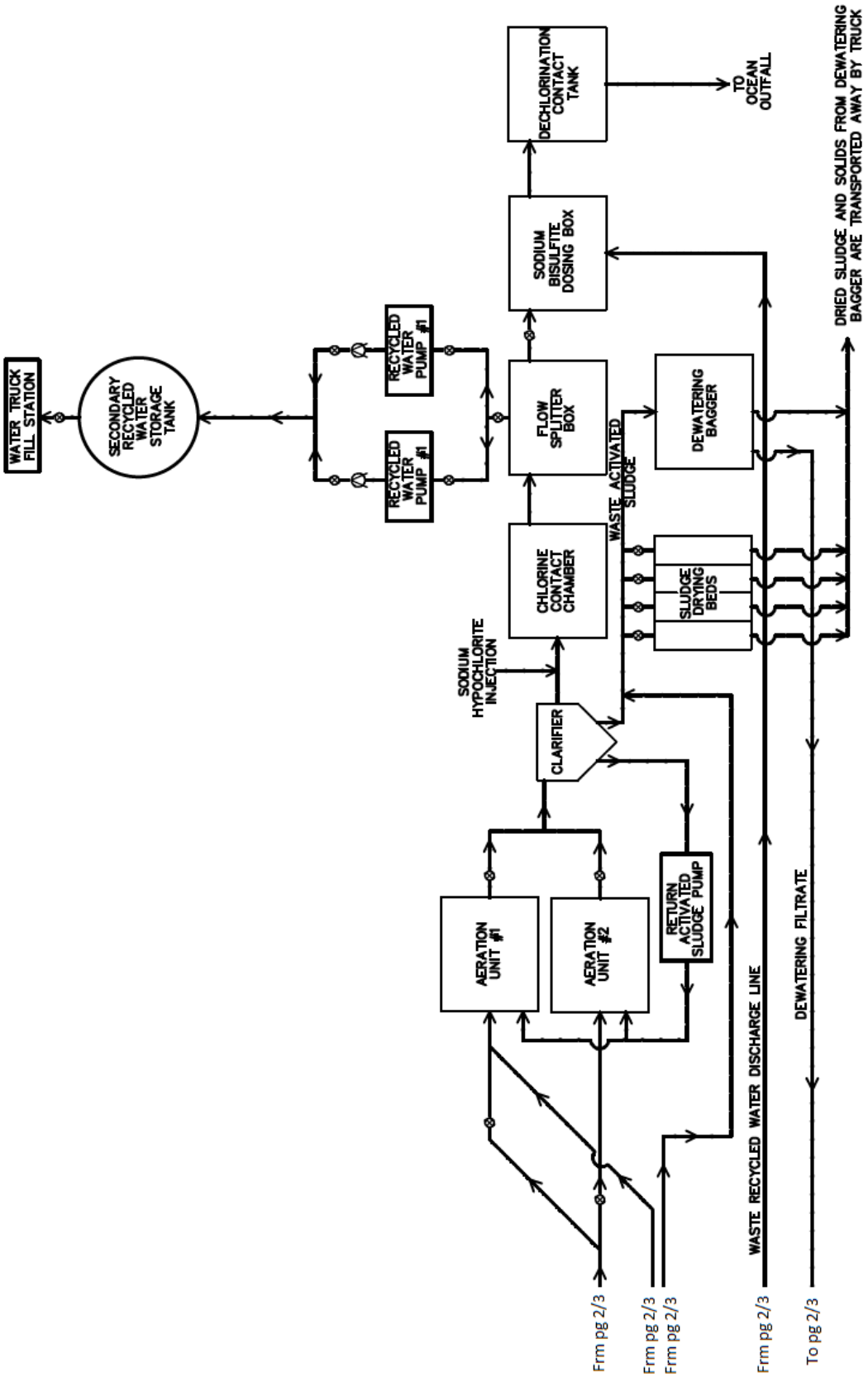
ATTACHMENT C – FLOW SCHEMATIC PART 1



ATTACHMENT C – FLOW SCHEMATIC PART 2



ATTACHMENT C – FLOW SCHEMATIC PART 3



ATTACHMENT D – STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

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

2. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 CFR § 122.41(a)(1).)

B. Need to Halt or Reduce Activity Not a Defense

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

C. Duty to Mitigate

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

D. Proper Operation and Maintenance

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

E. Property Rights

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

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

F. Inspection and Entry

The Discharger shall allow the Regional Water Board, State Water Board, USEPA, and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be

required by law, to (33 U.S.C. § 1318(a)(4)(b); 40 CFR § 122.41(i); Wat. Code, §§ 13267, 13383):

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

G. Bypass

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

conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 CFR § 122.41(m)(4)(ii).)

5. Notice

   a. *Anticipated bypass.* If the Discharger knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass. As of December 21, 2020, all notices must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting V.J below. Notices shall comply with 40 CFR part 3, 40 CFR section 122.22, and 40 CFR part 127. (40 CFR § 122.41(m)(3)(i).)

   b. *Unanticipated bypass.* The Discharger shall submit a notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). As of December 21, 2020, all notices must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting V.J below. Notices shall comply with 40 CFR part 3, 40 CFR section 122.22, and 40 CFR part 127. (40 CFR § 122.41(m)(3)(ii).)

H. Upset

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

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

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

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

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

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

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

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

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

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

B. Duty to Reapply

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

C. Transfers

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

III. STANDARD PROVISIONS – MONITORING

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

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

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

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

IV. STANDARD PROVISIONS – RECORDS

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

B. Records of monitoring information shall include:

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

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

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

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

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

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, V.B.5, and V.B.6 below. (40 CFR § 122.41(k).)
2. All permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA). (40 CFR § 122.22(a)(3).).
3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
    a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 CFR § 122.22(b)(1));
    b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus

be either a named individual or any individual occupying a named position.) (40 C.F.R. § 122.22(b)(2)); and

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

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

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

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

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

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 CFR § 122.41(l)(4).)

2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board. As of December 21, 2016, all reports and forms must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting V.J and comply with 40 CFR part 3, 40 CFR section 122.22, and 40 CFR part 127. (40 CFR § 122.41(l)(4)(i).)

3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 CFR part 136, or another method required for an industry-specific waste stream under 40 CFR chapter 1, subchapter N, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the Regional Water Board or State Water Board. (40 CFR § 122.41(l)(4)(ii).)

4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 CFR § 122.41(l)(4)(iii).)

D. Compliance Schedules

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

E. Twenty-Four Hour Reporting

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

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

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

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

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

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

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

F. Planned Changes

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

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

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

G. Anticipated Noncompliance

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

H. Other Noncompliance

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

I. Other Information

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

J. Initial Recipient for Electronic Reporting Data

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

VI. STANDARD PROVISIONS – ENFORCEMENT

A. The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the 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 imprisonment of 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 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 a 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 both (40 CFR § 122.41(k)(2).)

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS – NOT APPLICABLE

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

CONTENTS

TABLES

FIGURES

ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

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

I. GENERAL MONITORING PROVISIONS

A. All samples shall be representative of the waste discharge under conditions of peak load. Quarterly 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 Discharger must notify the Regional Water Board, 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-9 of the MRP.

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

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

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

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

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

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

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

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

J. The Discharger shall develop and maintain a record of all spills or bypasses of raw or partially treated sewage from its collection system or treatment plant according to the requirements in the Waste Discharge Requirements (WDRs) of this Order. This record shall be made available to the Regional Water Board upon request and a spill summary shall be included in the annual summary report.

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

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

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

2. Detection methods for *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 consistent 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 near shore 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. 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.

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 around 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.

Q. Laboratory Certification. Laboratories analyzing monitoring samples shall be certified by the State Water Resources Control Board (State Water Board), in accordance with the provision

of Water Code section 13176, and must include quality assurance/quality control data with their reports.

R. The Discharger shall ensure that the results of the Discharge Monitoring Report-Quality Assurance (DMR-QA) Study or the most recent Water Pollution Performance Evaluation Study are submitted annually to the State Water Board at the following address:

State Water Resources Control Board
Quality Assurance Program Officer
Office of Information Management and Analysis
1001 I Street, Sacramento, CA 95814

II. MONITORING LOCATIONS

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

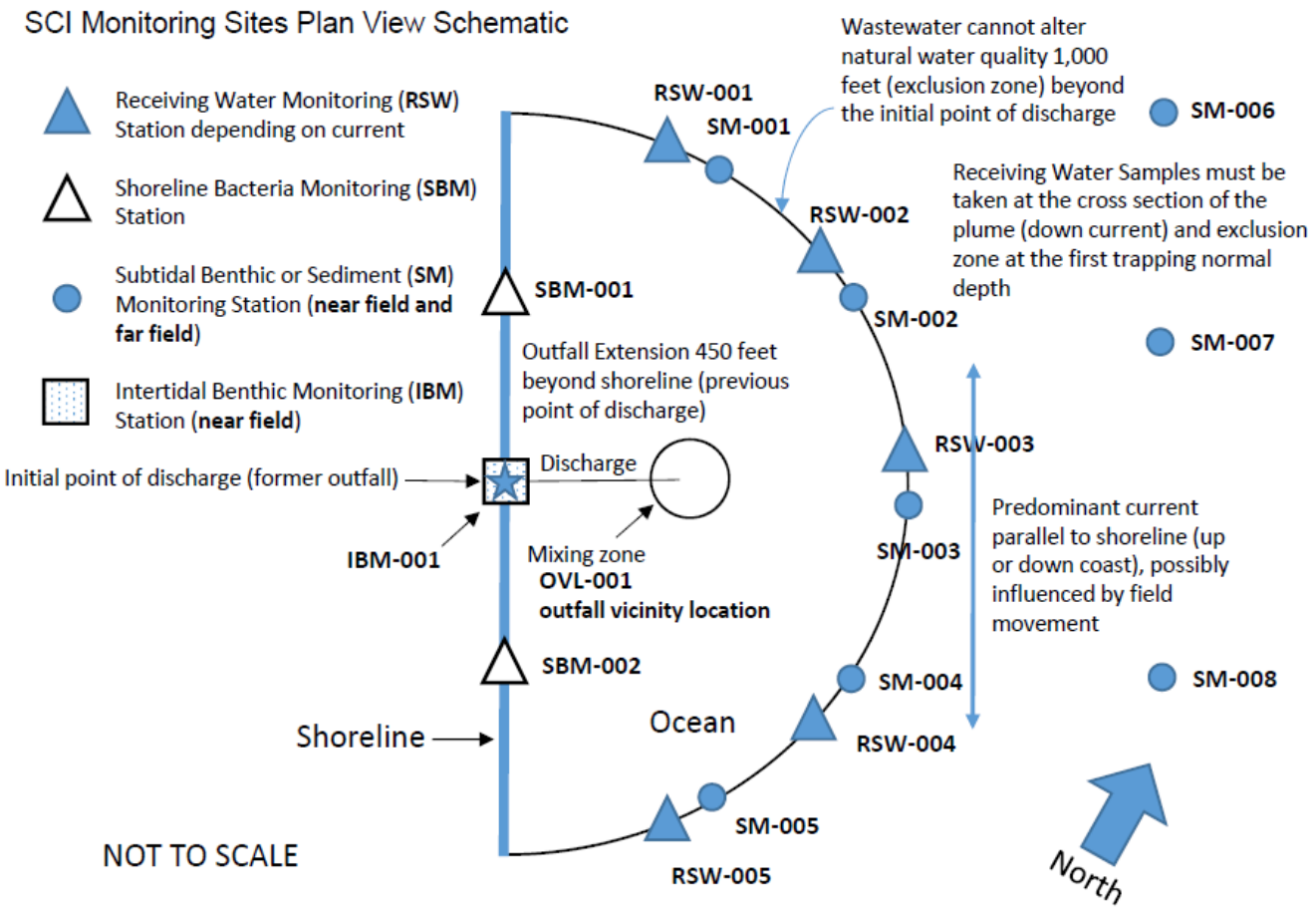
Table E-1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
Influent Monitoring Station		
--	**INF-001**	The influent monitoring location 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/or representative samples of the influent can be obtained. Influent samples shall be obtained on the same day effluent samples are obtained. Latitude: 33.004608° Longitude: -118.550801°
Effluent Monitoring Station		
002	**EFF-001**	The effluent monitoring location shall be located downstream of any in-plant return flows and effluent streams from both the tertiary and secondary treatment systems, where representative samples of the effluent can be obtained. Latitude: 33.0054600° Longitude: -118.550830°
Shoreline Bacteria Monitoring Stations		
--	**SBM-001** **SBM-002**	As part of the Ocean Plan core monitoring, monthly bacteria monitoring shall occur at the shoreline nearest the outfall. Samples may be collected along the shoreline at a point as near to the shoreline as can be negotiated safely by boat. The report shall contain the actual coordinates of the sample location. SBM-001: Latitude: 33.005219° Longitude: -118.553225° SBM-002: Latitude: 33.003386° Longitude: -118.550797°

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
Offshore Receiving Water Monitoring Stations		
--	**RSW-001** **RSW-002** **RSW-003** **RSW-004** **RSW-005**	The report shall contain actual depths and coordinates of the up-current and down-current sample location. RSW-001: Latitude: 33.006006° Longitude: -118.553156° RSW-002: Latitude: 33.006833° Longitude: -118.551000° RSW-003: Latitude: 33.005989° Longitude: -118.549544° RSW-004: Latitude: 33.004489° Longitude: -118.548747° RSW-005: Latitude: 33.003142° Longitude: -118.549003°
Sediment Monitoring (Subtidal Benthic) Stations		
--	**SM-001 near-field** **SM-002 near-field** **SM-003 near-field** **SM-004 near-field** **SM-005 near-field** **SM-006 far-field** **SM-007 far-field** **SM-008 far-field**	The Discharger shall perform a benthic biota survey (intertidal and subtidal) once per permit cycle at multiple near and far field stations. The survey shall be conducted at each SM-00X station and at IBM-001 (see below). This activity also satisfies ASBS compliance for determining the status of marine aquatic life. The report shall include the actual coordinates of the location sampled. SM-001: Latitude: 33.008940° Longitude: -118.552670° SM-002: Latitude: 33.007380° Longitude: -118.550190° SM-003: Latitude: 33.006110° Longitude: -118.546550° SM-004: Latitude: 33.004970° Longitude: -118.545970° SM-005: Latitude: 33.003460° Longitude: -118.545750° SM-006: Latitude: 33.002930° Longitude: -118.545750° SM-007: Latitude: 33.002140° Longitude: -118.545560° SM-008: Latitude: 33.000650° Longitude: -118.544690°
Intertidal Benthic Monitoring		
--	**IBM-001 near field**	The intertidal benthic monitoring location is located at the terminus of Discharge Point 001 (no longer in service). The Discharger shall perform a benthic biota survey (intertidal and subtidal) once per permit cycle at multiple near and far-field stations. The survey shall be conducted at each SM-00X station and at IBM-001 (see below). This activity also satisfies ASBS compliance for determining the status of marine aquatic life. The report shall include the actual coordinates of the location sampled. Latitude: 33.004000° Longitude: -118.552000°
Outfall Vicinity Location		
--	**OVL-001**	Located near the discharge point at a similar depth but outside the influence of the discharge plume. Temperature and salinity shall be monitored if needed to conduct an updated dilution study. The report shall include the actual depth versus outfall depth and the coordinates of the location sampled. Latitude: 33.000000° Longitude: -118.564444°

The coordinates in Table E-1 are approximate for administrative purposes.

Figure E- 1. Inshore Water Quality Station Locations



III. INFLUENT MONITORING REQUIREMENTS

Influent monitoring is required to determine compliance with NPDES permit conditions and to assess treatment plant performance.

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

Table E-2. Influent Monitoring

Parameter	Units	Sample Type[1]	Minimum Sampling Frequency[2]	Required Analytical Test Method
Flow	mgd	Recorder/totalizer	Continuous[3]	[4]
Biochemical Oxygen Demand (BOD_5 20°C)	mg/L	24-hr composite	Monthly	[4]
Total Suspended Solids (TSS)	mg/L	24-hr composite	Monthly	[4]
pH	pH units	Grab	Monthly	[4]
Oil and Grease	mg/L	Grab[5]	Monthly	[4]
Arsenic	µg/L	24-hr composite	Semiannually	[4]
Cadmium	µg/L	24-hr composite	Semiannually	[4]
Chromium VI[6]	µg/L	Grab	Semiannually	[4]
Copper	µg/L	24-hr composite	Semiannually	[4]
Lead	µg/L	24-hr composite	Semiannually	[4]
Mercury[7]	µg/L	24-hr composite	Semiannually	[4]
Nickel	µg/L	24-hr composite	Semiannually	[4]
Selenium	µg/L	24-hr composite	Semiannually	[4]

1 For 24-hour composite samples, if the duration of the discharge is less than 24 hours but greater than 8 hours, at least eight flow-weighted samples shall be obtained during the discharge period and composited. For discharge durations of less than eight hours, individual grab samples may be substituted. A grab sample is an individual sample collected in less than 15 minutes.

2 Weekly and monthly sampling shall be arranged so that each day of the week is represented over a seven week or month period, except Saturday and Sunday. The schedule should be repeated every seven weeks or months.

3 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).

4 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.

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

6 The Discharger may, at its option, meet the hexavalent chromium limitation by analyzing for total chromium rather than hexavalent chromium.

7 USEPA Method 1631E, with a quantitation level of 0.5 ng/L, shall be used to analyze total mercury. If an alternative method with an equivalent or more sensitive method detection limit is approved in 40 CFR 136, the Discharger may use that method in lieu of USEPA Method 1631E.

Parameter	Units	Sample Type[1]	Minimum Sampling Frequency[2]	Required Analytical Test Method
Silver	µg/L	24-hr composite	Semiannually	[4]
Zinc	µg/L	24-hr composite	Semiannually	[4]
Cyanide	µg/L	Grab	Semiannually	[4]
Ammonia Nitrogen	mg/L	24-hr composite	Semiannually	[4]
Phenolic Compounds (non-chlorinated)[8]	µg/L	24-hr composite	Semiannually	[4]
Phenolic Compounds (chlorinated)[8]	µg/L	24-hr composite	Semiannually	[4]
Endosulfan[8]	µg/L	24-hr composite	Semiannually	[4]
Endrin	µg/L	24-hr composite	Semiannually	[4]
Hexachlorocyclohexane (HCH)[8]	µg/L	24-hr composite	Semiannually	[4]
Radioactivity (including gross alpha, gross, beta, combined radium-226 & radium-228, tritium, strontium-90 and uranium)[9]	pCi/L	24-hr composite	Semiannually	[4]
Acrolein	µg/L	Grab	Semiannually	[4]
Antimony	µg/L	24-hr composite	Semiannually	[4]
Bis(2-chloroethoxy) methane	µg/L	24-hr composite	Semiannually	[4]
Bis(2-chloroisopropyl) ether	µg/L	24-hr composite	Semiannually	[4]
Chlorobenzene	µg/L	Grab	Semiannually	[4]
Chromium (III)	µg/L	Grab	Semiannually	[4]
Di-n-butyl phthalate	µg/L	24-hr composite	Semiannually	[4]
Dichlorobenzenes[8]	µg/L	24-hr composite	Semiannually	[4]
Diethyl phthalate	µg/L	24-hr composite	Semiannually	[4]
Dimethyl phthalate	µg/L	24-hr composite	Semiannually	[4]
4,6-dinitro-2-methylphenol	µg/L	24-hr composite	Semiannually	[4]
2,4-dinitrophenol	µg/L	24-hr composite	Semiannually	[4]
Ethylbenzene	µg/L	Grab	Semiannually	[4]
Fluoranthene	µg/L	24-hr composite	Semiannually	[4]
Hexachlorocyclopentadiene	µg/L	24-hr composite	Semiannually	[4]
Nitrobenzene	µg/L	24-hr composite	Semiannually	[4]
Thallium	µg/L	24-hr composite	Semiannually	[4]
Toluene	µg/L	Grab	Semiannually	[4]
Tributyltin	ng/L	24-hour composite	Semiannually	[4]
1,1,1-Trichloroethane	µg/L	Grab	Semiannually	[4]
Acrylonitrile	µg/L	Grab	Semiannually	[4]

[8] See Attachment A for definition of terms.

[9] 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[1]	Minimum Sampling Frequency[2]	Required Analytical Test Method
Aldrin	µg/L	24-hr composite	Semiannually	[4]
Benzene	µg/L	Grab	Semiannually	[4]
Benzidine	µg/L	24-hr composite	Semiannually	[4]
Beryllium	µg/L	24-hr composite	Semiannually	[4]
Bis(2-chloroethyl) ether	µg/L	24-hr composite	Semiannually	[4]
Bis(2-ethylhexyl) phthalate	µg/L	24-hr composite	Semiannually	[4]
Carbon tetrachloride	µg/L	Grab	Semiannually	[4]
Chlordane[8]	µg/L	24-hr composite	Semiannually	[4]
Chlorodibromomethane	µg/L	Grab	Semiannually	[4]
Chloroform	µg/L	Grab	Semiannually	[4]
DDT[8]	µg/L	24-hr composite	Semiannually	[4]
1,4-dichlorobenzene	µg/L	24-hr composite	Semiannually	[4]
3,3'-dichlorobenzidine	µg/L	24-hr composite	Semiannually	[4]
1,2-Dichloroethane	µg/L	Grab	Semiannually	[4]
1,1-Dichloroethylene	µg/L	Grab	Semiannually	[4]
Dichlorobromomethane	µg/L	Grab	Semiannually	[4]
Dichloromethane	µg/L	Grab	Semiannually	[4]
1,3-Dichloropropene	µg/L	Grab	Semiannually	[4]
Dieldrin	µg/L	24-hr composite	Semiannually	[4]
2,4-dinitrotoluene	µg/L	24-hr composite	Semiannually	[4]
1,2-diphenylhydrazine	µg/L	24-hr composite	Semiannually	[4]
Halomethanes[8]	µg/L	Grab	Semiannually	[4]
Heptachlor	µg/L	24-hr composite	Semiannually	[4]
Heptachlor epoxide	µg/L	24-hr composite	Semiannually	[4]
Hexachlorobenzene	µg/L	24-hr composite	Semiannually	[4]
Hexachlorobutadiene	µg/L	24-hr composite	Semiannually	[4]
Hexachloroethane	µg/L	24-hr composite	Semiannually	[4]
Isophorone	µg/L	24-hr composite	Semiannually	[4]
N-Nitrosodimethylamine	µg/L	24-hr composite	Semiannually	[4]
N-Nitrosodi-n-propylamine	µg/L	24-hr composite	Semiannually	[4]
N-Nitrosodiphenylamine	µg/L	24-hr composite	Semiannually	[4]
Polycyclic Aromatic Hydrocarbons (PAHs)[8]	µg/L	24-hr composite	Semiannually	[4]
Polychlorinated Biphenyls (PCBs) as Aroclors[8]	µg/L	24-hr composite	Semiannually	[4]
TCDD Equivalents[8,10]	pg/L	24-hr composite	Semiannually	[4]
1,1,2,2-Tetrachloroethane	µg/L	Grab	Semiannually	[4]

[10] USEPA Method 1613 shall be used to analyze TCDD equivalents. If an alternative method with an equivalent or more sensitive method detection limit is approved in 40 CFR 136, the Discharger may use that method in lieu of USEPA Method 1613.

Parameter	Units	Sample Type[1]	Minimum Sampling Frequency[2]	Required Analytical Test Method
Tetrachloroethylene	µg/L	Grab	Semiannually	[4]
Toxaphene	µg/L	24-hr composite	Semiannually	[4]
Trichloroethylene	µg/L	Grab	Semiannually	[4]
1,1,2-Trichloroethane	µg/L	Grab	Semiannually	[4]
2,4,6-Trichlorophenol	µg/L	24-hr composite	Semiannually	[4]
Vinyl chloride	µg/L	Grab	Semiannually	[4]

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

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

Table E-3. Effluent Monitoring

Parameter	Units	Sample Type[11]	Minimum Sampling Frequency[12]	Required Analytical Test Method and (Minimum Level, units), respectively
Flow	mgd	Recorder/ totalizer	Continuous[13]	[14]
BOD_5 20°C	mg/L	24-hour composite	Monthly	[14]
TSS	mg/L	24-hour composite	Monthly	[14]
pH	pH units	Grab	Monthly	[14]

[11] For 24-hour composite samples, if the duration of the discharge is less than 24 hours but greater than 8 hours, at least eight flow-weighted samples shall be obtained during the discharge period and composited. For discharge durations of less than eight hours, individual grab samples may be substituted. A grab sample is an individual sample collected in less than 15 minutes.

[12] Weekly and monthly sampling shall be arranged so that each day of the week is represented over a seven week or month period, except Saturday and Sunday. The schedule should be repeated every seven weeks or months.

[13] 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).

[14] 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[11]	Minimum Sampling Frequency[12]	Required Analytical Test Method and (Minimum Level, units), respectively
Oil and Grease	mg/L	Grab[15]	Monthly	[14]
Temperature	°F	Grab	Monthly	[14]
Settleable Solids	mL/L	Grab[15]	Monthly	[14]
Dissolved Oxygen	mg/L	Grab	Monthly	[14]
Turbidity	NTU	24-hr composite	Monthly	[14]
Total Coliform	CFU/ 100mL or MPN/ 100mL	Grab	Monthly	[14]
Enterococcus	CFU/ 100mL or MPN/ 100mL	Grab	Monthly	[14]
Fecal Coliform	CFU/ 100mL or MPN/ 100mL	Grab	Monthly	[14]
Nitrate Nitrogen	mg/L	24-hour composite	Semiannually	[14]
Nitrite Nitrogen	mg/L	24-hour composite	Semiannually	[14]
Organic Nitrogen	mg/L	24-hour composite	Semiannually	[14]
Total Phosphorus	mg/L	24-hour composite	Semiannually	[14]
Arsenic	µg/L	24-hr composite	Semiannually	[14]
Cadmium	µg/L	24-hr composite	Semiannually	[14]
Chromium (VI)	µg/L	Grab	Semiannually	[14]
Copper[16]	µg/L	24-hr composite and Grab	Monthly	[14]
Lead	µg/L	24-hr composite	Semiannually	[14]

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

[16] 24-hour composite samples are used to assess compliance with the maximum daily and average monthly effluent limitations and grab samples are used to assess compliance with the instantaneous maximum effluent limitation.

Parameter	Units	Sample Type[11]	Minimum Sampling Frequency[12]	Required Analytical Test Method and (Minimum Level, units), respectively
Mercury[17]	µg/L	24-hr composite	Quarterly	[14]
Nickel	µg/L	24-hr composite	Semiannually	[14]
Selenium	µg/L	24-hr composite	Semiannually	[14]
Silver	µg/L	24-hr composite	Semiannually	[14]
Zinc[16]	µg/L	24-hr composite and Grab	Monthly	[14]
Cyanide	µg/L	Grab	Semiannually	[14]
Total Residual Chlorine[16]	mg/L	Grab and 24-hour composite	Monthly	[14]
Ammonia Nitrogen	mg/L	24-hr composite	Quarterly	[14]
Toxicity, Chronic	Pass or Fail (TST) % Effect	24-hr composite	Quarterly	[14]
Phenolic compounds (non-chlorinated)[18]	µg/L	24-hr composite	Semiannually	[14]
Phenolic compounds (chlorinated)[18]	µg/L	24-hr composite	Semiannually	[14]
Endosulfan[18]	µg/L	24-hr composite	Semiannually	[14]
Endrin	µg/L	24-hr composite	Semiannually	[14]
HCH[18]	µg/L	24-hr composite	Quarterly	[14]
Radioactivity (including gross alpha, gross beta, combined radium-226 & radium-228, tritium, strontium-90 and uranium)[19]	pCi/L	24-hr composite	Semiannually	[14]

[17] USEPA Method 1631E, with a quantitation level of 0.5 ng/L, shall be used to analyze total mercury. If an alternative method with an equivalent or more sensitive method detection limit is approved in 40 CFR 136, the Discharger may use that method in lieu of USEPA Method 1631E.

[18] See Attachment A for definition of terms.

[19] 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,

Parameter	Units	Sample Type[11]	Minimum Sampling Frequency[12]	Required Analytical Test Method and (Minimum Level, units), respectively
Acrolein	µg/L	Grab	Semiannually	[14]
Antimony	µg/L	24-hr composite	Semiannually	[14]
Bis(2-chloroethoxy) methane	µg/L	24-hr composite	Semiannually	[14]
Bis(2-chloroisopropyl) ether	µg/L	24-hr composite	Semiannually	[14]
Chlorobenzene	µg/L	Grab	Semiannually	[14]
Chromium (III)	µg/L	Grab	Semiannually	[14]
Di-n-butyl phthalate	µg/L	24-hr composite	Semiannually	[14]
Dichlorobenzenes[18]	µg/L	24-hr composite	Semiannually	[14]
Diethyl Phthalate	µg/L	24-hr composite	Semiannually	[14]
Dimethyl Phthalate	µg/L	24-hr composite	Semiannually	[14]
4,6-dinitro-2-methylphenol	µg/L	24-hr composite	Semiannually	[14]
2,4-dinitrophenol	µg/L	24-hr composite	Semiannually	[14]
Ethylbenzene	µg/L	Grab	Semiannually	[14]
Fluoranthene	µg/L	24-hr composite	Semiannually	[14]
Hexachlorocyclo-pentadiene	µg/L	24-hr composite	Semiannually	[14]
Nitrobenzene	µg/L	24-hr composite	Semiannually	[14]
Thallium	µg/L	24-hr composite	Semiannually	[14]
Toluene	µg/L	Grab	Semiannually	[14]
Tributyltin	ng/L	24-hr composite	Semiannually	[14]
1,1,1-Trichloroethane	µg/L	Grab	Semiannually	[14]
Acrylonitrile	µg/L	Grab	Semiannually	[14]
Aldrin	µg/L	24-hr composite	Semiannually	[14]
Benzene	µg/L	Grab	Semiannually	[14]
Benzidine	µg/L	24-hr composite	Semiannually	[14]
Beryllium	µg/L	24-hr composite	Semiannually	[14]
Bis(2-chloroethyl) ether	µg/L	24-hr composite	Semiannually	[14]

respectively. If radium-226 & 228 exceeds the stipulated criteria, then analyze for tritium, strontium-90, and uranium.

Parameter	Units	Sample Type[11]	Minimum Sampling Frequency[12]	Required Analytical Test Method and (Minimum Level, units), respectively
Bis(2-ethylhexyl) phthalate	µg/L	24-hr composite	Semiannually	[14]
Carbon Tetrachloride	µg/L	Grab	Semiannually	[14]
Chlordane[18]	µg/L	24-hr composite	Semiannually	[14]
Chlorodibromomethane	µg/L	Grab	Semiannually	[14]
Chloroform	µg/L	Grab	Semiannually	[14]
DDT[18]	µg/L	24-hr composite	Semiannually	[14]
1,4-dichlorobenzene	µg/L	24-hr composite	Semiannually	[14]
3,3'-dichlorobenzidine	µg/L	24-hr composite	Semiannually	[14]
1,2-dichloroethane	µg/L	Grab	Semiannually	[14]
1,1-dichloroethylene	µg/L	Grab	Semiannually	[14]
Dichlorobromomethane	µg/L	Grab	Semiannually	[14]
Dichloromethane	µg/L	Grab	Semiannually	[14]
1,3-Dichloropropene	µg/L	Grab	Semiannually	[14]
Dieldrin	µg/L	24-hr composite	Semiannually	[14]
2,4-dinitrotoluene	µg/L	24-hr composite	Semiannually	[14]
1,2-diphenylhydrazine	µg/L	24-hr composite	Semiannually	[14]
Halomethanes[18]	µg/L	Grab	Semiannually	[14]
Heptachlor	µg/L	24-hr composite	Quarterly	[14]
Heptachlor Epoxide	µg/L	24-hr composite	Quarterly	[14]
Hexachlorobenzene	µg/L	24-hr composite	Semiannually	[14]
Hexachlorobutadiene	µg/L	24-hr composite	Semiannually	[14]
Hexachloroethane	µg/L	24-hr composite	Semiannually	[14]
Isophorone	µg/L	24-hr composite	Semiannually	[14]
N-Nitrosodimethylamine	µg/L	24-hr composite	Semiannually	[14]
N-Nitrosodi-n-propylamine	µg/L	24-hr composite	Semiannually	[14]
N-Nitrosodiphenylamine	µg/L	24-hr composite	Semiannually	[14]
PAHs[18]	µg/L	24-hr composite	Semiannually	[14]
PCBs as Aroclors[18]	µg/L	24-hr composite	Semiannually	[14]

Parameter	Units	Sample Type[11]	Minimum Sampling Frequency[12]	Required Analytical Test Method and (Minimum Level, units), respectively
TCDD Equivalents[18,20]	pg/L	24-hr composite	Monthly	[14]
1,1,2,2-Tetrachloroethane	µg/L	Grab	Semiannually	[14]
Tetrachloroethylene	µg/L	Grab	Semiannually	[14]
Toxaphene	µg/L	24-hr composite	Semiannually	[14]
Trichloroethylene	µg/L	Grab	Semiannually	[14]
1,1,2-Trichloroethane	µg/L	Grab	Semiannually	[14]
2,4,6-Trichlorophenol	µg/L	24-hr composite	Semiannually	[14]
Vinyl chloride	µg/L	Grab	Semiannually	[14]

V. WHOLE EFFLUENT TOXICITY 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 002 is 0.73 percent effluent.

2. Sample Volume and Holding Time

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

3. Chronic Marine Species and Test Methods

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

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

[20] USEPA Method 1613 shall be used to analyze TCDD equivalents. If an alternative method with an equivalent or more sensitive method detection limit is approved in 40 CFR 136, the Discharger may use that method in lieu of USEPA Method 1613.

b. A static non-renewal toxicity test with the purple sea urchin, *Strongylocentrotus purpuratus*, or the sand dollar, *Dendraster excentricus* (both using 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 Discharger shall collect a single effluent sample to initiate and concurrently conduct three toxicity tests using the fish, an invertebrate, and the alga species previously referenced. This sample shall also be analyzed for the parameters required on a monthly frequency for the discharge, during that given month. As allowed under the test method for the *Atherinops affinis*, a second and third sample may be collected for use as test solution renewal water as the seven-day toxicity test progresses. If the result of all three species is "Pass", 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 Discharger shall rescreen with the marine vertebrate species, a marine invertebrate species, and the alga species previously referenced, and continue to monitor with the most sensitive species. If the first suite of rescreening tests demonstrates that the same species is the most sensitive, then the rescreening does not need to include more than one suite of tests. If a different species is the most sensitive or if there is ambiguity, then the Discharger may proceed with suites of screening tests for a minimum of three, but not to exceed five suites.

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

5. Quality Assurance and Additional Requirements

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

a. The discharge is subject to determination of "Pass" or "Fail" from a chronic toxicity test using the Test of Significant Toxicity statistical t-test approach described in the *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010), Appendix A, Figure A-1, and Table A-1, and Appendix B, Table B-1. The null hypothesis (H_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 Discharger must re-sample and re-test within 14 days.

Table E-4. 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; 0.85 mg average dry weight per surviving organism in control chambers (9 day old); 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 EC_{25}[21].

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

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

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

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

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

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

Once the Discharger becomes aware of this result, the Discharger shall implement an accelerated monitoring schedule within 5 calendar days of the receipt of the result. However, if the sample is contracted out to a commercial laboratory, the Discharger shall ensure that the first of four accelerated monitoring tests is initiated within seven calendar days of the Discharger becoming aware of the result. If the Discharger is unable to transport the collected samples off the island or if the contract lab is unable to secure organisms to conduct the toxicity test within 7 days, the Discharger may submit a written request to the Regional Water Board to delay initiation of accelerated monitoring up to an additional 7 days. 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 EC_{25}. If each of the accelerated toxicity tests results in "Pass," the Discharger shall return to routine monitoring for the next

[21] EC_{25} 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.

monitoring period. If one of the accelerated toxicity tests results in "Fail," the Discharger shall immediately implement the TRE Process conditions set forth below. During accelerated monitoring schedules, only TST results ("Pass" or "Fail") for chronic toxicity tests shall be reported as effluent compliance monitoring results for the chronic toxicity MDEL.

8. Toxicity Reduction Evaluation (TRE) Process

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

   a. **Preparation and Implementation of Detailed TRE Work Plan.** The Discharger shall immediately initiate a TRE using, according to the type of treatment facility, USEPA manual *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants* (EPA/833/B-99/002, 1999) and, within 15 days, submit to the Executive Officer a Detailed TRE Work Plan, which shall follow the generic Initial Investigation TRE Work Plan revised as appropriate for this toxicity event. It shall include the following information, and comply with additional conditions set by the Executive Officer:

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

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

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

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

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

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

   e. The Regional Water Board recognizes that toxicity may be episodic and identification of causes and reduction of sources of toxicity may not be successful in

all cases. The TRE may be ended at any stage if monitoring finds there is no longer toxicity.

9. Reporting

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

a. 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-7.

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 Discharger 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 Discharger must demonstrate the effluent toxicity is caused by ammonia because of increasing test pH when conducting the toxicity test. It is important to distinguish the potential toxic effects of ammonia from other pH sensitive chemicals, such as certain heavy metals, sulfide, and cyanide. 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. Offshore Water Quality Monitoring Location

This monitoring is designed to determine if Ocean Plan, ASBS, 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.

1. The Discharger shall conduct offshore water quality monitoring at RSW-001, RSW-002, RSW-003, RSW-004, and RSW-005 annually using a CTD profiler as follows:

Table E-5. Offshore Receiving Water Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Dissolved oxygen	mg/L	continuous profile[22]	Annually	[23]
Temperature	°C	continuous profile[22]	Annually	[23]
Salinity	ppt	continuous profile[22]	Annually	[23]
Transmissivity	% transmittance	continuous profile[22]	Annually	[23]
Chlorophyll a	µg/L	continuous profile[22]	Annually	[23]
pH	pH units	continuous profile[22]	Annually	[23]
Total Residual Chlorine	mg/L	Grabs at 0.5 meters below surface at RSW-002 only	Annually	[23]

[22] 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).

[23] 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
Visual observations[24]	---	---	Annually	---

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*. Data shall be analyzed to approximate the typical wastewater plume movement and data under different seasonal and weather conditions.

2. To determine compliance with ASBS requirements, the Discharger shall monitor a single down-current location, at the first trapping normal depth, to demonstrate that natural water quality is not altered in the ASBS outside the exclusion zone (within 1000 feet of the initial point of discharge) when compared to the unaffected reference site. Only one of the RSW locations (RSW-001, RSW-002, RSW-003, RSW-004, or RSW-005) shall be sampled to determine compliance, depending on the direction of the current at the time of sample collection. The selected station must be down-current of the discharge point. Regional monitoring data may be reported for the reference site except for dissolved oxygen and pH, which shall be sampled separately at a single up-current location from the RSW. Monitoring results for total residual chlorine and visual observations at the selected down-current RSW location shall be reported in the quarterly self-monitoring report. The Discharger shall conduct the following offshore water quality monitoring twice per permit cycle at a single down-current RSW location and a single up-current reference location concurrent with the effluent monitoring:

[24] Observations of wind speed and direction, weather, current direction, and tidal condition (high/low) shall be recorded at the time receiving water samples are collected. 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.

Table E-6. ASBS Compliance Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Arsenic	µg/L	Grab	2x/permit cycle	[25]
Cadmium	µg/L	Grab	2x/permit cycle	[25]
Chromium (VI)	µg/L	Grab	2x/permit cycle	[25]
Copper	µg/L	Grab	2x/permit cycle	[25]
Lead	µg/L	Grab	2x/permit cycle	[25]
Mercury[26]	µg/L	Grab	2x/permit cycle	[25]
Nickel	µg/L	Grab	2x/permit cycle	[25]
Selenium	µg/L	Grab	2x/permit cycle	[25]
Silver	µg/L	Grab	2x/permit cycle	[25]
Zinc	µg/L	Grab	2x/permit cycle	[25]
Cyanide	µg/L	Grab	2x/permit cycle	[25]
Total Residual Chlorine	mg/L	Grab	2x/permit cycle	[25]
Ammonia Nitrogen	mg/L	Grab	2x/permit cycle	[25]
Toxicity, Chronic	Pass or Fail (TST)	Grab	2x/permit cycle	[25]
Phenolic compounds (non-chlorinated)[27]	µg/L	Grab	2x/permit cycle	[25]
Phenolic compounds (chlorinated)[27]	µg/L	Grab	2x/permit cycle	[25]
Endosulfan[27]	µg/L	Grab	2x/permit cycle	[25]
Endrin	µg/L	Grab	2x/permit cycle	[25]
HCH[27]	µg/L	Grab	2x/permit cycle	[25]
Radioactivity (including gross alpha, gross beta, combined radium-226 & radium-228, tritium, strontium-90 and uranium)[28]	pCi/L	Grab	2x/permit cycle	[25]
Acrolein	µg/L	Grab	2x/permit cycle	[25]

[25] 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.

[26] USEPA Method 1631E, with a quantitation level of 0.5 ng/L, shall be used to analyze total mercury. If an alternative method with an equivalent or more sensitive method detection limit is approved in 40 CFR 136, the Discharger may use that method in lieu of USEPA Method 1631E.

[27] See Attachment A for definition of terms.

[28] 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	Required Analytical Test Method
Antimony	µg/L	Grab	2x/permit cycle	[25]
Bis(2-chloroethoxy) methane	µg/L	Grab	2x/permit cycle	[25]
Bis(2-chloroisopropyl) ether	µg/L	Grab	2x/permit cycle	[25]
Chlorobenzene	µg/L	Grab	2x/permit cycle	[25]
Chromium (III)	µg/L	Grab	2x/permit cycle	[25]
Di-n-butyl phthalate	µg/L	Grab	2x/permit cycle	[25]
Dichlorobenzenes[27]	µg/L	Grab	2x/permit cycle	[25]
Diethyl Phthalate	µg/L	Grab	2x/permit cycle	[25]
Dimethyl Phthalate	µg/L	Grab	2x/permit cycle	[25]
4,6-dinitro-2-methylphenol	µg/L	Grab	2x/permit cycle	[25]
2,4-dinitrophenol	µg/L	Grab	2x/permit cycle	[25]
Ethylbenzene	µg/L	Grab	2x/permit cycle	[25]
Fluoranthene	µg/L	Grab	2x/permit cycle	[25]
Hexachlorocyclo-pentadiene	µg/L	Grab	2x/permit cycle	[25]
Nitrobenzene	µg/L	Grab	2x/permit cycle	[25]
Thallium	µg/L	Grab	2x/permit cycle	[25]
Toluene	µg/L	Grab	2x/permit cycle	[25]
Tributyltin	ng/L	Grab	2x/permit cycle	[25]
1,1,1-Trichloroethane	µg/L	Grab	2x/permit cycle	[25]
Acrylonitrile	µg/L	Grab	2x/permit cycle	[25]
Aldrin	µg/L	Grab	2x/permit cycle	[25]
Benzene	µg/L	Grab	2x/permit cycle	[25]
Benzidine	µg/L	Grab	2x/permit cycle	[25]
Beryllium	µg/L	Grab	2x/permit cycle	[25]
Bis(2-chloroethyl) ether	µg/L	Grab	2x/permit cycle	[25]
Bis(2-ethylhexyl) phthalate	µg/L	Grab	2x/permit cycle	[25]
Carbon Tetrachloride	µg/L	Grab	2x/permit cycle	[25]
Chlordane[27]	µg/L	Grab	2x/permit cycle	[25]
Chlorodibromomethane	µg/L	Grab	2x/permit cycle	[25]
Chloroform	µg/L	Grab	2x/permit cycle	[25]
DDT[27]	µg/L	Grab	2x/permit cycle	[25]
1,4-dichlorobenzene	µg/L	Grab	2x/permit cycle	[25]
3,3'-dichlorobenzidine	µg/L	Grab	2x/permit cycle	[25]
1,2-dichloroethane	µg/L	Grab	2x/permit cycle	[25]
1,1-dichloroethylene	µg/L	Grab	2x/permit cycle	[25]
Dichlorobromomethane	µg/L	Grab	2x/permit cycle	[25]
Dichloromethane	µg/L	Grab	2x/permit cycle	[25]
1,3-Dichloropropene	µg/L	Grab	2x/permit cycle	[25]

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Dieldrin	µg/L	Grab	2x/permit cycle	[25]
2,4-dinitrotoluene	µg/L	Grab	2x/permit cycle	[25]
1,2-diphenylhydrazine	µg/L	Grab	2x/permit cycle	[25]
Halomethanes[27]	µg/L	Grab	2x/permit cycle	[25]
Heptachlor	µg/L	Grab	2x/permit cycle	[25]
Heptachlor Epoxide	µg/L	Grab	2x/permit cycle	[25]
Hexachlorobenzene	µg/L	Grab	2x/permit cycle	[25]
Hexachlorobutadiene	µg/L	Grab	2x/permit cycle	[25]
Hexachloroethane	µg/L	Grab	2x/permit cycle	[25]
Isophorone	µg/L	Grab	2x/permit cycle	[25]
N-Nitrosodimethylamine	µg/L	Grab	2x/permit cycle	[25]
N-Nitrosodi-n-propylamine	µg/L	Grab	2x/permit cycle	[25]
N-Nitrosodiphenylamine	µg/L	Grab	2x/permit cycle	[25]
PAHs[27]	µg/L	Grab	2x/permit cycle	[25]
PCBs as Aroclors[27]	µg/L	Grab	2x/permit cycle	[25]
TCDD Equivalents[27,29]	pg/L	Grab	2x/permit cycle	[25]
1,1,2,2-Tetrachloroethane	µg/L	Grab	2x/permit cycle	[25]
Tetrachloroethylene	µg/L	Grab	2x/permit cycle	[25]
Toxaphene	µg/L	Grab	2x/permit cycle	[25]
Trichloroethylene	µg/L	Grab	2x/permit cycle	[25]
1,1,2-Trichloroethane	µg/L	Grab	2x/permit cycle	[25]
2,4,6-Trichlorophenol	µg/L	Grab	2x/permit cycle	[25]
Vinyl chloride	µg/L	Grab	2x/permit cycle	[25]
Oil and Grease	mg/L	Grab	2x/permit cycle	[25]
Total Suspended Solids	mg/L	Grab	2x/permit cycle	[25]
Settleable Solids	mL/L	Grab	2x/permit cycle	[25]
Turbidity	NTU	Grab	2x/permit cycle	[25]
pH	Units	Grab	2x/permit cycle	[25]
Dissolved oxygen	mg/L	Grab	2x/permit cycle	[25]
Nitrate	°C	Grab	2x/permit cycle	[25]
Phosphate	ppt	Grab	2x/permit cycle	[25]

3. The Discharger shall monitor bacteria and ammonia at five offshore receiving water monitoring locations including RSW-001, RSW-002, RSW-003, RSW-004, and RSW-005, and bacteria at two shoreline bacteria monitoring locations including SBM-001 and SBM-002 (see Figure E-1 and Table E-1) as follows:

[29] USEPA Method 1613 shall be used to analyze TCDD equivalents. If an alternative method with an equivalent or more sensitive method detection limit is approved in 40 CFR 136, the Discharger may use that method in lieu of USEPA Method 1613.

Table E-7. Additional Offshore and Shoreline Receiving Water Monitoring Requirements

Parameter	Units	Sample Type[30]	Minimum Sampling Frequency	Required Analytical Test Method
Total Coliform	MPN or CFU/100 mL	Grab, surface, and mid-depth and near bottom[31]	Monthly	[32]
Fecal Coliform	MPN or CFU/100 mL	Grab, surface, and mid-depth and near bottom[31]	Monthly	[32]
Enterococcus	MPN or CFU/100 mL	Grab, surface, and mid-depth and near bottom[31]	Monthly	[32]
Ammonia Nitrogen	mg/L	Grab, surface, and mid-depth and near bottom[31]	Annually	[32]

B. Benthic Infauna Sediment Chemistry Monitoring Requirements

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 for drawing inferences concerning the relationship between effluent-derived alteration of the benthic habitat and patterns in infaunal community structure. This data is also used to determine the status of marine aquatic life to satisfy ASBS requirements.

The Discharger shall monitor the eight subtidal and one intertidal benthic monitoring stations at SM-001, SM-002, SM-003, SM-004, SM-005, SM-006, SM-007, SM-008, and IBM-001 (see Figure E-1 and Table 1) once per permit cycle as follows:

Table E-8. Benthic Infauna and Sediment Chemistry Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Benthic Infauna Community[33]	--	0.1 square meter Van Veen Grab	Once per permit cycle	--
Total Organic Carbon	mg/kg	0.1 square meter Van Veen Grab (upper 2 centimeters)	Once per permit cycle	[32]

[30] 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 at depths less than 45 meters.

[31] Bottom sampling shall be conducted 2 meters (6.6 feet) above the seabed.

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

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Organic Nitrogen	mg/kg	0.1 square meter Van Veen Grab (upper 2 centimeters)	Once per permit cycle	[32]
Grain Size	Phi size	0.1 square meter Van Veen Grab (upper 2 centimeters)	Once per permit cycle	[32]

Intertidal survey methods shall be those used by the Partnership for Interdisciplinary Studies of Coastal Oceans (PISCO) for their biodiversity surveys. A single intertidal site at IBM-001 (see Figure E-1 and Table E-1) shall be surveyed as close to the discharge as possible and compared to a reference location at San Clemente Island approved through the regional monitoring program.

Subtidal surveys and sampling at SM-001 through SM-008 (See Figure E-1 and Table E-1) may include rocky reef and/or soft-bottom habitats as appropriate to the actual benthic conditions at the edge of the exclusion zone (within 1,000 feet of the initial point of discharge). The far-field samples at SM-006 through SM-008 shall be collected from a comparable habitat to the near-field samples at SM-001 through SM-005. Subtidal soft-bottom sampling shall conform with the methods used in the SCCWRP Southern California Bight regional surveys. Subtidal rocky reef surveys shall be non-destructive and conform to the methods used in the SCCWRP Southern California Bight regional surveys.

Benthic infauna monitoring shall be conducted once per permit cycle during the month of July. One sample shall be collected at each station for benthic infaunal community analysis. The entire contents of each sample shall be passed through a 1.0-millimeter screen to retain the benthic organisms. Benthic 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 contained within the sample shall be identified to the lowest possible taxon and counted. The resulting data shall be used to describe community structure at each station.

2. 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.

Regional surveys of benthic conditions occur every five years within the Southern California Bight and the 2018 regional monitoring effort is currently underway. The final survey design is determined cooperatively by participants represented on the Regional Steering Committee. The Discharger is encouraged to support the benthic surveys conducted as part of the Bight regional monitoring effort 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

IX. OTHER MONITORING REQUIREMENTS

A. Special Study – Data for Plume Model Mixing Predictions

State Water Board Ocean Unit staff applied data from the California Cooperative Oceanic Fisheries Investigations nearshore stations surveyed in the summers 2010 and 2011 to evaluate the minimum initial dilution for Discharge Point 002. Based on the results, State Water Board staff agreed with the original United States Navy (Navy) report suggesting 136 as the value for minimum initial dilution as defined in the 2009 California Ocean Plan for use in the Order.

However, neither the ambient data used by staff to model near-field mixing nor the ambient data used by the Navy's consultant represent actual site receiving water conditions. As a result, the Navy collected salinity and temperature data throughout the water column near the outfall in areas unaffected by the plume for two summers during the previous permit cycle. The Navy shall use the receiving water data collected and any additional data shall be collected as needed to evaluate the initial dilution of the discharge plume and to determine the appropriateness of the 136:1 dilution ratio. The Navy shall submit a dilution study work plan to the Regional Water Board for approval by the Executive Officer within 180 days of the effective date of this permit describing the timeline and procedures that will be used in the study. At a minimum, the work plan shall include the dilution model being used, a description of the sensitivity analysis, ambient conditions, and all model inputs.

B. Outfall and Diffuser Inspection

This survey is designed to ensure that the outfall structures are in serviceable condition and 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.

The entire ocean outfall for Discharge Point 002 shall be externally inspected at a minimum of twice per permit cycle during the month of July or August of 2020 and 2022. Inspections shall include general observations and photographic/video graphic records of the exterior outfall pipes and the adjacent ocean bottom. The outfall shall be examined for plugs, leaks, and flow distribution. A visual inspection at and near the outfall system shall be conducted to determine the thickness of any "cloud" of unsettled solids, bottom flora and fauna, and any other biological and physical conditions. 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 video graphic and/or photographic images, will provide a description of the observed condition of the discharge pipes from shallow water to their respective termini. The final report shall be submitted to the Regional Water Board with the annual summary report on April 15.

C. Biosolids and Sludge Management

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

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.
2. If there is no discharge during any reporting period, the report shall so state.

3. Each monitoring report shall contain a separate section titled "Summary of Non-compliance" which discusses the compliance record and the corrective actions taken or planned that may be needed to bring the discharge into full compliance with waste discharge requirements. This section shall clearly list all non-compliance with discharge requirements as well as all excursions of effluent limitations.

4. The Discharger shall inform the Regional Water Board well in advance of any proposed construction or maintenance activity, or modification to the Federally-Owned Treatment Works (FOTW) 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 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. The actual depths and coordinates of the receiving water stations sampled shall also be reported.

8. Non-detect levels reported for SCI WWTP's effluent are generally higher than effluent limitations or water quality objectives for DDT, chlordane, PCBs and PAHs. Therefore, the Discharger shall strive for lower analytical detection levels than those specified in Appendix II of the 2015 Ocean Plan.

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

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

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

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

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

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

10. 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.

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

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

B. Self-Monitoring Reports (SMRs)

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

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

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

Table E-9. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins	Monitoring Period	SMR Due Date
Continuous	Order effective date	All	Submit with quarterly SMR
Hourly	Order effective date	Hourly	Submit with quarterly SMR
Daily	Order effective date	(Midnight through 11:59 PM) or any 24-hour period	Submit with quarterly SMR

Sampling Frequency	Monitoring Period Begins	Monitoring Period	SMR Due Date
		that reasonably represents a calendar day for purposes of sampling.	
Weekly	Sunday following Order effective date or on Order effective date if on a Sunday	Sunday through Saturday	Submit with quarterly 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	Submit with quarterly SMR
Quarterly	Closest of January 1, April 1, July 1, or October 1 following (or on) permit effective date	January 1 to March 31 April 1 to June 30 July 1 to September 30 October 1 to December 31	May 15 August 15 November 15 February 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	August 15 February 15
Annually	January 1 following (or on) permit effective date	January 1 through December 31	April 15

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

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

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

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

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

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

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

5. **Compliance Determination.** Compliance with effluent limitations for reportable pollutants shall be determined using sample reporting protocols defined above and

Attachment A of this Order. For purposes of reporting and administrative enforcement by the Regional Water Board and State Water Board, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the reportable pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported Minimum Level (ML).

6. **Multiple Sample Data.** When determining compliance with a measure of central tendency (arithmetic mean, geometric mean, median, etc.) of multiple sample analyses and the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND), the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

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

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

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

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

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

C. Discharge Monitoring Reports (DMRs)

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

D. Other Reports

1. The Discharger shall report the results of any special studies, acute and chronic toxicity testing, TRE/TIE, BMPs, PMP, and Pollution Prevention Plan required by Special Provisions – VI.C. The Discharger shall submit reports in compliance with SMR reporting requirements described in subsection X.B above.

2. Hauling Reports for Non-Biosolids Wastes

   a. In the event that wastes (not including biosolids) 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.

3. Annual Summary Report

By April 15 of each year, the Discharger 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). 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. The Discharger shall submit annual reports to the Regional Water Board in accordance with the requirements described in subsection X.B.7. above.

4. Receiving Water Monitoring Report

An annual summary of the receiving water monitoring data collected during each sampling year (January – December) shall be prepared and submitted to the Regional Water Board by August 1st of the following year. This annual summary shall include a brief discussion of the monitoring results.

A detailed Biennial Receiving Water Monitoring Assessment Report of the data collected during the two previous calendar sampling years (January-December) shall be prepared and submitted so that it is received by the Regional Water Board by 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, 2019 and cover the sampling periods from January 2017 through December 2018. Subsequent reports shall be due August 1, 2021, and August 1, 2023, to cover sampling periods from January 2019 through December 2020, and January 2021 through December 2022, respectively.

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

6. Outfall Inspection Report

   By April 15 following the year the outfall inspection is conducted, the Discharger shall prepare and submit a summary report of the outfall inspection findings to the Regional Water Board. This written report, augmented with videographic and/or photographic images, and shall provide a description of the observed external condition of the discharge pipes from shallow water to their respective termini.

7. Technical Report on Preventive and Contingency Plans

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

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

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

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

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

ATTACHMENT F – FACT SHEET

CONTENTS

TABLES

ATTACHMENT F – FACT SHEET

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

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

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table F-1. Facility Information

WDID	4B190703003
Discharger	United States Navy (Navy)
Name of Facility	San Clemente Island Wastewater Treatment Plant
Facility Address	Navy Auxiliary Landing Field
	San Clemente Island, CA
	Los Angeles County
Facility Contact, Title and Phone	Thomas Niday, Utilities System Operator, (619) 524-9125
Authorized Person to Sign and Submit Reports	Jason Golumbfskie-Jones, Installation Environmental Program Director, (619) 545-3429
Mailing Address	Naval Base Coronado, PO Box 357088, San Diego, CA 92135
Billing Address	SAME
Type of Facility	Federally-owned Treatment Works (FOTW)
Major or Minor Facility	Minor
Threat to Water Quality	1
Complexity	B
Pretreatment Program	No
Recycling Requirements	Producer and User
Facility Permitted Flow	0.025 million gallons per day (mgd) monthly average
Facility Design Flow	0.06 mgd – Secondary Treatment Plant 0.03 mgd – Tertiary Treatment Plant
Watershed	San Clemente Island Watershed
Receiving Water	Pacific Ocean
Receiving Water Type	Ocean waters

A. The United Sates Navy (hereinafter Discharger or Navy) is the owner and operator of the San Clemente Island Wastewater Treatment Plant (hereinafter Facility or SCI WWTP), a Federally-Owned Treatment Works (FOTW).

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

B. The Facility discharges wastewater to the Pacific Ocean, a water of the United States. The Discharger was previously regulated by Order No. R4-2013-0111 and National Pollutant

Discharge Elimination System (NPDES) Permit No. CA0110175 adopted on July 11, 2013, expired on August 30, 2018, and administratively extended until the adoption of this Order. Attachment B provides a map of the area around the Facility. Attachment C provides a flow schematic of the Facility.

C. The Discharger filed a report of waste discharge and submitted an application for reissuance of its waste discharge requirements (WDRs) and NPDES permit on March 02, 2018. Supplemental information was requested on March 07 and May 16, 2018 and received on May 02 and June 19, 2018. The application was deemed complete on July 11, 2018. A site visit was conducted on August 29, 2018, to observe operations and collect additional data to develop permit limitations and requirements for waste discharge.

D. Regulations at Title 40 of the Code of Federal Regulations (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 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.

II. FACILITY DESCRIPTION

A. Description of Wastewater Treatment and Controls

1. The Discharger owns and operates the SCI WWTP, located approximately 1,500 feet east of Wilson Cove and discharges a maximum monthly average of 0.025 mgd of treated wastewater to the Pacific Ocean, a water of the United States. This maximum permitted flow is a result of discussions between the Navy and the State Water Board regarding discharge to a designated Area of Special Biological Significance (ASBS).

2. The facility receives sewage from a separated sanitary sewer serving a population of approximately 500 people, except in cases when extra personnel are present due to training on the island. In those cases, wastewater from the portable toilets may be delivered directly to the headworks of the treatment system. Only residential wastes are discharged to the sanitary sewer and all industrial drains have been capped with concrete. Industrial wastes (used oil, used antifreeze, used batteries, etc.) are stored onsite and are manifested off the island via barge and properly disposed of in accordance with federal and state regulations. There is no industry on the island and most of the industrial waste generated is associated with facility and vehicle maintenance. Septage from the 22 septic tanks on the island may also be delivered directly to the headworks on an emergency basis to avoid or mitigate overflows. The septic tanks are routinely pumped by a contractor and septage transported offsite by barge to a City of San Diego treatment works pump station.

3. The Facility's treatment system consists of a package-type secondary-23 wastewater treatment plant, built in 1979, and a recently installed package-type tertiary wastewater treatment plant. The influent flows through a comminutor and then into a primary equalization tank. The two plants are hydraulically connected at this point and the flow may be directed to either plant once the tertiary plant is in operation. The secondary-23 treatment plant is currently the only treatment plant in operation at the Facility. It has a design capacity of 0.060 million gallons per day (mgd) and consists of comminution, equalization, activated sludge extended aeration, clarification, chlorination, and dechlorination. The tertiary treatment plant is not currently in operation but the Discharger anticipates having the treatment plant online within the next year. It has a design capacity of 0.030 mgd and consists of the Smith and Loveless Titan Membrane Bio Reactor Package, which includes fine screening, flow equalization, sludge storage, anoxic zones, an aeration zone including an immersion-type membrane module of flat

sheet polyvinylidene difluoride (PVDF), a filtration zone, chlorine contact, and dechlorination. The membrane is the Membray® brand manufactured by Toray and is listed as an approved technology by the State Water Resources Control Board, Division of Drinking Water, in their *Alternative Treatment Technology Report for Recycled Water* published in 2014. Treated wastewater, prior to dechlorination, is pumped to either a tertiary or a secondary-23 recycled water storage tank, depending on water quality. The sludge is either dried in drying beds or bagged for dewatering over plastic pallets. The dried solids are sent to the landfill on San Clemente Island for disposal and regulated under Order No. R4-2010-0045, adopted by the Regional Water Board on March 04, 2010. A process flow diagram of the facility consisting of both treatment plants is depicted in Attachment C.

4. The Navy intends to operate the tertiary treatment plant exclusively, except during startup and maintenance of the tertiary plant, and during emergencies. The secondary plant will only be operated in emergency situations or when the tertiary plant must be shut down for maintenance.

5. Consistent with the ASBS exclusion area, this Order authorizes the Navy to discharge a maximum monthly average of 0.025 mgd of treated wastewater to the Pacific Ocean.

B. Discharge Points and Receiving Waters

The Facility has two discharge points located 250 feet east of the Facility on the northeast end of the island approximately 1,000 feet south of Wilson Cove. Discharge Point 001 is a shoreline discharge and has been decommissioned. Discharge Point 002 is a submerged, 450-foot long, 3.6-inch diameter, outfall located 70 feet below the ocean's surface. The discharge point is within the ASBS exclusion area because it is within a 1,000-foot radius from the original end-of-pipe (State Water Board Resolution 77-11).

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

Effluent limitations/Discharge Specifications contained in the existing Order for discharges from Discharge Point 002 (Monitoring Location EFF-001) and representative monitoring data from the term of the previous Order are as follows:

Table F-2. Historic Effluent Limitations and Monitoring Data

Parameter	Units	Effluent Limitation				Monitoring Data (From January 2013 – March 2018)		
		Average Monthly	Average Weekly	Maximum Daily	Instant-aneous Maximum	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
Conventional/Non-Conventional								
Biochemical Oxygen Demand (BOD)	mg/L	30	45	--	--	44.1	--	44.1
Total Suspended Solids (TSS)	mg/L	30	45	--	--	18.3	--	18.3
Oil & Grease	mg/L	25	40	--	75	1.51	--	1.51
Settleable Solids	mL/L	1.0	1.5	--	3.0	<1	--	<1
Nitrate-N	mg/L	--	--	--	--	45.9	--	45.9
Nitrite-N	mg/L	--	--	--	--	0.592	--	0.592
pH	pH Unit	6.0 - 9.0				7.71	--	7.71
Temperature	°F	--	--	--	100	74.5	--	74.5
Turbidity	NTU	75	100	--	225	9.56	--	9.56

Parameter	Units	Effluent Limitation				Monitoring Data (From January 2013 – March 2018)		
		Average Monthly	Average Weekly	Maximum Daily	Instant-aneous Maximum	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
Marine Aquatic Life Protection								
Arsenic	µg/L	--	--	--	--	8.07	--	8.07
Cadmium	µg/L	--	--	--	--	<0.2	--	<0.2
Chromium (VI)	µg/L	--	--	--	--	0.248 (DNQ)	--	0.248 (DNQ)
Copper	µg/L	--	--	--	--	251	--	251
Lead	µg/L	--	--	--	--	0.55 (DNQ)	--	0.55 (DNQ)
Mercury	µg/L	--	--	--	--	0.107 (DNQ)	--	0.107 (DNQ)
Nickel	µg/L	--	--	--	--	8.0	--	8.0
Selenium	µg/L	--	--	--	--	1.05	--	1.05
Silver	µg/L	--	--	--	--	<0.2	--	<0.2
Zinc	µg/L	--	--	--	--	2270	--	2270
Cyanide	µg/L	--	--	--	--	27.1	--	27.1
Total Residual Chlorine	µg/L	274	--	100	8200	15.4	--	15.4
Ammonia-N	mg/L	--	--	--	--	6.4	--	6.4
Phenolic Compounds (non-chlorinated)	µg/L	--	--	--	--	<11	--	<11
Phenolic Compounds (chlorinated)	µg/L	--	--	--	--	<11	--	<11
Endosulfan	µg/L	--	--	--	--	0.03 (DNQ)	--	0.03 (DNQ)
Endrin	µg/L	--	--	--	--	<0.011	--	<0.011
Hexachlorocyclohexane (HCH)	µg/L	--	--	--	--	0.48	--	0.48
Chronic Toxicity	TUc	--	--	137	--	270	--	270
Radioactivity								
Gross Alpha	pCi/L	--	--	--	--	12.4	--	12.4
Gross Beta	pCi/L	--	--	--	--	10.6	--	10.6
Human Health Toxicants – Noncarcinogens								
Acrolein	µg/L	--	--	--	--	<2	--	<2
Antimony	µg/L	--	--	--	--	1.91	--	1.91
Bis (2-Chloroethoxy) methane	µg/L	--	--	--	--	<11	--	<11
Bis (2-Chloroisopropyl) ether	µg/L	--	--	--	--	<11	--	<11
Chlorobenzene	µg/L	--	--	--	--	<1	--	<1
Chromium III	µg/L	--	--	--	--	0.719 (DNQ)	--	0.719 (DNQ)
Di-n-Butyl Phthalate	µg/L	--	--	--	--	<11	--	<11
Dichlorobenzenes	µg/L	--	--	--	--	<11	--	<11
Diethyl phthalate	µg/L	--	--	--	--	<11	--	<11
Dimethyl phthalate	µg/L	--	--	--	--	<11	--	<11

Parameter	Units	Effluent Limitation				Monitoring Data (From January 2013 – March 2018)		
		Average Monthly	Average Weekly	Maximum Daily	Instant-aneous Maximum	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
4,6-dinitro-2-methylphenol	µg/L	--	--	--	--	<11	--	<11
2,4-dinitrophenol	µg/L	--	--	--	--	<11	--	<11
Ethylbenzene	µg/L	--	--	--	--	<2	--	<2
Fluoranthene	µg/L	--	--	--	--	<11	--	<11
Hexachlorocyclopentadiene	µg/L	--	--	--	--	<11	--	<11
Nitrobenzene	µg/L	--	--	--	--	<11	--	<11
Thallium	µg/L	--	--	--	--	<0.2	--	<0.2
Toluene	µg/L	--	--	--	--	<1	--	<1
Tributyltin	µg/L	--	--	--	--	3.9	--	3.9
1,1,1-trichloroethane	µg/L	--	--	--	--	<1	--	<1
Human Health Toxicants - Carcinogens								
Acrylonitrile	µg/L	--	--	--	--	<2	--	<2
Aldrin	µg/L	--	--	--	--	<5.4	--	<5.4
Benzene	µg/L	--	--	--	--	<20	--	<20
Benzidine	µg/L	--	--	--	--	<42	--	<42
Beryllium	µg/L	--	--	--	--	<0.1	--	<0.1
Bis (2-Chloroethyl) ether	µg/L	--	--	--	--	<11	--	<11
Bis(2-ethylhexyl)-phthalate	µg/L	--	--	--	--	39	--	39
Carbon tetrachloride	µg/L	--	--	--	--	<1	--	<1
Chlordane	µg/L	--	--	--	--	0.034 (DNQ)	--	0.034 (DNQ)
Chlorodibromomethane	µg/L	--	--	--	--	22	--	22
Chloroform	µg/L	--	--	--	--	51	--	51
DDT	µg/L	0.024	--	--	--	<0.01	--	<0.01
1,4-Dichlorobenzene	µg/L	--	--	--	--	<11	--	<11
3,3'-Dichlorobenzidine	µg/L	--	--	--	--	<11	--	<11
1,2-dichloroethane	µg/L	--	--	--	--	<1	--	<1
1,1-dichloroethylene	µg/L	--	--	--	--	<1	--	<1
Dichlorobromomethane	µg/L	--	--	--	--	39	--	39
Dichloromethane	µg/L	--	--	--	--	3.5 (DNQ)	--	3.5 (DNQ)
1,3-dichloropropene	µg/L	--	--	--	--	<1	--	<1
Dieldrin	µg/L	--	--	--	--	<0.011	--	<0.011
2,4-Dinitrotolulene	µg/L	--	--	--	--	<11	--	<11
1,2-Diphenylhydrazine	µg/L	--	--	--	--	<11	--	<11
Halomethanes	µg/L	--	--	--	--	2.8 (DNQ)	--	2.8 (DNQ)
Heptachlor	µg/L	--	--	--	--	0.018 (DNQ)	--	0.018 (DNQ)
Heptachlor epoxide	µg/L	--	--	--	--	0.011 (DNQ)	--	0.011 (DNQ)
Hexachlorobenzene	µg/L	--	--	--	--	<11	--	<11

Parameter	Units	Effluent Limitation				Monitoring Data (From January 2013 – March 2018)		
		Average Monthly	Average Weekly	Maximum Daily	Instant-aneous Maximum	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
Hexachlorobutadiene	µg/L	--	--	--	--	<11	--	<11
Hexachloroethane	µg/L	--	--	--	--	<11	--	<11
Isophorone	µg/L	--	--	--	--	<11	--	<11
N-Nitrosodimethylamine	µg/L	--	--	--	--	<11	--	<11
N-Nitrosodi-N-propylamine	µg/L	--	--	--	--	<11	--	<11
N-Nitrosodiphenylamine	µg/L	--	--	--	--	<11	--	<11
Polycyclic Aromatic Hydrocarbons (PAHs)	µg/L	--	--	--	--	<11	--	<11
Polychlorinated Biphenyls (PCBs)	µg/L	--	--	--	--	<0.54	--	<0.54
TCDD equivalents	µg/L	$5.3x10^{-7}$	--	--	--	$8.96x10^{-3}$	--	$8.96x10^{-3}$
1,1,2,2-tetrachloroethane	µg/L	--	--	--	--	<1	--	<1
Tetrachloroethylene	µg/L	--	--	--	--	<1	--	<1
Toxaphene	µg/L	--	--	--	--	<0.54	--	<0.54
Trichloroethylene	µg/L	--	--	--	--	<1	--	<1
1,1,2-trichloroethane	µg/L	--	--	--	--	<1	--	<1
2,4,6-Trichlorophenol	µg/L	--	--	--	--	<11	--	<11
Vinyl chloride	µg/L	--	--	--	--	<1	--	<1

D. Compliance Summary

Table F-3. List of Violations for SCI WWTP

Violation ID	Occurrence Date	Violation Description
983795	09/09/13	Exceedance of pH Instantaneous Minimum
965394	10/08/13	Exceedance of pH Instantaneous Minimum
965395	10/09/13	Exceedance of pH Instantaneous Minimum
1007889	09/08/14	Exceedance of pH Instantaneous Minimum
990921	10/20/14	Exceedance of pH Instantaneous Minimum
990923	11/23/14	Exceedance of pH Instantaneous Minimum
990922	11/25/14	Exceedance of pH Instantaneous Minimum
990924	11/28/14	Exceedance of pH Instantaneous Minimum
990919	03/16/15	Exceedance of pH Instantaneous Minimum
994486	05/11/15	Exceedance of pH Instantaneous Minimum
1023344	04/04/16	Exceedance of pH Instantaneous Minimum
1023404	07/31/16	Exceedance of TCDD equivalents Monthly Average
1023405	07/31/16	Exceedance of TCDD equivalents Monthly Average
1020533	10/02/16	Exceedance of total residual chlorine instantaneous maximum
1020534	12/05/16	Exceedance of Minimum % Removal BOD

The pH exceedances were the result of improper sodium bisulfite dosing during dechlorination. Staff received additional training and began closer monitoring of the pH. The last low pH exceedance occurred in April 2016.

The total residual chlorine concentration was reported as 15.4 mg/L and the instantaneous maximum final effluent limitation is 8.2 mg/L. The sodium bisulfite dose was increased to address the spike in total residual chlorine. There were no exceedances of the instantaneous maximum water quality objective in the annual receiving water monitoring conducted in August 2016.

In January of 2015, the Discharger failed to collect effluent samples for fecal coliform and *Enterococcus*. Staff was notified of the uncollected samples and additional training was provided to staff.

In April 2015, the Chief Plant Operator (CPO) had improper grade level certification for the wastewater treatment plant. The Discharger has since provided the Regional Water Board with documentation that the CPO now has the proper grade level certification.

The following table lists the violations of the 137 TUc chronic toxicity trigger. The Discharger conducted the accelerated monitoring as required in Order No. R4-2013-0111.

Table F-4. Chronic Toxicity Violation Summary SCI WWTP

Test Date	Test Species	Endpoint	NOEC	TUc	EC/IC_{25}	%Effect at IWC
10/26/15	*Macrocystis pyrifera*	Growth	0.37	270	>2.9	0.86%
07/05/16	*Macrocystis pyrifera*	Growth	0.37	270	>2.9	5.09%
08/29/16	*Macrocystis pyrifera*	Growth	0.37	270	>2.9	2.54%

E. Planned Changes

The Discharger anticipates commencing operation of the tertiary treatment plant toward the end of 2019. Once online, the tertiary treatment plant will be operated exclusively, except during periods of high flows to the treatment system, and during start-up and maintenance of the tertiary treatment plant.

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

A. Legal Authorities

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

B. California Environmental Quality Act (CEQA)

Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, (commencing with section 21100) of Division 13 of the Public Resources Code.

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 (hereinafter Basin Plan) on June 13, 1994, that

has been occasionally amended and designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for the Pacific Ocean and other Receiving Waters addressed through the plan. Requirements in this Order implement the Basin Plan including its subsequent amendments.

Beneficial uses applicable to the Pacific Ocean around San Clemente Island are as follows:

Table F-5. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
002	Pacific Ocean San Clemente Island Los Angeles Coastal Feature	Existing: Water Contact Recreation (REC-1), Non-contact Water Recreation (REC-2), Navigation (NAV), Commercial and Sport Fishing (COMM), Marine Habitat (MAR), Wildlife Habitat (WILD) (Marine habitats of the Channel Islands and Mugu Lagoon serve as pinniped haul-out areas for one or more species, i.e. sea lions), Preservation of Biological Habitats (BIOL; Area of Special Biological Significance), Rare, Threatened, or Endangered Species (RARE), Shellfish Harvesting (SHELL). Potential: Spawning, Reproduction, and/or Early Development (SPWN)

2. **California Thermal Plan.** The State Water Board adopted the *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California* (Thermal Plan) on January 7, 1971, and amended this plan on September 18, 1975. This plan contains temperature objectives for coastal and inland surface waters. The Thermal Plan defines the discharge from the Facility as an existing discharge of elevated temperature waste to coastal waters because the discharge is currently taking place and the temperature of the discharge is higher than the natural temperature of the receiving coastal waters. For coastal waters, the Thermal Plan requires elevated temperature wastes to comply with limitations necessary to assure protection of the beneficial uses and areas of special biological significance. This Order includes temperature objectives for coastal waters; therefore, the requirements of this Order implement the Thermal Plan.

6. **California Ocean Plan.** The State Water Board adopted the Water Quality Control Plan for Ocean Waters of California, California Ocean Plan (Ocean Plan) in 1972 and amended it in 1978, 1983, 1988, 1990, 1997, 2000, 2005, 2009,2012, and 2015. The State Water Board adopted the latest amendment on May 06, 2015, and became effective on January 28, 2016. The Ocean Plan is applicable, in its entirety, to point source discharges to the ocean. The Ocean Plan identifies beneficial uses of ocean waters of the state to be protected as summarized below:

Table F-6. Ocean Plan Beneficial Uses

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

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

7. **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.

8. **Stringency of Requirements for Individual Pollutants.** This Order contains restrictions on individual pollutants that are no more stringent than required by the federal CWA and California Ocean Plan. Individual pollutant restrictions consist of technology-based effluent limitations (TBELs) and water quality-based effluent limitations (WQBELs). The TBELs consist of restrictions on BOD, TSS, pH, and percent removal of BOD and TSS, which implement the minimum applicable federal technology-based requirements. 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's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

   WQBELs for chronic toxicity, copper, zinc, total residual chlorine, and TCDD equivalents, 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's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

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

incorporates by reference, both the state and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provision 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.

10. **Anti-Backsliding Requirements.** Sections 402(o) and 303(d)(4) of the CWA and 40 CFR § 122.44(l) restrict backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed. The applicability of these requirements to this Order is discussed in detail in section V.D.1. of this Fact Sheet.

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

11. **Endangered Species Act (ESA) Requirements.** This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California ESA (Fish and Game Code, §§ 2050 to 2097) or the Federal ESA (16 U.S.C.A. §§ 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state, including protecting rare and endangered species. The Discharger is responsible for meeting all requirements of the applicable ESA.

12. **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.

13. **Water Recycling.** In accordance with statewide policies concerning water reclamation[1], this Regional Water Board strongly encourages, wherever practicable, water recycling, water conservation, and use of storm water and dry-weather urban runoff. The Discharger 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.

14. **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 Special Provisions applicable to the Discharger. The rationale for the Special Provisions contained in this Order is provided in the attached Fact Sheet.

[1] 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).

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

The State Water Board proposed the California 2014-16 Integrated Report from a compilation of the adopted Regional Water Boards' Integrated Reports containing CWA section 303(d) List of Impaired Waters and section 305(b) Reports following recommendations from the Regional Water Boards and information solicited from the public and other interested persons. On April 06, 2018, the 2014-2016 Integrated Report Section 303(d) List of Impaired Waters was approved by USEPA. The CWA section 303(d) list can be viewed at the following link: https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2014_2016.shtml.

E. Other Plans, Polices and Regulations

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

2. **Storm Water.** CWA section 402(p), as amended by the Water Quality Act of 1987, requires NPDES permits for storm water discharges. Pursuant to this requirement, in 1990, USEPA promulgated 40 CFR § 122.26 that established requirements for storm water discharges under an NPDES program. To facilitate compliance with federal regulations, in November 1991, the State Water Board issued a statewide general permit, NPDES No. CAS000001: *General Permit for Storm Water Discharges 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 the Facility. On July 15, 2016, the Discharger filed a Notice of Intent to comply with the requirements of the *General Permit for Storm Water Discharges Associated with Industrial Activities* Order No. 2014-0057-DWQ. The Discharger developed and currently implements a Storm Water Pollution Prevention Plan (SWPPP) to comply with Order No. 2014-0057-DWQ.

3. **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.

4. **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 and the accompanying Monitoring and Reporting Program (Attachment E) fosters implementation of this approach.

IV. 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 in the Code of Federal Regulations: 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 are based on the requirements in section III.I of the 2015 California Ocean Plan.

B. Technology-Based Effluent Limitations

1. Scope and Authority

Technology-based effluent limitations require a minimum level of treatment for industrial/municipal point sources based on currently available treatment technologies while allowing the Discharger to use any available control techniques to meet the effluent limits. The 1972 CWA required POTWs to meet performance requirements based on available wastewater treatment technology. Section 301 of the CWA established a required performance level - referred to as "secondary treatment" - that all POTWs were required to meet by July 1, 1977. More specifically, section 301(b)(1)(B) of the CWA required that USEPA develop secondary treatment standards for POTWs as defined in section 304(d)(1). Based on this statutory requirement, USEPA developed national secondary treatment regulations which are specified in 40 CFR § 133. These technology- based regulations apply to all POTWs and identify the minimum level of effluent quality to be attained by secondary treatment. The Discharger operates an FOTW that treats wastewater of similar quality to POTWs and includes similar treatment processes as POTWs. Since the operation of the Facility is comparable to a POTW, the Regional Water Board used BPJ to apply the secondary treatment standards to this facility. The secondary treatment standards were included in the previous order as technology-based effluent limitations and were therefore carried over in this Order.

2. Applicable Technology-Based Effluent Limitations

Section 301(b) of the CWA and implementing USEPA permit regulations at 40 CFR § 122.44 require that permits include conditions meeting applicable technology-based requirements at a minimum, and more stringent effluent limitations necessary to meet minimum federal technology-based requirements based on Secondary Standards at 40

CFR § 133 and Best Professional Judgment (BPJ) in accordance with 40 CFR § 125.3. Secondary treatment is defined in terms of three parameters – $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-7. 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 TSS	%	85	--
Removal Efficiency for BOD	%	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-8. Summary of TBELs for POTWs established by the 2015 Ocean Plan

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

All technology-based effluent limitations from Order No. R4-2013-0111 for $BOD_5$20°C, TSS, oil and grease, settleable solids, pH, and turbidity are retained in this Order. 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. The mass-based maximum daily effluent limitations were developed to satisfy ASBS requirements. The dilution ratio was not considered in the development of the technology-based effluent limitations.

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

Table F-9. Summary of TBELs

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
$BOD_5$20°C	mg/L	30	45	--	--	--
	lbs/day[2]	6.3	9.4	19	--	--

[2] The mass emission rates are calculated using 0.025 mgd consistent with the water quality-based limits in the previous permit: lbs/day = 0.00834 x Ce (effluent concentration, µg/L) x Q (flow rate, mgd). During wet-weather storm events in which the flow exceeds 0.025 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
	% removal	85	--	--	--	--
TSS	mg/L	30	45	--	--	--
	lbs/day[2]	6.3	9.4	19	--	--
	% removal	85	--	--	--	--
Oil & Grease	mg/L	25	40	--	--	75
	lbs/day[2]	5.2	8.3			15
Settleable Solids	mL/L	1.0	1.5	--	--	3.0
Turbidity	NTU	75	100	--	--	225
pH	6.0 to 9.0 pH units					

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

CWA Section 301(b) and 40 CFR section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards. Section 122.44(d)(1)(i) of 40 CFR requires that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives 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 criterion or objective 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, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi).

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

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

3. Expression of WQBELS

Pursuant to 40 CFR § 122.45(d)(2), for continuous discharges other than POTWs, all permit effluent limitations, standards, and prohibitions, including those necessary to achieve water quality standards, shall, unless impracticable, be stated as maximum daily and average monthly discharge limitations. This order includes maximum daily and average monthly effluent limitations for certain constituents, as referenced in 40 CFR § 122.45(d).

The WQBELs for marine aquatic life toxics contained in this Order are based on Table 1 water quality objectives contained in the 2015 Ocean Plan that are expressed as six-month median, daily maximum, and instantaneous maximum water quality objectives. However, in the existing Order (Order No. R4-2013-0111), the calculated effluent limitations based on 6-month median objectives for marine aquatic life toxics in the Ocean Plan were prescribed as average monthly effluent limitations. Applying the antibacksliding regulations, this Order retains the same approach and sets effluent limitations derived from six-month median water quality objectives for marine aquatic life toxics in the 2015 Ocean Plan as average monthly limitations. The 2013 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.

4. Determining the Need for WQBELs

Order No. R4-2013-0111 contains effluent limitations for non-conventional and toxic pollutant parameters from Table 1 of the 2015 Ocean Plan. The need for effluent limitations based on water quality objectives from Table 1 of the 2015 Ocean Plan was reevaluated in accordance with the Reasonable Potential Analysis (RPA) procedures contained in Appendix VI of the 2015 Ocean Plan. This statistical RPA method (RPcalc version 2.2) accounts for the averaging period of the water quality objective, accounts for and captures the long-term variability of the pollutant in the effluent, accounts for limitations associated with sparse data sets, accounts for uncertainty associated with censored data sets, and assumes a lognormal distribution of the facility-specific effluent data. The program calculates the upper confidence bound (UCB) of an effluent population percentile after complete mixing. In the evaluation employed in this Order, the UCB is calculated as the one-sided, upper 95 percent confidence bound for the 95^{th} 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, 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.

Using this statistical procedure, in combination with effluent data provided by the Discharger from January 2013 to March 2018, and minimum initial dilution ratio of 136:1 for Discharge Point 002, Regional Water Board staff have determined that all pollutants with final effluent limitations in the previous permit continue to exhibit reasonable potential, except for DDT. Therefore, the final effluent limitations from the previous permit were carried over for the following pollutants: total residual chlorine and TCDD equivalents. In addition, the following additional pollutants have reasonable potential to

exceed Ocean Plan Water Quality Objectives and therefore, require effluent limitations: copper, zinc, and chronic toxicity.

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

Bacteria did not have reasonable potential to cause or exceed water quality standards and no WQBELs for bacteria are prescribed in this Order. Bacteria monitoring is required at offshore and shoreline monitoring locations to demonstrate that the 2015 Ocean Plan objectives are being met. The 2015 Ocean Plan includes receiving water limitations for bacteria within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot 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. DDW also sets minimum protective bacteriological standards for coastal waters adjacent to public beaches and for public water-contact sports areas in ocean waters. Receiving water monitoring between the outfall and the shoreline demonstrates compliance with the bacteria objectives. Fecal indicator bacteria, total coliform, and *Enterococcus* receiving water and final effluent results were below the single sample receiving water standards between 2013 and 2018. The fecal indicator bacteria and total coliform receiving water data demonstrate compliance with the 30-day geometric mean bacteria standards; however, the geometric mean could not be calculated since a single sample is collected during a calendar month for this facility. San Clemente Island is a remote facility that is not easily accessible and creates challenges in collecting weekly receiving water bacteria samples that have short holding times. In addition, the State Water Board recommended in their approval of the minimum dilution that weekly bacteria monitoring at the shoreline nearest the outfall be conducted, assuming there are contact recreation and shellfish harvesting beneficial uses at the location. The Basin Plan lists the receiving water around San Clemente Island for contact recreation but not shellfish harvesting. As a result, the Regional Water Board reduced the required receiving water bacteria monitoring from weekly to monthly in the previous order. *Enterococcus* single sample receiving water data exceeded the geometric mean standard (35 MPN/ 100 mL) on two separate occasions in 2015 (36 MPN/ 100 mL) and 2017 (37 MPN/ 100 mL); however, *Enterococcus* final effluent monitoring was at or below the detection limit during these two months (2 MPN/100 mL). Since the final effluent monitoring data was in compliance with the geometric mean standards during the same months the receiving water exceeded the geometric mean standards, the cause of the exceedances in the receiving water is unclear and does not trigger reasonable potential for *Enterococcus*. Where bacteria objectives have been routinely exceeded at the shoreline in this region, the Regional Water Board has developed regulatory devices such as Total Maximum Daily Loads to address water quality impairments.

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, a dilution ratio of 136:1 has been applied to Discharge Point 002.

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 submerged 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-10. 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 are demonstrated below for Discharge Point 002, as an example:

Table F-11. Ocean Plan Water Quality Objectives (C_o) for Copper

Constituents	6-Month Median	Daily Maximum	Instantaneous Maximum	30 Day Average
Copper	3 μg/L	12 μg/L	30 μg/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 002 and, therefore, a dilution ratio (D_m) of 136:1 is applied.

Copper

C_e = 3 + 136(3-2) = 139 μg/L (prescribed as Average Monthly)

C_e = 12 + 136(12-2) = 1,372 μg/L (rounded to 1,370 μg/L prescribed as Daily Maximum)

C_e = 30 + 136(30-2) = 3,838 μg/L (rounded to 3,840 prescribed as instantaneous maximum)

Based on the implementing procedures described above, effluent limitations have been calculated for all Table 1 pollutants) from the 2015 Ocean Plan and incorporated into this Order 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 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 discharges into the FOTW sewershed, toxic constituents (or a mixture of constituents exhibiting toxic effects) may be present in the effluent.

A total of 39 chronic WET tests were conducted on SCI WWTP final effluent between September 2013 and March 2018. Three exceedances of the maximum daily final effluent trigger were reported for chronic toxicity and the discharger conducted the required accelerated monitoring. Due to these violations, the discharge did exhibit reasonable potential to exceed the water quality objectives for chronic toxicity at Discharge Point 002 based on 2015 Ocean Plan procedures for calculating reasonable potential.

The 2013 permit contained a final effluent trigger for chronic toxicity at Discharge Point 002. Based on RPA, this Order contains a final effluent limitation for chronic toxicity for Discharge Point 002, expressed as a maximum daily effluent limitation.

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 002 is 136. Since D_m is between 99 and 349, chronic toxicity monitoring is required and has been assigned a final effluent limitation to Discharge Point 002. No acute toxicity monitoring or final effluent limitations have been assigned to Discharge Point 002 consistent with 40 CFR § 122.44(d)(1)(v), the 2015 Ocean Plan, and because the chronic toxicity final effluent limitation is protective of both chronic and acute toxicity.

The 2015 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 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 chronic toxicity, this Order contains a numeric chronic toxicity effluent limitation. Compliance with the chronic toxicity requirement contained in this Order shall be determined in accordance with section VII.J. Nevertheless, this Order contains a reopener to allow the Regional Water Board to modify the permit in the future, if necessary, to make it consistent with any new policy, plan, law, or regulation.

For this Order, 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 a Maximum Daily Effluent Limitation (MDEL) and an Average Monthly Effluent Limitation (AMEL) for dischargers other than 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 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 Percent Minimum Significant Difference (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

Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 CFR section 122.44(l) prohibit backsliding in NPDES permits. 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 in this Order are at least as stringent as the effluent limitations in the previous Order, Order No. R4-2013-0111, with one exception. The final effluent limitations for DDT 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.

2. Antidegradation Policies

This Order includes both narrative and numeric final effluent limitations, receiving water limitations, and performance goals, 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 2015 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 2015 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 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 includes new final effluent limitations for copper, zinc, and chronic toxicity, in addition to the final effluent limitations from the previous permit for total residual chlorine, and TCDD equivalents. The final effluent limitations (and the reasonable potential analyses) are calculated using the dilution ratio of 136:1. Mass emission final effluent limitations continue to be based on 0.025 mgd to comply with ASBS requirements. As a result, both the quantity of the discharged pollutants and quality of the discharge are expected to remain relatively constant or improve during this permit term, consistent with antidegradation policies. The accompanying MRP requires continued data collection and if monitoring data show reasonable potential for a pollutant to cause or contribute to an exceedance of water quality objectives, the permit may be reopened to incorporate appropriate WQBELs. Such an approach ensures that the discharge will adequately

protect the beneficial uses and conforms to antidegradation policies and antibacksliding provisions.

The performance goals are an additional incentive for the Discharger to maintain the current treatment quality since then performance goals set final effluent targets for the Discharger to meet based on current performance. Some performance goals in this Order are more stringent due to improved performance; however, the performance goals for some constituents have increased. Since the performance goals are based on performance and do not exceed the water quality objectives for the receiving water, the increase of any performance goal is not expected to result in additional degradation.

3. Stringency of Requirements for Individual Pollutants

This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based effluent limitations consist of restrictions on biochemical oxygen demand, total suspended solids, settleable solids, pH, oil and grease, and turbidity. Restrictions on these pollutants are discussed in section IV.B.2 of this Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum applicable federal technology-based requirements.

Water quality-based effluent limitations have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and 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 prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to 40 CFR section 131.21(c)(1). Collectively, this Order'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-12. Summary of Final Effluent Limitations for Discharge Point 002

Parameter	Units	Effluent Limitations[3]				Performance Goal	Basis
		Average Monthly[4]	Average Weekly	Maximum Daily[5]	Instant-aneous Maximum[6]		
$BOD_5$20˚C	mg/L	30	45	--	--	--	Secondary treatment
	lbs/day[7]	6.3	9.4	19	--		

[3] The minimum dilution ratio used to calculate effluent limitations for nonconventional and toxic pollutants for Discharge Point 002 is 136:1 for all pollutants (i.e. 136 parts seawater to one part effluent).

[4] 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.

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

[6] The instantaneous maximum effluent limitations shall apply to grab samples.

[7] The mass emission rates are calculated using a maximum flow rate of 0.025 mgd, consistent with water-quality based limits in the previous permit.: lbs/day = 0.00834 x Ce (effluent concentration in µg/L) x Q (flow

Parameter	Units	Effluent Limitations[3]				Performance Goal	Basis
		Average Monthly[4]	Average Weekly	Maximum Daily[5]	Instant-aneous Maximum[6]		
							standard/ ASBS/ Existing
TSS	mg/L	30	45	--	--	--	Secondary treatment standard/ ASBS/ Existing
	lbs/day[7]	6.3	9.4	19	--		
Removal Efficiency for BOD	%	85	--	--	--	--	Secondary treatment standard/ Existing
Removal Efficiency for TSS	%	85	--	--	--	--	Secondary treatment standard/ Existing
Temperature	°F	--	--	--	100	--	Thermal Plan/ Existing
pH	pH Unit	6.0 (instantaneous minimum) – 9.0 (instantaneous maximum)					Secondary treatment standard/ Existing
Oil and Grease	mg/L	25	40	--	75	--	Secondary treatment standard/ Existing
	lbs/day[7]	5.2	8.3	--	15	--	
Settleable Solids	mL/L	1.0	1.5	--	3.0	--	Secondary treatment standard/ Existing
Turbidity	NTU	75	100	--	225	--	Secondary treatment standard/ Existing
Marine Aquatic Life Toxicants							
Arsenic	µg/L	--	--	--	--	3.0	No RP
Cadmium	µg/L	--	--	--	--	1.0	No RP
Chromium (VI)	µg/L	--	--	--	--	25	No RP

rate in mgd). During storm events when flow exceeds 0.025 mgd, the mass emission rate limitations shall not apply.

Parameter	Units	Effluent Limitations[3]				Performance Goal	Basis
		Average Monthly[4]	Average Weekly	Maximum Daily[5]	Instant-aneous Maximum[6]		
Copper	µg/L	139	--	1,370	3,840	--	RP/ Ocean Plan
	lbs/day[7]	0.029	--	0.29	0.80		
Lead	µg/L	--	--	--	--	2.5	No RP
Mercury	µg/L	--	--	--	--	2.5	No RP
Nickel	µg/L	--	--	--	--	8.0	No RP
Selenium	µg/L	--	--	--	--	1.1	No RP
Silver	µg/L	--	--	--	--	1.0	No RP
Zinc	µg/L	1,650	--	9,870	26,310	--	RP/ Ocean Plan
	lbs/day[7]	0.34	--	2.1	5.5		
Cyanide	µg/L	--	--	--	--	27	No RP
Ammonia as Nitrogen	mg/L	--	--	--	--	6.4	No RP
Total Residual Chlorine[8]	mg/L	0.274	--	0.1[9]	8.2	--	RP/ Ocean Plan/ Anti-backsliding/ Existing
	lbs/day[7]	0.06	--	0.021	1.7		
Chronic Toxicity[10,11] (TST)	Pass or Fail	--	--	Pass	--	--	RP/ Ocean Plan
Phenolic compounds (non-chlorinated)[12]	µg/L	--	--	--	--	5.0	No RP

8 These total chlorine residual final effluent limitations shall only apply to continuous discharges exceeding two hours. For intermittent discharges not exceeding two hours, final effluent limitations for total chlorine residual shall be determined using the procedures outlined in section III.C.4.a of the Ocean Plan, a minimum dilution ratio of 136:1, the water quality objectives in Table 1 of the Ocean Plan, and the following equation:

Log y = -0.43(log x) + 1.8

Where y = the water quality objective (in µg/L) to apply when chlorine is being discharged

x = duration of uninterrupted chlorine discharge in minutes

9 The total residual chlorine final effluent limitation was carried over from Order No. R4-2013-0111 per 40 CFR 122.44(l)(1).

10 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 USEPA Regions 8, 9, and 10, *Toxicity Training Tool* (January 2010).

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

12 See Attachment A for definitions of terms.

Parameter	Units	Effluent Limitations[3]				Performance Goal	Basis
		Average Monthly[4]	Average Weekly	Maximum Daily[5]	Instant-aneous Maximum[6]		
Phenolic compounds (chlorinated)[12]	µg/L	--	--	--	--	5.0	No RP
Endosulfan[12]	µg/L	--	--	--	--	0.05	No RP
Endrin	µg/L	--	--	--	--	0.05	No RP
HCH[12]	µg/L	--	--	--	--	0.025	No RP
Radioactivity							
Gross alpha	pCi/L	--	--	--	--	12	No RP
Gross beta	pCi/L	--	--	--	--	11	No RP
Human Health Toxicants – Non-Carcinogens							
Acrolein	µg/L	--	--	--	--	25	No RP
Antimony	µg/L	--	--	--	--	1.9	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	--	--	--	--	2.5	No RP
Di-n-butyl-phthalate	µg/L	--	--	--	--	50	No RP
Dichloro-benzenes[12]	µg/L	--	--	--	--	5.0	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	--	--	--	--	5.0	No RP
Thallium	µg/L	--	--	--	--	5.0	No RP
Toluene	µg/L	--	--	--	--	10	No RP
Tributyltin	ng/L	--	--	--	--	3.9	No RP
1,1,1-Trichloro-ethane	µg/L	--	--	--	--	10	No RP

Parameter	Units	Effluent Limitations[3]				Performance Goal	Basis
		Average Monthly[4]	Average Weekly	Maximum Daily[5]	Instant-aneous Maximum[6]		
Human Health Toxicants – Carcinogens							
Acrylonitrile	µg/L	--	--	--	--	10	No RP
Aldrin	µg/L	--	--	--	--	0.003	No RP
Benzene	µg/L	--	--	--	--	10	No RP
Benzidine	µg/L	--	--	--	--	0.0095	No RP
Beryllium	µg/L	--	--	--	--	2.5	No RP
Bis(2-chloroethyl) ether	µg/L	--	--	--	--	5.0	No RP
Bis(2-ethylhexyl) phthalate	µg/L	--	--	--	--	39	No RP
Carbon tetrachloride	µg/L	--	--	--	--	10	No RP
Chlordane[12]	µg/L	--	--	--	--	0.0032	No RP
Chlorodibromo-methane	µg/L	--	--	--	--	22	No RP
Chloroform	µg/L	--	--	--	--	51	No RP
DDT[12]	µg/L	--	--	--	--	0.023	No RP
1,4-Dichloro-benzene	µg/L	--	--	--	--	10	No RP
3,3'-Dichloro-benzidine	µg/L	--	--	--	--	1.0	No RP
1,2-Dichloro-ethane	µg/L	--	--	--	--	10	No RP
1,1-Dichloro-ethylene	µg/L	--	--	--	--	10	No RP
Dichlorobromo-methane	µg/L	--	--	--	--	39	No RP
Dichloro-methane	µg/L	--	--	--	--	10	No RP
1,3-Dichloro-propene	µg/L	--	--	--	--	10	No RP
Dieldrin	µg/L	--	--	--	--	0.0055	No RP
2,4-Dinitrotoluene	µg/L	--	--	--	--	25	No RP
1,2-Diphenyl-hydrazine	µg/L	--	--	--	--	5.0	No RP
Halomethanes[12]	µg/L	--	--	--	--	10	No RP
Heptachlor	µg/L	--	--	--	--	0.0069	No RP
Heptachlor epoxide	µg/L	--	--	--	--	0.0027	No RP

Parameter	Units	Effluent Limitations[3]				Performance Goal	Basis
		Average Monthly[4]	Average Weekly	Maximum Daily[5]	Instant-aneous Maximum[6]		
Hexachloro-benzene	µg/L	--	--	--	--	0.029	No RP
Hexachloro-butadiene	µg/L	--	--	--	--	5.0	No RP
Hexachloro-ethane	µg/L	--	--	--	--	5.0	No RP
Isophorone	µg/L	--	--	--	--	5.0	No RP
N-Nitroso-dimethylamine	µg/L	--	--	--	--	25	No RP
N-Nitrosodi-N-propylamine	µg/L	--	--	--	--	25	No RP
N-Nitroso-diphenylamine	µg/L	--	--	--	--	5.0	No RP
PAHs[12]	µg/L	--	--	--	--	0.25	No RP
Total PCBs	µg/L	--	--	--	--	0.0026	No RP
TCDD equivalents[12]	pg/L	0.53	--	--	--	--	RP/ Ocean Plan/ Existing
	lbs/day	$1.1x10^{-10}$	--	--	--		
1,1,2,2-Tetrachloro-ethane	µg/L	--	--	--	--	10	No RP
Tetrachloro-ethylene	µg/L	--	--	--	--	10	No RP
Toxaphene	µg/L	--	--	--	--	0.029	No RP
Trichloro-ethylene	µg/L	--	--	--	--	10	No RP
1,1,2-Trichloroethane	µg/L	--	--	--	--	10	No RP
2,4,6-Trichlorophenol	µg/L	--	--	--	--	40	No RP
Vinyl chloride	µg/L	--	--	--	--	10	No RP

E. Interim Effluent Limitations (Not Applicable)

F. Land Discharge Specifications (Not Applicable)

G. Recycling Specifications (Not Applicable)

V. PERFORMANCE GOALS

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

Pursuant to this provision and to implement the recommendation of the Water Quality Advisory Task Force (Working Together for an Affordable Clean Water Environment, A final report presented to the California Water Quality Control Board, Los Angeles Region by Water Quality

Advisory Task Force, September 30, 1993) that was adopted by the Regional Water Board on November 1, 1993, performance goals that are more stringent than those based on Ocean Plan objectives are prescribed in this Order. This approach is consistent with the antidegradation policy in that it requires the Discharger to maintain its treatment level and effluent quality, recognizing normal variations in treatment efficiency and sampling and analytical techniques. However, this approach does not address substantial changes in treatment plant operations that could significantly affect the quality of the treated effluent.

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

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 2013 through March 2018 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 nickel, arsenic, and dieldrin at Discharge Point 002 are calculated as follows:

   Nickel
   $C_o = UCB_{95/95}$ = 0.08 µg/L; D_m = 136; C_s = background seawater concentration = 0 µg/L; MEC = 8.0 µg/L; C_{PG} = Performance Goal = (0.08 µg/L) + 136(0.08 µg/L - 0 µg/L) = 11.6 µg/L.

   Since the MEC of 8.0 µg/L is less than the calculated PG of 11.6 µg/L, the prescribed performance goal for nickel is 8.0 µg/L.

   Arsenic
   $C_o = UCB_{95/95}$ = 3 µg/L; D_m = 136; C_s = background seawater concentration = 3 µg/L; MEC = 8.07 µg/L; C_{PG} = Performance Goal = (3 µg/L) + 136(3 µg/L - 3 µg/L) = 3 µg/L.

Since the MEC of 8.07 µg/L is greater than the calculated PG of 3 µg/L, the prescribed performance goal for arsenic is 3 µg/L.

Dieldrin

C_o = $UCB_{95/95}$ = N/A (all ND); C_o = WQO = 0.00004 µg/L; D_m = 136; C_s = background seawater concentration = 0 µg/L; MEC = N/A (all ND); C_{PG} = Performance Goal = (0.00004 µg/L) + 136(0.00004 µg/L - 0 µg/L) = 0.0055 µg/L.

Since there were no detections, the WQO is used to calculate the performance goal, so the prescribed performance goal for dieldrin is 0.0055 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 the 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 a respective effluent limitation, then a performance goal is not prescribed for that constituent.

Performance goals for Discharge Point 002 are prescribed in this Order. The listed performance goals are not enforceable effluent limitations or standards. The Discharger shall maintain, if not improve, its treatment efficiency. Any two consecutive exceedances of the performance goals shall trigger an investigation into the cause of the exceedance. If the exceedance persists in three successive monitoring periods, the Discharger shall submit a written report to the Regional Water Board 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.

VI. 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 are included to ensure protection of beneficial uses of the receiving water.

B. Groundwater (Not Applicable)

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

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

Sections 122.41(a)(1) and (b) through (n) of 40 CFR establish conditions that apply to all State-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. Section 123.25(a)(12) allows the state to omit or modify conditions to impose more stringent requirements. In accordance with 40 CFR § 123.25, this Order omits federal conditions that address enforcement authority specified in 40 CFR sections 122.41(j)(5) and (k)(2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order 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 may reopen the Order to modify conditions and requirements. Causes for modifications can include, but are not limited to, the promulgation of new regulations, modification in 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 and Additional Monitoring Requirements

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

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

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

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

e. **ASBS Compliance.** The discharge from the Facility is located within a designated ASBS but the State Water Board has authorized this discharge if specific conditions are met. One such condition is that the Discharger shall demonstrate through monitoring that the effluent (1) does not alter the natural water quality (that is, it is undetectable) beyond a radius of 1,000 feet from the outfall's terminus and (2) complies with the Ocean Plan-based limitations. The Order ensures the Discharger will satisfy this requirement because it requires that the Discharger monitor water quality (at the boundary of the exclusion zone which is within 1,000 feet of the initial point of discharge) at a single down-current location, at the first trapping depth, to demonstrate that natural water quality is not altered in the ASBS outside of the exclusion zone when compared to an unaffected reference site.

f. **Evaluation of Minimum Initial Dilution**

The State Water Board applied data from the California Cooperative Oceanic Fisheries Investigations nearshore stations surveyed in the summers 2010 and 2011 to evaluate the minimum initial dilution for Discharge Point 002. Based on the

results, State Water Board staff agreed with the original Navy report suggesting 136 as the value for minimum initial dilution as defined in the 2009 California Ocean Plan for use in the Order. However, neither the ambient data used by staff to model near-field mixing nor the ambient data used by the Navy's consultant represent actual site receiving water conditions. As a result, the Navy collected salinity and temperature data throughout the water column near the outfall in areas unaffected by the plume for two summers during the previous permit cycle. This study will evaluate the minimum initial dilution using more relevant data to ensure the dilution ratio applied in this permit is protective of the beneficial uses of the receiving water.

3. Best Management Practices and Pollution Prevention

a. **Spill Clean-Up Contingency Plan (SCCP)**

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

b. **Pollutant Minimization Program (PMP)**

This provision is based on the requirements of section III.C.9 of the 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.

5. Special Provisions for Federally-Owned Treatment Works (FOTWs)

a. **Sanitary Sewer Overflows.** 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). Pursuant to federal regulations, the Discharger must properly operate and maintain its collection system (40 CFR 122.41(e)), report any noncompliance (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). As such, the Discharger must comply with all requirements in Attachment I. The requirements contained in this Order in Attachment I, sections VI.C.3.b. (Spill Clean-up Contingency Plan), VI.C.4. (Construction, Operation, and Maintenance Specifications Section), and VI.C.6. (Spill Reporting Requirements are intended to be consistent with the requirements from the SSO WDR.

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

c. **Spill Reporting Requirements.** This Order established a reporting protocol for how different types of spills, overflows, and bypasses of raw or partially treated sewage from the FOTW shall be reported to regulatory agencies. Refer to spill reporting requirements in section VI.C.6. and Attachment I for additional requirements and information.

d. **Collection System.** The Discharger's collection system is part of the FOTW that is subject to this Order. As such, pursuant to federal regulations, the Discharger must

properly operate and maintain its collection system (40 CFR part 122.41(e)), report any noncompliance (40 CFR parts 122.41(l)(6) and (7)), and mitigate any discharge from the collection system in violation of the permit (40 CFR 122.41(d)). See attachment D, subsections I.D, V.E, V.H, and I.C, and the Spill Reporting Requirements of this Order.

6. Compliance Schedules (Not Applicable)

VIII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

CWA section 308 and 40 CFR sections 122.41(h), (j)-(*l*), 122.44(i), and 122.48 require that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Regional Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. The Monitoring and Reporting Program (MRP), Attachment E of this Order establishes monitoring, reporting, and recordkeeping requirements that implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this facility.

A. Influent Monitoring

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

B. Effluent Monitoring

The Discharger is required to conduct monitoring of the permitted discharge to evaluate compliance with permit limitations and conditions. Monitoring requirements are specified in the Monitoring and Reporting Program (Attachment E). This Order 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 NPDES permits (including this Order) 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 Discharger's wastewater treatment plant. It defines the sampling stations and frequency, pollutants to be monitored, and additional reporting requirements. Pollutants to be monitored include all pollutants for which effluent limitations are specified.

Monitoring for those pollutants expected to be present in the discharge from the facility, will be required as shown on the proposed 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	Monitoring Frequency (2013 Order)	Monitoring Frequency (2018 Order)	Basis
Flow	Continuous	No Change	BPJ
$BOD_5 20^oC$	Monthly	No Change	BPJ
Total Suspended Solids	Monthly	No Change	BPJ
pH	Monthly	No Change	BPJ
Oil and Grease	Monthly	No Change	BPJ
Temperature	Monthly	No Change	BPJ
Settleable Solids	Monthly	No Change	BPJ
Dissolved Oxygen	Monthly	No Change	BPJ
Turbidity	Monthly	No Change	BPJ
Total Coliform	Monthly	No Change	BPJ
Enterococcus	Monthly	No Change	BPJ
Fecal Coliform	Monthly	No Change	BPJ
Arsenic	Semiannually	No Change	BPJ
Cadmium	Semiannually	No Change	Criterion 3
Chromium (VI)	Semiannually	No Change	BPJ
Copper	**Quarterly**	**Monthly**	**Criterion 1**
Lead	Semiannually	No Change	BPJ
Mercury	**Semiannually**	**Quarterly**	**Criterion 2**
Nickel	Semiannually	No Change	BPJ
Selenium	Semiannually	No Change	BPJ
Silver	Semiannually	No Change	Criterion 3
Zinc	**Quarterly**	**Monthly**	**Criterion 1**
Cyanide	Semiannually	No Change	BPJ
Total Residual Chlorine	Monthly	No Change	Criterion 1
Ammonia Nitrogen	**Semiannually**	**Quarterly**	**Criterion 2**
Nitrate Nitrogen	Semiannually	No Change	BPJ
Nitrite Nitrogen	Semiannually	No Change	BPJ
Organic Nitrogen	Semiannually	No Change	BPJ
Toxicity, Chronic	Quarterly	No Change	BPJ
Phenolic Compounds (non-chlorinated)	Semiannually	No Change	Criterion 3
Phenolic Compounds (chlorinated)	Semiannually	No Change	Criterion 3
Endosulfan	Semiannually	No Change	BPJ
Endrin	Semiannually	No Change	Criterion 3
HCH	**Semiannually**	**Quarterly**	**Criterion 2**

Parameter	Monitoring Frequency (2013 Order)	Monitoring Frequency (2018 Order)	Basis
Radioactivity (including gross alpha, gross beta, combined radium-226 & radium-228, tritium, strontium-90 and uranium)	Semiannually	Semiannually	Criterion 2
Acrolein	Semiannually	No Change	Criterion 3
Antimony	Semiannually	No Change	BPJ
Bis(2-chloroethoxy) methane	Semiannually	No Change	Criterion 3
Bis(2-chloroisopropyl) ether	Semiannually	No Change	Criterion 3
Chlorobenzene	Semiannually	No Change	Criterion 3
Chromium (III)	Semiannually	No Change	BPJ
Di-n-butyl-phthalate	Semiannually	No Change	Criterion 3
Dichlorobenzenes	Semiannually	No Change	Criterion 3
Diethyl phthalate	Semiannually	No Change	Criterion 3
Dimethyl phthalate	Semiannually	No Change	Criterion 3
4,6-dinitro-2-methylphenol	Semiannually	No Change	Criterion 3
2,4-Dinitrophenol	Semiannually	No Change	Criterion 3
Ethylbenzene	Semiannually	No Change	Criterion 3
Fluoranthene	Semiannually	No Change	Criterion 3
Hexachlorocyclopentadiene	Semiannually	No Change	Criterion 3
Nitrobenzene	Semiannually	No Change	Criterion 3
Thallium	Semiannually	No Change	Criterion 3
Toluene	Semiannually	No Change	Criterion 3
Tributyltin	Semiannually	No Change	BPJ
1,1,1-Trichloroethane	Semiannually	No Change	Criterion 3
Acrylonitrile	Semiannually	No Change	Criterion 3
Aldrin	Semiannually	No Change	Criterion 3
Benzene	Semiannually	No Change	Criterion 3
Benzidine	Semiannually	No Change	Criterion 3
Beryllium	Semiannually	No Change	Criterion 3
Bis(2-chloroethyl) ether	Semiannually	No Change	Criterion 3
Bis(2-ethylhexyl) phthalate	Semiannually	No Change	BPJ
Carbon tetrachloride	Semiannually	No Change	Criterion 3
Chlordane	Semiannually	No Change	BPJ
Chlorodibromomethane	Semiannually	No Change	BPJ
Chloroform	Semiannually	No Change	BPJ
DDT	**Quarterly**	**Semiannually**	**Criterion 3**

Parameter	Monitoring Frequency (2013 Order)	Monitoring Frequency (2018 Order)	Basis
1,4-dichlorobenzene	Semiannually	No Change	Criterion 3
3,3'-dichlorobenzidine	Semiannually	No Change	Criterion 3
1,2-Dichloroethane	Semiannually	No Change	Criterion 3
1,1-Dichloroethylene	Semiannually	No Change	Criterion 3
Dichlorobromomethane	Semiannually	No Change	BPJ
Dichloromethane	Semiannually	No Change	BPJ
1,3-Dichloropropene	Semiannually	No Change	Criterion 3
Dieldrin	Semiannually	No Change	Criterion 3
2,4-dinitrotoluene	Semiannually	No Change	Criterion 3
1,2-diphenylhydrazine	Semiannually	No Change	Criterion 3
Halomethanes	Semiannually	No Change	BPJ
Heptachlor	**Semiannually**	**Quarterly**	**Criterion 2**
Heptachlor epoxide	**Semiannually**	**Quarterly**	**Criterion 2**
Hexachlorobenzene	Semiannually	No Change	Criterion 3
Hexachlorobutadiene	Semiannually	No Change	Criterion 3
Hexachloroethane	Semiannually	No Change	Criterion 3
Isophorone	Semiannually	No Change	Criterion 3
N-Nitrosodimethylamine	Semiannually	No Change	Criterion 3
N-Nitrosodi-N-propylamine	Semiannually	No Change	Criterion 3
N-Nitrosodiphenylamine	Semiannually	No Change	Criterion 3
PAHs	Semiannually	No Change	Criterion 3
PCBs as Aroclors	Semiannually	No Change	Criterion 3
TCDD Equivalents	**Quarterly**	**Monthly**	**Criterion 1**
1,1,2,2-Tetrachloroethane	Semiannually	No Change	Criterion 3
Tetrachloroethylene	Semiannually	No Change	Criterion 3
Toxaphene	Semiannually	No Change	Criterion 3
Trichloroethylene	Semiannually	No Change	Criterion 3
1,1,2-Trichloroethane	Semiannually	No Change	Criterion 3
2,4,6-Trichlorophenol	Semiannually	No Change	Criterion 3
Vinyl chloride	Semiannually	No Change	Criterion 3

C. Whole Effluent Toxicity Testing Requirements

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

D. Receiving Water Monitoring

1. Surface Water

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.

   The Discharger is encouraged to participate in regional monitoring activities coordinated by the SCCWRP or any other appropriate agency approved by the Regional Water Board. The procedures and time lines for the Regional Water Board 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.

d. The receiving water monitoring program contains the following core and regional components: shoreline and offshore water quality monitoring; and benthic infauna 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 structure 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 FOTW.

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

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

IX. PUBLIC PARTICIPATION

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

A. Notification of Interested Parties

The Regional Water Board notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and provided an opportunity to submit written comments and recommendations.

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 tentative WDRs as provided through the notification process. Comments were due either in person or by mail to the Executive Office at the Regional Water Board at the address on the cover page of this Order or by email submitted to losangeles@waterboards.ca.gov.

To be fully responded to by staff and considered by the Regional Water Board, the written comments were due at the Regional Water Board office by 5:00 p.m. on October 18, 2018.

C. Public Hearing

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

Date:	November 08, 2018
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 heard testimony, pertinent to the discharge, WDRs, and permit. For accuracy of the record, important testimony was requested in writing.

D. Reconsideration of Waste Discharge Requirements

Any person aggrieved by this action of the Regional Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., within 30 calendar days of the date of adoption of this Order at the following address, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

Or by email at waterqualitypetitions@waterboards.ca.gov

For instructions on how to file a petition for review, see:
http://www.waterboards.ca.gov/public_notices/petitions/water_quality/wqpetition_instr.shtml

E. Information and Copying

The Report of Waste Discharge, other supporting documents, and comments received are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling (213) 576-6600.

F. Register of Interested Persons

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

G. Additional Information

Requests for additional information or questions regarding this order should be directed to Steven Webb at (213) 576-6793 or at Steven.Webb@waterboards.ca.gov.

ATTACHMENT G – TOXICITY REDUCTION EVALUATION (TRE) WORK PLAN OUTLINE INFORMATION AND DATA ACQUISITION

I. Gather and Review Information and Data

A. FOTW Operations and Performance

B. FOTW Influent

C. Effluent Data including Toxicity Results

D. Sludge (Biosolids) Data

II. Evaluate Facility Performance

III. Conduct Toxicity Identification Evaluation (TIE)

IV. Evaluate Sources and In-Plant Controls

V. Implement Toxicity Control Measures

VI. Conduct Confirmatory Toxicity Testing

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 Discharger shall be reused or disposed of in compliance with the applicable portions of:

1. 40 CFR part 503: for biosolids that are land applied, placed in surface disposal sites (dedicated land disposal sites or monofills), or incinerated; 40 CFR § 503 Subpart B (land application) applies to biosolids placed on the land for the purposes of providing nutrients or conditioning the soil for crops or vegetation. 40 CFR § 503 Subpart C (surface disposal) applies to biosolids placed on land for disposal.
2. 40 CFR part 258: for biosolids disposed of in a municipal solid waste landfill.
3. 40 CFR part 257: for all biosolids use and disposal practices not covered under 40 CFR parts 258 or 503.

B. The Discharger is responsible for assuring that all biosolids from its facility are used or disposed of in accordance with 40 CFR part 503, whether the Discharger uses or disposes of the biosolids itself, or transfers their biosolids to another party for further treatment, reuse, or disposal. The Discharger is responsible for informing subsequent preparers, appliers, and disposers of requirements they must meet under 40 CFR part 503.

C. Duty to mitigate: The Discharger shall take all reasonable steps to prevent or minimize any biosolids use or disposal which may adversely impact human health or the environment.

D. No biosolids shall be allowed to enter wetland or other waters of the United States.

E. Biosolids treatment, storage, 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 Discharger shall assure that haulers transporting biosolids off site for further treatment, storage, reuse, or disposal take all necessary measures to keep the biosolids contained.

H. If biosolids are stored for over two years from the time they are generated, the Discharger must ensure compliance with all the requirements for surface disposal under 40 CFR part 503 Subpart C, or must submit a written request to USEPA with the information in part 503.20 (b), requesting permission for longer temporary storage.

I. Sewage sludge containing more than 50 mg/kg PCBs shall be disposed of in accordance with 40 CFR part 761.

J. Any off-site biosolids treatment, storage, use, or disposal site operated by the Discharger 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 USEPA or an authorized representative thereof, upon the presentation of credentials, shall be allowed by the Discharger, directly or through contractual arrangements with their biosolids management contractors, to:

A. enter upon all premises where biosolids are produced by the Discharger and all premises where Permittee biosolids are further treated, stored, used, or disposed, either by the Permittee or by another party to whom the Discharger 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 Discharger or by another party to whom the Discharger 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 Discharger 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 Discharger shall develop a representative sampling plan, which addresses the number and location of sampling points, and collect representative samples.

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

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

B. Biosolids shall be monitored for the following constituents at the frequency stipulated in 40 CFR § 503.16: arsenic, cadmium, 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 Discharger shall demonstrate that the biosolids meet Class A or Class B pathogen reduction levels by one of the methods listed in 40 CFR § 503.32. Prior to disposal in a surface disposal site, the 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 Discharger 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 Discharger either directly or through contractual arrangements with their biosolids management contractors shall comply with the following 40 CFR part 503 notification requirements:

A. Notification of Non-compliance

The Discharger shall require appliers of their biosolids to notify USEPA Region 9 and their state permitting agency of any noncompliance within 24 hours if the non-compliance may seriously endanger health or the environment. For other instances of non-compliance, the 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 Discharger must send written notice within 60 days of the shipment and prior to the initial application of bulk biosolids to the permitting authorities in the receiving State or Indian Land (the USEPA Regional Office for the area and the State/Indian authorities).

C. Land Application Notification

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

VII. Reporting

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

A. The amount of biosolids generated that year, in dry metric tons, and the amount accumulated from previous years.

B. Results of all pollutant monitoring required in the Monitoring Section above. Results must be reported on a 100% dry weight basis.

C. Descriptions of pathogen reduction methods, and vector attraction reduction methods, as required in 40 CFR § 503.17 and 503.27, and certifications.

D. Results of any groundwater monitoring or certification by groundwater scientist that the placement of biosolids in a surface disposal site will not contaminate an aquifer.

E. 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 Discharger 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 – SEWER SYSTEM REPORTING REQUIREMENTS

Consistent with the intent of the California Water Code (CWC) sections 13193, 13267 and 13271 and the Health and Safety Code section 5410-5416, the following establishes the monitoring, record- keeping, reporting and notification requirements for sanitary sewer overflows (SSOs) on San Clemente Island.

For purposes of these requirements, an SSO includes any spill, release, discharge or diversion of untreated or partially treated sewage or combined sewage and storm water from the sewer collection system. SSOs include:

1. Overflows or releases of untreated sewage or combined sewage and storm water that reach waters of the United States;
2. Overflows or releases of untreated or partially treated sewage or combined sewage and storm water that do not reach waters of the United States; and
3. Sewage or combined sewage and storm water backups into buildings and on private property that are caused by blockages or flow conditions within the publicly-owned portion of the sewer system.

Revisions to the SSO reporting requirements may be made at any time by the Executive Officer, and may include a reduction or increase in the monitoring and reporting.

A. General Reporting Requirements

1. The Discharger shall request a Sanitary Sewer System Database account by registering through the California Integrated Water Quality System (CIWQS) (CWC section 13193). This account will allow controlled and secure entry into the SSO Database. Additionally, within 30 days of receiving an account and prior to recording SSOs into the SSO Database, the Discharger shall complete the "Collection System Questionnaire", which collects pertinent information regarding an enrollee's collection system. The "Collection System Questionnaire" shall be updated at least every 12 months.
2. Pursuant to Health and Safety Code section 5411.5, any person who, without regard to intent or negligence, causes or permits any untreated wastewater or other waste (e.g., combined wastewater and storm water) to be discharged in or on any waters of the State, or discharged in or deposited where it is, or probably will be, discharged in or on any surface waters of the State, as soon as that person has knowledge of the discharge, shall immediately notify the Los Angeles Regional Water Quality Control Board (Regional Water Board). It is also recommended that the Navy notify the local health officer of the discharge. Discharges of untreated or partially treated wastewater to separate storm drains and drainage channels, whether man-made or natural or concrete-lined, shall be reported as required above.
3. Any SSO greater than 1,000 gallons discharged in or on any waters of the State, or discharged in or deposited where it is, or probably will be, discharged in or on any surface waters of the State shall also be reported to the Regional Water Board. It is recommended that the Navy also report this information to the California Emergency Management Agency (CALEMA) pursuant to California Water Code section 13271.
4. If the Discharger becomes aware that it failed to submit any relevant facts in any report required herein, the Discharger shall promptly submit such facts or information by formally amending the report in the Online SSO Database.

B. Notification Requirements

1. For any SSO that results in a discharge to a drainage channel or a surface water, the Discharger shall, as soon as possible, but not later than two (2) hours after becoming aware of the discharge, notify the Regional Water Board. It is recommended that the Navy also notify CALEMA, the local health officer or directors of environmental health with jurisdiction over affected water bodies.

2. It is recommended that as soon as possible, but no later than twenty-four (24) hours after becoming aware of a SSO that results in a discharge to a drainage channel or a surface water, the Discharger provide to the appropriate Regional Water Board a certification that CALEMA and the local health officer or directors of environmental health with jurisdiction over the affected water bodies have been notified of the discharge.

C. SSO Categories

1. Category 1 - All discharges of sewage or combined sewage and storm water resulting from a failure in the Discharger's combined sewer system that:

   a. Equal or exceed 1,000 gallons, or

   b. Result in a discharge to a drainage channel and/or surface water; or

   c. Discharge to a separate storm drainpipe that was not fully captured and returned to the sanitary sewer.

2. Category 2 - All other discharges of sewage or combined sewage and storm water resulting from a failure in the Discharger's sanitary sewer.

D. SSO Reporting Timeframes

1. Category 1 SSOs - Except as provided in B above, all SSOs that meet the above criteria for Category 1 SSOs shall be reported as soon as: (1) the Discharger has knowledge of the discharge, (2) reporting is possible, and (3) reporting can be provided without substantially impeding cleanup or other emergency measures. Initial reporting of Category 1 SSOs shall be reported to the Online SSO System as soon as possible but no later than 3 business days after the Discharger is made aware of the SSO. Minimum information that must be contained in the 3-day report shall include all information identified in section E.1 below, except item E.1.k. A final certified report shall be completed through the Online SSO System within 15 calendar days of the conclusion of SSO response and remediation. Additional information may be added to the certified report, in the form of an attachment, at any time.

   The above reporting requirements do not preclude other emergency notification requirements, recommendations, and timeframes.

2. Category 2 SSOs - All SSOs that meet the above criteria for Category 2 SSOs shall be reported to the Online SSO Database within 30 days after the end of the calendar month in which the CSS outflow occurs (e.g., all SSOs occurring in the month of January shall be reported to the Regional Water Board by March 1st).

3. If there are no SSOs during the calendar month, the Discharger will provide, within 30 days after the end of each calendar month, a statement through the Online SSO Database certifying that there were no SSOs for the designated month.

4. If the Online SSO Database is not available, the Discharger shall email all required information along with the CI Number 6432 to the Regional Water Board office at losangeles@waterboards.ca.gov in accordance with the time schedules identified above. The Discharger shall also call the Regional Water Board at (213) 576-6657 or for after

hours and weekends: (213) 305-2284 and (213) 305-2253. In such event, the Discharger shall also enter all required information into the Online SSO Database as soon as practicable.

E. Mandatory Information to be included in SSO Reporting

1. Category 2 SSOs:
    a. Location of the SSO, including latitude and longitude coordinates, street address, city, state, zip code;
    b. Applicable Regional Water Board, i.e. identify the region in which the SSO occurred along with Cl Number 6432;
    c. County where SSO occurred;
    d. If the SSO entered a drainage channel and/or surface water;
    e. If the SSO was discharged to a separate storm drain pipe that was not fully captured and returned to the sanitary sewer;
    f. Estimated SSO volume in gallons;
    g. SSO source (e.g. manhole, cleanout, surcharge, flooding, etc.);
    h. SSO cause (e.g. mainline blockage, roots, etc.);
    i. Time of SSO notification or discovery;
    j. Estimated operator arrival time;
    k. SSO destination;
    l. Estimated SSO end date/time; and
    m. Certification. Upon Certification, the SSO Database will issue a Final SSO Identification (ID) Number.
2. Category 1 SSOs:
    a. All information listed for Category 2 SSOs, plus the following:
    b. Estimated SSO volume that reached surface water, drainage channel, or not recovered from a separate storm drain;
    c. Estimated SSO amount recovered;
    d. Response and corrective action taken;
    e. If samples were collected, identify which regulatory agencies received the sample results (if applicable). If no samples were collected, NA must be selected;
    f. Parameters that samples were analyzed for (if applicable);
    g. Status of posting health warnings;
    h. Beaches impacted (if applicable). If no beach was impacted, NA must be selected;
    i. If there is an ongoing investigation;
    j. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the SSO and a schedule of major milestones for those steps;
    k. OES control number (if applicable);
    l. Date OES was called (if applicable);

m. Time OES was called (if applicable);

n. Identification of if County Health Officers were called;

o. Date County Health Officer was called (if applicable); and

p. Time County Health Officer was called (if applicable).

F. Reporting to Other Regulatory Agencies

These reporting requirements do not preclude the Discharger from reporting SSOs to other regulatory agencies pursuant to California state law.

1. It is recommended that the Discharger report SSOs to CALEMA, in accordance with California Water Code Section 13271.

CALEMA

Phone: (800)852-7550

2. It is recommended that the Discharger report SSOs to County Health officials in accordance with California Health and Safety Code Section 5410 et seq.

G. Record Keeping

1. Individual SSO records shall be maintained by the Discharger for a minimum of 5 years from the date of the SSO. This period may be extended when requested by the Regional Water Board Executive Officer.
2. All records shall be made available for review upon State or Regional Water Board staff's request.
3. All monitoring instruments and devices that are used by the Discharger to fulfill the prescribed monitoring and reporting program shall be properly maintained and calibrated as necessary to ensure their continued accuracy;
4. The Discharger shall retain records of all SSOs, such as, but not limited to and when applicable:
   a. Record of certified report, as submitted to the Online SSO Database;
   b. All original recordings for continuous monitoring instrumentation;
   c. Service call records and complaint logs of calls received by the Discharger;
   d. SSO phone calls;
   e. SSO records;
   f. Steps that have been and will be taken to prevent the SSO from recurring and a schedule to implement those steps;
   g. Work orders, work completed, and any other maintenance records from the previous 5 years which are associated with responses and investigations of system problems related to SSOs;
   h. A list and description of complaints from customers or others from the previous 5 years; and
   i. Documentation of performance and implementation measures for the previous 5 years.

5. If water quality samples are required by an environmental or health regulatory agency or State law, or if voluntary monitoring is conducted by the Discharger or its agent(s), because of any SSO, records of monitoring information shall include:
    a. The date, location, and time of sampling or measurements;
    b. The individual(s) who performed the sampling or measurements;
    c. The date(s) analyses were performed;
    d. The individual(s) who performed the analyses;
    e. The analytical technique or method used; and,
    f. The results of such analyses.
6. Certification
    a. All final reports must be certified by a person designated, for a municipality, state, federal or other public agency, as either a principal executive officer or ranking elected official, or by a duly authorized representative of that person. (For purposes of electronic reporting, an electronic signature and accompanying certification, which complies with the Online SSO Database procedures, meet this certification requirement.)
    b. Registration of authorized individuals, who may certify reports, will be in accordance with the California Integrated Water Quality System's (CIWQS') protocols for reporting.