TENTATIVE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LOS ANGELES REGION

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ORDER NO. <R4-2013-XXX> NPDES NO. <CA0110175>

WASTE DISCHARGE REQUIREMENTS FOR THE UNITED STATES NAVY, NAVAL AUXILIARY LANDING FIELD, SAN CLEMENTE ISLAND WASTEWATER TREATMENT PLANT, LOS ANGELES COUNTY DISCHARGE TO THE PACIFIC OCEAN

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

Table 1. Discharger Information

Discharger	United States Navy
Name of Facility	San Clemente Island Waste Water Treatment Plant
	Naval Auxiliary Landing Field, San Clemente Island
Facility Address	San Clemente Island, California
	Los Angeles County

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	No Longer In Use	32 °, 59', 50" N	118 °, 32', 45" W	Pacific Ocean
002	Secondary and tertiary treated wastewater	33 °, 0', 17" N	118 °, 33', 3" W	Pacific Ocean

Table 3. Administrative Information

This Order was adopted by the Regional Water Quality Control Board on:	July 11, 2013
This Order shall become effective on:	August 30, 2013
This Order shall expire on:	August 30, 2018
The Discharger shall file a Report of Waste Discharge as an application for renewal of waste discharge requirements 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 (USEPA) and the Regional Water Quality Control Board have classified this discharge as follows:	Minor discharge ¹

¹ The SCI WWTP has a design flow of less than 1 MGD and services a population of less than 10,000.

TENTATIVE

IT IS HEREBY ORDERED, that Order No. 00-090 is terminated upon the effective date of this Order except for enforcement purposes, and in order to meet the provisions contained in division 7 of the California Water Code (commencing with section 13000) and regulations adopted pursuant thereto, and the provisions of the federal Clean Water Act, and regulations and guidelines adopted pursuant thereto, the Discharger shall comply with the requirements in this Order.

I, Samuel Unger, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on **July 11, 2013.**

Samuel Unger, Executive Officer

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I. FACILITY INFORMATION

The following Discharger is subject to the waste discharge requirements set forth in this Order:

Table 4. Facility Information

Discharger	United States Navy (Navy)					
	•					
Name of Facility	Naval Auxiliary Landing Field, San Clemente Island Waste Water Treatment Plant (SCI WWTP)					
Facility Address	Naval Auxiliary Landing Field, San Clemente Island San Clemente Island Los Angeles County					
Facility Contact, Title, and Phone	Thomas Niday, Utilities System Operator, (619) 524- 9125					
Mailing address	Naval Station San Diego, Building 3212, San Diego, CA 92135					
Type of Facility	Federally-owned Treatment Works (FOTW)					
Facility Design Flow	0.06 million gallons per day (mgd) design capacity for secondary treated discharge and 0.03 mgd design capacity for tertiary treated discharge. 0.025 mgd average monthly discharge is authorized.					

II. FINDINGS

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

A. Legal Authorities

This Order is 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 California Water Code (CWC; commencing with section 13370). It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the CWC (commencing with section 13260).

B. Background and Rationale for Requirements

The Navy (Discharger) is currently discharging effluent from the San Clemente Island Waste Water Treatment Plant (SCI WWTP or Facility) under Order No. 00-090, which was adopted June 29, 2000. The Discharger submitted a Report of Waste Discharge and application for an NPDES permit renewal to discharge dated December 21, 2004, for discharge from the secondary treatment plant. The permit was not renewed previously because of concerns regarding an Area of Special Biological Significance (ASBS) exception. In 2012 the Discharger installed a new wastewater treatment plant and submitted an updated Report of Waste Discharge, received August 22, 2012, and applied for an NPDES permit renewal to discharge from the tertiary and secondary treatment plants. This permit is consistent with the existing ASBS exclusion area.

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

The 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 I are also incorporated into this Order.

C. Facility Description

The Discharger owns and operates the SCI WWTP, located approximately 1500 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.

SCI WWTP 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 instances, wastewater from portable toilets may be delivered directly to the headworks of the treatment system. According to Navy personnel, only residential wastes are discharged to the sanitary sewer; all industrial drains have been capped with concrete. Industrial wastes (used oil, used anti-freeze, 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 heavy industry on the island and most of the waste generated is associated with facility and vehicle maintenance (e.g. changing oil on a vehicle).

The treatment system consists of a package-type secondary wastewater treatment plant, built in 1979, and a recently completed package-type tertiary wastewater treatment plant. The tertiary plant will be brought into operation following adoption of this Order. The secondary plant has a design capacity of 0.060 mgd and consists of communition, equalization, activated

sludge extended aeration, clarification, chlorination and dechlorination (Attachment C). The tertiary plant has a design capacity of 0.030 mgd. The new Smith and Loveless (S&L) Titan Membrane Bio Reactor (MBR) Package consists of screening, flow equalization, sludge storage, anoxic zones, an aeration, a filtration zone, chlorine contact, and dechlorination. Treated wastewater, prior to dechlorination, is pumped to a tertiary recycled water storage tank (Attachment C).

The Navy intends to operate the tertiary wastewater treatment plant exclusively, except during periods of high flows to the treatment system and startup and maintenance of the tertiary plant. The secondary plant may only be operated in emergency situations or when the tertiary plant must be shut down for maintenance. During such times, the Navy must comply with all bypass conditions contained in this permit.

Solids from the treatment system are either dried in drying beds or bagged for dewatering over plastic pallets. The dried solids are transported to and disposed of at the San Clemente Island Landfill, regulated separately under Order No. R4-2010-0045, adopted by the Regional Water Board on March 4, 2010.

The Discharger is producing, distributing, and using recycled water under Order R4-2004-0057, which was adopted April 1, 2004. A revised order to authorize the use of recycled water from the tertiary plant is forthcoming.

Consistent with ASBS exclusion area, this Order authorizes the Navy to discharge a monthly average of 0.025 mgd of treated wastewater to the Pacific Ocean. Discharges in excess of 0.025 mgd are not authorized.

Attachment B provides a location map of the area around the Facility. Attachment C provides a flow schematic of the Facility.

D. Descriptions of Discharge Points

The SCI WWTP has two discharge points, located 250 feet east of the plant, 1,000 feet south of Wilson Cove, near the northeast end of the island. Discharge Point 001 (the shoreline discharge with coordinates 32 ° 59' 50" N, 118 ° 32' 45" W) has been decommissioned. Discharge Point 002 (the submerged outfall system with coordinates 33 ° 0' 17" N, 118 ° 33' 3" W) was completed on August 8, 2008.

Discharge Point 002 consists of a 450 foot long, 3.6-inch diameter pipe extension 70-feet below the ocean's surface. The discharge point is within the ASBS exclusion area (1,000-foot radius from original end of pipe) (State Water Board Resolution No. 77-11).

Discharge Point 002

Diameter of Pipe at Discharge Terminus (inches) 3.6

Outfall Distance Offshore (feet) 450

Discharge Depth Below Surface Water (feet) 70

Latitude 33 ° 0' 17" N

Longitude 118 ° 33' 3" W

Table 5 Description of Discharge Point 002

E. California Environmental Quality Act (CEQA)

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

F. Technology-based Effluent Limitations (TBELs)

Section 301(b) of the CWA and implementing USEPA permit regulations at part 122.44, title 40 of the Code of Federal Regulations (CFR) require that permits include conditions meeting applicable technology-based requirements, at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Secondary Treatment Standards at 40 CFR part 133. A detailed discussion of the TBELs development is included in the Fact Sheet (Attachment F).

G. Water Quality-Based Effluent Limitations (WQBELs)

CWA section 301(b) and 40 CFR part 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

40 CFR part 122.44(d)(1)(i) mandates 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. 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 proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in 40 CFR part 122.44(d)(1)(vi). USEPA has applied CWA section 403(c) and 40 CFR part 125, subpart M, following 40 CFR part 122.

H. Water Quality Control Plans

The Regional Water Board adopted a Water Quality Control Plan for the Los Angeles Region (Basin Plan) on June 13, 1994, that 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 by the Basin Plan. In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Beneficial uses applicable to the Pacific Ocean are as follows:

Table 6 Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
002	Pacific Ocean San Clemente Island Nearshore Zone *Nearshore zone is defined as the zone 1000 feet from the shoreline or the 30-foot depth contours, whichever is further from the shoreline.	Existing: Navigation (NAV); Water Contact Recreation (REC-1); Non-contact Water Recreation (REC-2); 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); and, Shell Harvesting (SHELL).
		Potential: Spawning, Reproduction, and/or Early Development (SPWN).

Requirements of this Order implement the Basin Plan.

I. Impaired Water Bodies on CWA 303(d) List

On June 28, 2007, USEPA approved California's 2006 section 303(d) List of Water Quality Limited Segments (303(d) List). The 303(d) List identifies water bodies where water quality standards are not expected to be met after implementation of TBELs by point sources. The San Clemente Island Nearshore Zone is currently not listed.

J. California Thermal Plan

The State Water Board adopted the Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for coastal waters.

K. 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, and 2009. The State Water Board adopted the latest amendment on October 8, 2010 (2009 Ocean Plan). 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	7	Ocean	Plan	Beneficia	Uses
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Discharge Point	Receiving Water	Beneficial Uses
002	Pacific Ocean	Industrial water supply (IND); REC-1; REC-2; NAV; COMM; MAR; SPWN; RARE; SHELL; AQUA; MIGR; and, preservation and enhancement of designated Areas of Special Biological Significance (ASBS).

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

L. Alaska Rule

On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards became effective for CWA purposes (40 CFR part 131.21; 65 Federal Regulation 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.

M. Stringency of Requirements for Individual Pollutants

This Order contains both technology-based and water quality-based effluent limitations for individual pollutants that are no more stringent than required by the federal CWA. The TBELs consist of restrictions on biochemical oxygen demand (BOD), total suspended solids (TSS), oil and grease, settleable solids, turbidity, pH, and percent removal of BOD and TSS. Restrictions on BOD, TSS, oil and grease, settleable solids, turbidity, and pH are discussed in Section IV.B.2 of the Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements. WQBELs have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. The scientific procedures for calculating the individual WQBELs are based on the Ocean Plan, which was approved by USEPA on October 8, 2010. WQBELs, consisting of restrictions on DDT, TCDD equivalents, and total chlorine residual, have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. Collectively this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

N. Antidegradation Policy

40 CFR part 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 No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy, which requires that existing quality of waters 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. As discussed in detail in the Fact Sheet the permitted discharge is consistent with the antidegradation provision of 40 CFR part 131.12 and State Water Board Resolution No. 68-16.

O. Anti-Backsliding Requirements

CWA sections 402(o)(2) and 303(d)(4) and federal regulations at 40 CFR part 122.44(l) prohibit backsliding in NPDES permits. These Anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous order, with some exceptions where limitations may be relaxed.

P. Endangered Species Act.

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 Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act (16 United States Code. sections 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. The discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

Q. Monitoring and Reporting

40 CFR part 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.

R. Standard and Special Provisions

Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR part 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR part 122.42, are provided in Attachment D. The Regional Water Board has also included in this Order special provisions applicable to the Discharger. The rationale for the special provisions contained in this Order is provided in the Fact Sheet (Attachment F).

S. Sanitary Sewer Overflows

The State Water Board issued General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order No. 2006-0003-DWQ (General SSO Order) on May 2, 2006, as amended. The General SSO Order requires public agencies that own or operate sanitary sewer systems with greater than one mile of pipes or sewer lines to enroll for coverage under the General SSO Order. The General SSO Order requires agencies to develop sanitary sewer management plans and report all sanitary sewer overflows (SSOs), among other requirements and prohibitions. Furthermore, the General SSO Order contains requirements for operation and maintenance of collection systems and for reporting and mitigating SSOs. The Discharger's collection system is part of the FOTW that is subject to this Order. The Discharger must comply with both the General SSO Order including its future amendments and this Order.

T. Pretreatment (Not Applicable)

U. Sewage Sludge/Biosolids Requirements

Attachment I, section 405 of the CWA and implementing regulations at 40 CFR part 503 require that producers of sewage sludge/biosolids meet certain reporting, handling, and use or disposal requirements (Attachment I). The state has not been delegated the authority to implement this program; therefore, USEPA is the implementing agency.

V. Performance Goals

Chapter III, section F.2 of the 2009 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 the 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.

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 as 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. The methodology for calculating performance goals is described in the Fact Sheet (Attachment F).

W. Notification of Interested Parties

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

X. 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. 00-090 except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the CWC (commencing with section 13000) and regulations adopted thereunder, and the provisions of the CWA and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order. This action in no way prevents the Regional Water Board from taking enforcement action for past violations of the previous Order. If any part of this Order is subject to a temporary stay of enforcement, unless otherwise specified, the Discharger shall comply with the analogous portions of the previous Order, which shall remain in effect for all purposes during the pendency of the stay.

III. DISCHARGE PROHIBITIONS

- **A.** The discharge of any radiological, chemical, or biological warfare agent into the waters of the state is prohibited under CWC section 13375.
- B. Waste shall not be discharged to designated ASBS. In 1974, the State Water Board designated the ocean waters off San Clemente Island to a depth of 300 feet or a distance of one nautical mile as an ASBS. This designation required the 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. In 1976, the State Water Board held a hearing to consider the request and, the following year, adopted Resolution No. 77-11. In the resolution, the State Water Board denied the Navy's request to change the ASBS boundaries but concluded that the evidence supported an action to allow the Navy to continue discharging at the site "under very limited circumstances." The State Water Board authorized its Executive Officer to request USEPA to modify the Navy's NPDES Order to conditionally allow the discharge. The conditions required that the Navy do the following:
 - 1. Provide secondary treatment;
 - Comply with the Ocean Plan;
 - 3. Comply with effluent limits based on the existing monthly average daily flow (25,000 gallons per day), 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 requirements.

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 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 against discharges to an ASBS. 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 CEQA. Exceptions also require USEPA concurrence.

- **C.** Discharge of wastewater at a location different from that describe in this Order is prohibited.
- **D.** The bypassing of untreated waste containing concentrations of pollutants in excess of those of Table A or Table B of the Ocean Plan to the ocean is prohibited.
- E. 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. Bypass includes the treatment of any wastewater only by the secondary treatment plant.
- F. The Discharger shall operate the Plant as designed and in accordance with the Operation & Maintenance Manual for the Plant. This means it shall optimize storage and use of equalization units, and shall fully utilize the biological treatment units and advanced treatment units, if applicable. The Discharger shall report incidents of blended effluent discharges in routine monitoring reports, and shall monitor this discharge as specified in the Attachment E (MRP).

- **G.** The discharge of municipal and industrial waste sludge directly to the ocean, or into a waste stream that discharges to the ocean, is prohibited.
- H. The discharge of sludge digester supernatant and centrate directly to the ocean, or into a waste stream that discharges to the ocean without further treatment, is prohibited. It is the policy of the State Water Board that 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. Therefore, if federal law is amended to permit such discharge, which could affect California waters, the State Water Board may consider requests for exceptions to this section under chapter III of the Ocean Plan, provided further that an Environmental Impact Report on the proposed project shows clearly that any available alternative disposal method will have a greater adverse environmental impact than the proposed project.
- I. The monthly average effluent dry weather discharge flow rate from the facility shall not exceed 0.025 mgd average monthly discharge
- **J.** The Discharger shall not cause degradation of any water supply, except as consistent with State Water Board Resolution No. 68-16.
- K. The treatment or disposal of wastes from the facility shall not cause pollution or nuisance as defined in section 13050, subdivisions (I) and (m) of the CWC.
- **L.** The discharge of any substances in concentrations toxic to animal or plant is prohibited.

IV. EFFLUENT LIMITATIONS, PERFORMANCE GOALS, AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations and Performance Goals

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

Effluent limitations for Discharge Point 002 are given below in Table 8. The discharge of an effluent with constituents in excess of effluent limitations is prohibited. 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 attached MRP.

The performance goals for Discharge Point 002 are also prescribed in Table 8. The listed performance goals are not enforceable effluent limitations or standards. However, the Discharger shall maintain, if not improve, its treatment efficiency. Any exceedance of the performance goals shall trigger an investigation into the cause of the exceedance. If the exceedance is 50% greater than the performance goal or persists in https://example.com/thee-successive monitoring periods, the Discharger shall submit a written report to the Regional Water Board within 90 days 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. If there are three successive exceedances of the acute and/or chronic toxicity WQBELs, the Discharger shall implement the initial investigation Toxicity Reduction Evaluation (TRE) work plan and initiate a Toxicity Identification Evaluation (TIE), as specified in section V (Whole Effluent Toxicity Testing Requirements) of the MRP.

Table 8 Effluent Limitations and Performance Goals for Discharge Point 002

		Effluent Limitations ¹					Performance Goals ²
Parameter	Units	Average Monthly	Average Weekly	Maximum Daily ³	Instantaneous Minimum ⁴	Instantaneous Maximum ⁴	Average Monthly
Major Wastewater	Constituents						
Biochemical	mg/L	30	45				
Oxygen Demand (BOD) 5-day @ 20°C ⁵	lbs/day ⁶	6.3	9.4	19			
Total Suspended	mg/L	30	45	,	. 		8.0
Total Suspended Solids (TSS) ^{5,7}	lbs/day ⁶	6.3	9.4	19		 ` ·	
pH ^{4,5,8}	standard units				6.0	9.0	
Oil and Grease ^{7,8}	mg/L	25	40		par pag	75	2.0
Oil and Grease	lbs/day ⁶	5.2	8.3			15	
Settleable Solids ⁸	ml/L	1.0	1.5		<u></u>	3.0	
Turbidity ^{7,8}	NTU	75	100			225	. 3.0
Marine Aquatic Lif	e Toxicants ⁹						
Arsenic ^{7,10,11}	μg/L			·			8.0

¹ Effluent limitations for conventional, nonconventional, and toxic pollutants were calculated based on effluent limitations in Table A and water quality objectives in Table B of the Ocean Plan. The minimum dilution ratios used to calculate effluent limitations for nonconventional and toxic pollutants based on water quality objectives in Table B of the Ocean Plan are 136:1 (i.e., 136 parts seawater to one part effluent) for Discharge Point 002. Please refer to the Fact Sheet for the detailed discussions of the effluent limitations development. See section VII of this Order and Attachment A for definitions of terms.

² The performance goals are generally based upon actual performance data (2007-2012) of the SCI WWTP and are specified only as an indication of the treatment efficiency of the plant. Some performance goals were carried over from Order No. 00-090. They are not considered effluent limitations or standards for the plant. The SCI WWTP shall make its best efforts to maintain, if not improve, the effluent quality at the level of these performance goals. The Executive Officer may modify any of the performance goals if the Discharger requests and has demonstrated that the change is warranted. Please refer to the Fact Sheet for performance goals determination procedures.

³The maximum daily effluent concentration limitation shall apply to flow-weighted 24-hour composite samples. It may apply to grab samples if the collection of composite samples for those constituents is not appropriate because of the instability of the constituents. Maximum daily effluent concentration limitations were also carried over from Order 00-090.

⁴ The instantaneous minimum and maximum shall apply to grab sample results.

⁵ The effluent limitations are based on secondary treatment standards, 40 CFR part 133.102

⁶ The daily mass emission calculations are based on the monthly average design flow rate of 0.025 MGD according to the Ocean Plan equation: lbs/day = 0.00834 x Ce (effluent concentration, ug/L) x Q (flow rate, MGD). Where Ce = Co + Dm*(Co - Cs). During storm events when flow exceeds the dry weather design capacity, the mass emission rate limits shall not apply. Only the concentration limits shall apply.

⁷ Performance goals were carried over from Order No. 00-090, Tables A. and B., based on 40 CFR part 122.44(I)(1) and 40 CFR 122.62(a)(1). The alteration to the facility addressed in 40 CFR 122.62(a)(1) is the extended outfall that was completed August 8, 2008.

⁸ Based on Ocean Plan Table A effluent limitations

⁹ Effluent limitations for these constituents are based on Ocean Plan Table B objectives using initial ratios of 136:1 (i.e., 136 parts of seawater to 1 part effluent) for Discharge Point 002. However, for the calculation of the acute toxicity limitation, only 10% of the initial dilution ratio is used.

		Effluent Limitations ¹					Performance Goals ²
Parameter	Units	Average Monthly	Average Weekly	Maximum Daily ³	Instantaneous Minimum ⁴	Instantaneous Maximum ⁴	Average Monthly
Cadmium ^{7,11}	μg/L						1.0
Chromium (hexavalent) ^{7,11,12}	μg/L						2.0
Copper 7,11	μg/L						3.0
Lead ^{7,11}	μg/L						2.0
Mercury ¹¹	μg/L				 ,		0.04
Nickel ^{7,11}	μg/L					· 	5.0
Selenium ^{7,11}	μg/L						15
Silver ^{7,11}	μg/L					·	0.70
Zinc ^{7,11}	μg/L						20
Cyanide ¹¹	μg/L						0.015
Total Chlorine Residual ¹³	µg/L	274		100 ¹⁴		8200	0.90
	lbs/day ⁶	0.06		0.021		1.7	
Ammonia as N ^{7,11}	μg/L					· ·	0.60
Phenolic compounds (non- chlorinated) ^{11,15}	μg/L	-					5.1
Phenolic compounds (chlorinated) ^{11,16}	µg/L	· <u>-</u> -					5.1
Endosulfan ^{11,17}	μg/L						0.022

¹⁰ Represents total recoverable metal value. Concentration expressed as total recoverable.

These constituents did not show reasonable potential to exceed Ocean Plan Table B objectives; therefore, no numerical WQBELs are prescribed. Please refer to the Fact Sheet (Attachment F) for calculation procedures of numerical effluent quality performance goals.

The Discharger has the option to meet the hexavalent chromium performance goal with a total chromium analysis. However, if the total chromium level exceeds the hexavalent chromium performance goal, it will be considered an exceedance unless an analysis has been made for hexavalent chromium in a replicate/split sample and the result has been shown to be in compliance with the hexavalent chromium performance goal.

These total chlorine residual limits shall only apply to continuous discharge exceeding two hours. For intermittent discharges not exceeding two hours, water quality objectives for total chlorine residual shall be determined through the use of the following equation:

Log v = -0.43(log x) + 1.8

Where: y =the water quality objective (in μ g/L) to apply when chlorine is being discharged;

x = the duration of uninterrupted chlorine discharge in minutes.

For intermittent discharges not exceeding two hours, the applicable total chlorine residual limit (daily maximum) shall then be calculated using the above calculated water quality objective according to procedures outlined in section III.C.4.a of the Ocean Plan. The minimum dilution ratio shall be 136:1 for Discharge Point 002.

The total chlorine residual daily discharge limitation was carried over from Order No. 00-090, Table a, per 40 CFR 122.44(I)(1) and 40 CFR 122.62(a)(1). The alteration to the facility addressed in 40 CFR 122.62(a)(1) is the extended outfall that was completed August 8, 2008.

Nonchlorinated phenolic compounds shall mean the sum of Phenol, 2,4-Dimethylphenol, 2-Nitrophenol, and 4-

Nitrophenol, 2,4-Dinitrophenol and 4,6-Dinitro-2-Methylphenol.

¹⁶ Chlorinated phenolic compounds mean the sum of 2-Chlorophenol, 2,4-Dichlorophenol, 4-Chloro-3-methylphenol, 2,4,6-Trichlorophenol, and Pentachlorophenol.

			1. 17. 116. · · · ·	Effluent Lin	nitations ¹		Performance Goals ²
Parameter	Units	Average Monthly	Average Weekly	Maximum Daily ³	Instantaneous Minimum ⁴	Instantaneous Maximum ⁴	Average Monthly
HCH ¹¹	μg/L						0.050
Endrin ¹¹	μg/L						0.022
Acute Toxicity ¹⁸	TUa	1.5	2.0	2.5			
Chronic Toxicity 19	TUc		-	137			
Radioactivity ²⁰ Not to exceed limits	specified in ti	tle 22, section	64442 of the	CCR			•
Gross alpha	PCi/L				 .	 .	4.5
Gross beta	PCi/L			·			10.0
Combined Radium-226 & Radium-228	PCi/L	·			 	. <u></u>	
Tritium	PCi/L						-
Strontium-90	PCi/L		'		· 	-	-
Uranium	PCi/L					1	
Human Health Tox	icants – Non	Carcinogens					
Acrolein ¹¹	μg/L				. 		3.0
Antimony ¹¹	μg/L						0.74
Bis(2- chloroethoxy) methane ¹¹	μg/L					·	5.1
Bis(2- chloroisopropyl) ether ¹¹	µg/L				MA 19		5.1

¹⁷ Please refer to Attachment A for definitions.

TUa = 100/LC50

Where:

Lethal concentration, 50 percent (LC50) is expressed as the estimate of the percent effluent concentration that causes death in 50% of the test population, in the time period prescribed by the toxicity test, as required by this permit. When it is not possible to measure the LC50 due to greater than 50 percent survival of the test species in 100 percent waste, the toxicity concentration shall be calculated by the expression:

TUa = log (100-S)/1.7

Where:

S = percentage survival in 100% waste. If S>99, TUa shall be reported as zero.

¹⁹ Expressed as Chronic Toxicity Units (TUc)

TUc = 100/NOEC

Where:

NOEC (No Observed Effect Concentration) is expressed as the maximum percent effluent that causes no observable effect on a test organism as determined by the result of a critical life stage toxicity test, as required by this permit.

²⁰Analyze 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. For these pollutants, the maximum detected effluent concentration (MDEC) from 2007 to 2012 is prescribed as the performance goal. Analysis for combined radium-226 & 228 and uranium shall be conducted only if gross alpha results for the same sample exceed 15 pCi/L. If radium-226 & 228 exceeds 5 pCi/L, monitor at least 4 quarters of total radium and analyze for tritium, strontium-90 and uranium. Please refer to Fact Sheet (Attachment F) for calculation procedures.

¹⁸ Expressed as Acute Toxicity Units (TUa)

Parameter	Units		Performance Goals ²				
		Average Monthly	Average Weekly	Maximum Daily ³	Instantaneous Minimum ⁴	Instantaneous Maximum ⁴	Average Monthly
Chlorobenzene ¹¹	μg/L						1.0
Chromium (III) ¹¹	μg/L						0.73
Di-n-butyl- phthalate ¹¹	μg/L					in the	5.1
Dichlorobenzenes	μg/L				<u></u>	 	5.1
Diethyl phthalate ¹¹	μg/L						5.1
Dimethyl phthalate ¹¹	μg/L	<u></u>					5.1
4,6-dinitro-2- methylphenol ¹¹	μg/L						5.1
2,4- Dinitrophenol ¹¹	μg/L				'		5.1
Ethyl benzene ¹¹	μg/L						· 1.0
Fluoranthene ¹¹	μg/L			·			5.1
Hexachloro- cyclopentadiene ¹¹	μg/L					 .	5.1
Nitrobenzene ¹¹	μg/L				***		5.1
Thallium ¹¹	µg/L				'	 ·	0.50
Toluene ¹¹	μg/L					-	1.0
Tributyltin ²²	μg/L	0.19					
1,1,1- Trichloroethane ¹¹	μg/L			· 		· -	2.5
Human Health Tox	icants – Car	cinogens					
Acrylonitrile ¹¹	μg/L						3.0
Aldrin ²²	μg/L	0.003			, 		
Benzene ¹¹	μg/L				<u></u>		1.0
Benzidene ²²	μg/L	. 0.0095					
Beryllium ¹¹	μg/L						0.50
Bis(2-chloroethyl) ether ¹¹	μg/L			 .			5.1
Bis(2-ethylhexyl) phthalate ¹¹	μg/L	; <u>-</u>					12
Carbon tetrachloride ¹¹	μg/L			<u></u>	_		1.0
Chlordane ^{22,23}	μg/L	0.0032					

²¹ Dichlorobenzenes shall mean the sum of 1,2- and 1,3-dichlorobenzene.

²³ Chlordane shall mean the sum of chlordane-alpha, chlordane-gamma, chlordene-alpha, chlordene-gamma, nonachloralpha, nonachlor-gamma and oxychlordane.

²² Best professional judgment (BPJ) effluent limitation equal to Ce=Co+Dm*(Co-Cs) applies, since all data provided was non-detect (i.e. below the laboratory MDL) and the laboratory method selected for the highest non-detect level did not meet the minimum level required in the Ocean Plan (2009).

Parameter	Units		Performance Goals ²				
		Average Monthly	Average Weekly	Maximum Daily ³	Instantaneous Minimum ⁴	Instantaneous Maximum ⁴	Average Monthly
Chlorodibromo- methane ¹¹	μg/L						29
Chloroform ¹¹	μg/L						47
DDT ²⁴	µg/L	0.024		· 			
וטטי	lbs/day ⁶	5.0 x 10 ⁻⁶					
1,4- Dichlorobenzene ¹	μg/L					<u></u>	5.1
3,3'- Dichlorobenzidine	µg/L	1.1					
1,2- Dichloroethane ¹¹	μg/L		:				1.0
1,1- Dichloroethylene ¹	µg/L			· ,		 . ·	1.0
Dichlorobromo- methane ¹¹	µg/L				·		43
Dichloromethane ¹	µg/L			·	<u></u>		1.3
1,3- Dichloropropene ¹	µg/L					· 	1.0
Dieldrin ²²	μg/L	0.0055					
2,4- Dinitrotoluene ¹¹	μg/L						5.1
1,2-Diphenyl- hydrazine ¹¹	µg/L						5.1
Halomethanes ^{11,}	µg/L					-	69
Heptachlor ²²	· μg/L	0.00069	·				
Heptachlor epoxide ²²	µg/L	0.0027	· 				,
Hexachloro- benzene ²²	μg/L	0.029				-	
Hexachloro- butadiene ¹¹	μg/L		·				5.1
Hexachloro- ethane ¹¹	μg/L						5.1
Isophorone ¹¹	μg/L						5.1
N-Nitrosodi- methylamine ¹¹	µg/L						5.1
N-Nitrosodi-N- propylamine ¹¹	μg/L					 -	

²⁴ 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.

²⁵Halomethanes shall mean the sum of bromoform, bromomethane (methyl bromide) and chloromethane (methyl chloride).

Parameter	Units		Performance Goals ²				
		Average Monthly	Average Weekly	Maximum Daily ³	Instantaneous Minimum ⁴	Instantaneous Maximum ⁴	Average Monthly
N-Nitrosodi- phenylamine ¹¹	μg/L						5.1
PAHs ^{11,26}	μg/L	1.2					
PCBs ^{1122,27}	μg/L	0.0026					
TCDD	µg/L	5.3 x 10 ⁻⁷				 :	
equivalents ²⁸	lbs/day ⁶	1.1 x 10 ⁻¹⁰					
1,1,2,2- Tetrachloro- ethane ¹¹	μg/L						1.0
Tetrachloro- ethylene ¹¹	μg/L						1.0
Toxaphene ²²	μg/L	0.029					
Trichloro- ethylene ¹¹	μg/L	 .					1.0
1,1,2- Trichloroethane ¹¹	μg/L						2.5
2,4,6- Trichlorophenol ¹¹	μg/L						5.1
Vinyl Chloride ¹¹	μg/L	_					1.0

PCBs (polychlorinated biphenyls) shall mean 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.

²⁸ TCDD equivalents shall mean the sum of the concentration 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			
I,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			

²⁶ PAHs (polynuclear aromatic hydrocarbons) shall mean 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.

- a. Percent Removal: The average monthly percent removal of BOD 5-day 20°C and TSS shall not be less than 85 percent, except in situations where the concentration of the influent wastewater is too low to meet 85 percent 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, its permit effluent concentration limits but its percent removal requirements cannot be met due to less concentrated influent wastewater, (2) to meet the percent removal requirements, the treatment works would have to achieve significantly more stringent limitations than would otherwise be required by the concentration-based standards, and (3) the less concentrated influent wastewater is not the result of excessive inflow and infiltration (I/I). The determination of whether the less concentrated wastewater is the result of excessive I/I will use the definition of excessive I/I in 40 CFR 35.2005(b)(16) plus the additional criterion that inflow is nonexcessive if the total flow to the POTW (i.e., wastewater plus inflow plus infiltration) is less than 275 gallons per capita per day. This demonstration must be made in the monitoring reports.
- b. The temperature of wastes discharged shall not exceed 100°F, which takes into account very large dilution credit based upon Best Professional Judgment (BPJ).
- c. Waste discharged to the ocean must be essentially free of the following:
 - 1. Material that is floatable or will become floatable upon discharge.
 - 2. Settleable material or substances that may form sediments that will degrade benthic communities or other aquatic life.
 - 3. Substances that will accumulate to toxic levels in marine waters, sediments or biota.
 - 4. Substances that significantly decrease the natural light to benthic communities and other marine life.
 - 5. Materials that result in aesthetically undesirable discoloration of the ocean surface.
- 2. Interim Effluent Limitations (Not Applicable)
- B. Land Discharge Specifications (Not Applicable)
- C. Reclamation Specifications (Not applicable)

The reuse of reclaimed water is regulated under separate WDRs and water recycling requirements (WRRs) for the San Clemente Island WWTP, Order No. R4-2004-0057, File No. 04-035, and CI No. 8734.

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitation

Receiving water limitations are based on water quality objectives contained in the Basin Plan and Ocean Plan, and are a required part of this Order. Unless specifically excepted by this Order, the discharge shall not cause violation of the following water quality objectives. Compliance with these objectives shall be determined by samples collected at stations representative of the area within the waste field where initial dilution is completed.

1. Bacterial Characteristics

- Water Contact Standards
 - i. 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. In marine water designated to water contact recreation (REC-1), the waste discharged shall not cause the following bacterial standards to be exceeded in the receiving water outside the initial dilution zone:

- (a) Geometric Mean Limits
 - (i) Total coliform density shall not exceed 1,000/100 ml.
 - (ii) Fecal coliform density shall not exceed 200/100 ml.
 - (iii) Enterococcus density shall not exceed 35/100 ml.
- (b) Single Sample Maximum (SSM)
 - (i) Total coliform density shall not exceed 10,000/100 ml.
 - (ii) Fecal coliform density shall not exceed 400/100 ml.
 - (iii) Enterococcus density shall not exceed 104/100 ml.
 - (iv) Total coliform density shall not exceed 1,000/100ml, when the fecal coliform/total coliform ratio exceeds 0.1.

If any single sample limits are exceeded, the Regional Water Board may require repeat sampling on a daily basis until the sample falls below the single sample limit in order to determine the persistence of the exceedance. When repeat sampling is required because of an exceedance of any 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 will 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.

(c) Initial Dilution Zone

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

ii. California Department of Public Health (CDPH) Standards

CDPH has established minimum protective bacteriological standards for coastal waters adjacent to public beaches and for public water contact sports areas in ocean waters. These standards are found in the CCR title 17, section 7958, and they are identical to the objectives contained in subsection a. above. When a public beach or public water contact sports area fails to meet these standards, CDPH 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. The CDPH 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), CDPH imposes the same standards as contained in CCR title 17 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 waste discharged shall not cause the following bacterial standards to be exceeded:

The median total coliform density for any 6-month period shall not exceed 70 per 100 ml, and not more than 10 percent of the samples during any 6-month period shall exceed 230 per 100 ml.

3. Implementation Provisions for Bacterial Characteristics

- a. If the Discharger is required to conduct receiving water monitoring for bacterial characteristics in the future, then, at a minimum, weekly samples shall be collected from each site. The geometric mean values should be calculated using the five most recent sample results. If sampling occurs more frequently than weekly, all samples taken during the previous 30-day period shall be used to calculate the geometric mean.
- b. If a single sample exceeds any of the single sample maximum (SSM) standards, repeat sampling at that location shall be conducted to determine the extent and persistence of the exceedance. Repeat sampling shall be conducted within 24 hours of receiving analytical results and continued until the sample result is less than the SSM standard or until the Regional Water Board requires the discharger or appropriate agency to conduct a sanitary survey to determine the source of the high bacterial densities. A sanitary survey shall also be required if three out of four weekly samples exceed any SSM standard, or if 75 percent of the samples from more frequent testing during any 30-day period exceed any SSM standard.

When repeat sampling is required because of an exceedance of any one single sample density, values from all samples collected during that 30-day period will be used to calculate the geometric mean.

- c. It is state policy that the geometric mean bacterial objectives are strongly preferred for use in water body assessment decisions (for example, in developing the 303(d) List) because the geometric mean objectives are a more reliable measure of long-term water body conditions. In making assessment decisions on bacterial quality, single sample maximum data must be considered together with any available geometric mean data. The use of only single sample maximum bacterial data is generally inappropriate unless there is a limited data set, the water is subject to short-term spikes in bacterial concentrations, or other circumstances justify the use of only single sample maximum data.
- d. For monitoring stations outside of the defined water-contact recreation zone (REC-1), samples will be analyzed for total coliform only.

4. Physical Characteristics

- a. Floating particulates and grease and oil shall not be visible.
- The discharge of waste shall not cause aesthetically undesirable discoloration of the ocean surface.
- c. Natural light transmittance shall not be significantly reduced at any point outside the initial dilution zone as the result of the discharge of waste.
- d. The rate of deposition of inert solids and the characteristics of inert solids in ocean sediments shall not be changed such that benthic communities are degraded.

5. Chemical Characteristics

- a. The dissolved oxygen concentration shall not at any time be depressed more than 10 percent from that which occurs naturally, as the result of the discharge of oxygen demanding waste materials.
- b. The pH shall not be changed at any time more than 0.2 units from that which occurs naturally.
- c. The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above that present under natural conditions.
- d. The concentration of substances set forth in chapter II, table B of the 2009 Ocean Plan, shall not be increased in marine sediments to levels that would degrade indigenous biota.
- e. The concentration of organic materials in marine sediments shall not be increased to levels that would degrade marine life.
- Nutrient materials shall not cause objectionable aquatic growths or degrade indigenous biota.
- g. Numerical water quality objectives established in Chapter II, Table B of the 2009 California Ocean Plan shall not be exceeded outside of the zone of initial dilution as a result of discharges from the Facility.

6. Biological Characteristics

a. Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded.

- b. The natural taste, odor, and color of fish, shellfish, or other marine resources used for human consumption shall not be altered.
- c. The concentration of organic materials in fish, shellfish, or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health.

7. Radioactivity

Discharge of radioactive waste shall not degrade marine life.

B. Groundwater Limitations (Not Applicable)

VI. PROVISIONS

A. Standard Provisions

Federal Standard Provisions. The Discharger shall comply with all Standard Provisions included in Attachment D of this Order.

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

- a. Neither the treatment nor the discharge of pollutants shall create a pollution, contamination, or nuisance as defined by CWC section 13050.
- 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 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 CWA section 510.
- 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 CWA section 311.
- i. The Discharger must 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.
- j. Discharge of wastes to any point other than specifically described in this Order is prohibited, and constitutes a violation thereof.
- k. 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 CWA and amendments thereto.
- I. 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.
- m. Oil or oily material, chemicals, refuse, or other polluting materials shall not be stored or deposited in areas where they may be picked up by rainfall and carried off of the property and/or discharged to surface waters. Any such spill of such materials shall be contained and removed immediately.
- n. A copy of these waste discharge specifications shall be maintained at the discharge facility so as to be available at all times to operating personnel.
- 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.
- p. The Discharger shall file with the Regional Water Board an ROWD at least 120 days before making any proposed change in the character, location or volume of the discharge.
- 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. CWC section 13385 provides that any person who violates a WDR 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.
- s. Pursuant to CWC section 13387(e), 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 and is subject to a fine of not less than\$5,000 nor more than \$50,000, imprisonment in the state prison, or both. For a subsequent conviction, such a person shall be punished by a fine of not more than \$100,000 per day of violation, by imprisonment in a state prison for two, four, or six years, or by both (fine and imprisonment).
- 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.

In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, maximum daily effluent limitation, or receiving water limitation of this Order, the Discharger shall notify the Watershed Regulatory Section chief at the Regional Water Board by telephone (213) 576-6616, electronically at dhung@waterboards.ca.gov, or by fax (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.

B. Monitoring and Reporting Program (MRP) Requirements

- The Discharger shall comply with the MRP, and future revisions thereto, in Attachment E
 of this Order.
- Documents that are less than 10 megabytes (MB) should be emailed to losangeles@waterboards.ca.gov. Documents that are 10 MB or larger should be transferred to a disk and mailed to the following address:

California Regional Water Quality Control Board Los Angeles Region 320 West 4th Street, Suite 200 Los Angeles, CA 90013

Attention: Information Technology Unit

Reference the reports to Compliance File No. CI-6432 to facilitate routing to the appropriate staff and file.

After notification by the State or Regional Water Board, the Discharger may be required to electronically submit self-monitoring reports (SMRs) and discharge monitoring reports (DMRs).

C. Special Provisions

1. Reopener Provisions

a. This Order may be reopened for modification to include an effluent limitation if monitoring establishes that the discharge causes, has the reasonable potential to cause, or contributes to an excursion above an Ocean Plan Table B water quality objective.

- b. This Order may be modified, revoked and reissued, or terminated for cause, including, but not limited to the following reasons:
 - 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.

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.

- c. 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.
- d. This Order may be reopened and modified to incorporate new limits based on future reasonable potential analyses to be conducted based on on-going monitoring data collected by the Discharger and evaluated by the Regional Water Board.
- e. This Order may be reopened and modified in accordance with the provisions set forth in 40 CFR parts 122 and 124, to incorporate requirements for the implementation of the watershed management approach.
- f. This Order may be modified, in accordance with the provisions set forth in 40 CFR parts 122 and 124, to include new Minimum Levels (ML).
- g. This Order may be reopened and modified to revise effluent limitations as a result of future Basin Plan Amendments, such as an update of water quality objectives or the adoption of a total maximum daily load (TMDL).
- h. 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 contribute to adverse impacts on water quality and/or beneficial uses of the receiving waters.
- i. This Order may be modified, revoked and reissued, or terminated in accordance with the provisions of 40 CFR parts 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.
- j. The waste discharged shall not cause a violation of any applicable water quality standards for receiving waters. If more stringent applicable water quality standards are promulgated or approved pursuant to CWA section 303, 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 incorporate new mass emission limitations based on the current SCI WWTP design capacity, provided that the

requirements in the SCI WWTP ASBS exclusion/exception are complied with and the Discharger requests and conducts an antidegradation analysis to demonstrate that the change is warranted.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

a. Toxicity Reduction Requirements

The Discharger shall prepare and submit a copy of the Discharger's initial investigation toxicity reduction evaluation (TRE) work plan to the Executive Officer of the Regional Water Board for approval within 90 days of the effective date of this Order. 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. At a minimum, the initial investigation TRE work plan must contain the provisions in Attachment G. This work plan shall describe the steps the Discharger intends to follow if toxicity is detected, and should include, at a minimum:

- 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;
- ii. 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,
- iii. If a toxicity identification evaluation (TIE) is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor).

If the effluent toxicity test result exceeds the limitation, then the discharger shall immediately implement accelerated toxicity testing that consists of six additional tests, approximately every two weeks, over a 12-week period. Effluent sampling for the first test of the six additional tests shall commence within five days of receipt of the test results exceeding the toxicity limitation.

If the results of any two of the six tests (any two tests in a 12-week period) exceed the limitation, the Discharger shall initiate a TRE.

If results of the implementation of the facility's initial investigation TRE work plan (as described above) indicate the need to continue the TRE/TIE, the Discharger shall expeditiously develop a more detailed TRE work plan for submittal to the Executive Officer within 15 days of completion of the initial investigation TRE.

Detailed toxicity testing and reporting requirements are contained in section V of the MRP (Attachment E).

b. ASBS Compliance

The State Water Board Ocean Unit staff requires that the Discharger shall monitor water quality (at the boundary of the exclusion zone) 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 agrees 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, it is important to note that 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 is required to collect salinity and temperature data from near the outfall.

The Discharger must collect temperature and salinity data from throughout the water column in the vicinity of the outfall in areas unaffected by the plume on a monthly basis during the summer for a period of two years to enable more relevant plume model mixing predictions. The data should be collected from areas of similar depth as the outfall for two years. Further details are in Attachment E (MRP).

d. Constituents of Emerging Concern (CEC) in Effluent

The Discharger shall conduct as special study to investigate the CECs studying the effluent discharged from the Facility. Within 90 days of the effective date of this Order, the Discharger shall develop a CEC special study work plan and submit it for Regional Water Board Executive Officer approval. Immediately upon approval of the work plan, the Discharger shall fully implement the work plan. Further details are provided in the MRP located in Attachment E.

e. Annual Special Studies

The Discharger and the Regional Water Board shall consult annually to determine the need for special studies. Each year, the Discharger shall submit proposals for any proposed special studies to the Regional Water Board by December 15, for the following year's monitoring effort (July through June). The following year, detailed scopes of work for proposals, including reporting schedules, shall be presented by the Discharger at a Spring Regional Water Board meeting, to obtain the Regional Water Board approval and to inform the public. Upon approval by the Regional Water Board, the Discharger shall implement its special study or studies.

f. 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 dryweather 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 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. 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 month, the date on which the peak flow occurred, the rate of that peak flow, and the total flow for the day;

- ii. The best estimate of when the monthly average daily dry-weather flow rate will equal or exceed the design capacity of the facilities; and
- iii. A schedule for studies, design, and other steps needed to provide additional capacity for waste treatment and/or disposal facilities before the waste flow rate equals the capacity of present units.

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

3. Best Management Practices and Pollution Prevention

a. Storm Water Pollution Prevention Plan (SWPPP) (Not Applicable)

b. Spill Clean-up Contingency Plan (SCCP)

Within 90 days, the Discharger is required to submit an updated SCCP that describes the activities and protocols to address clean-up of spills, overflows, and bypasses of untreated or partially treated wastewater from the Discharger's collection system or treatment facilities that reach water bodies, including dry channels and beach sands. At a minimum, the SCCP shall include sections on spill clean-up and containment measures, public notification, and monitoring. The Discharger shall review and amend the SCCP, 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 SCCP and the application of the SCCP to all spills during the year.

The updated SCCP shall include a conceptual monitoring protocol for spills greater than 10,000 gallons to beach sands to (1) define the extent of waste discharged to beach sands and adjacent surface waters and (2) to confirm the conclusion and effectiveness of the clean-up and/or mitigation measures. The plan shall include a protocol for coordination with the local health department during such an event. This component of the plan shall be posted on the website for stakeholder review and comment for 30 days prior to Executive Officer approval.

c. Pollutant Minimization Program (PMP)

Reporting protocols in the MRP (Attachment E) section VIII.B.4 describe sample results that are to be reported as DNQ or ND. Definitions for a reported ML and 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 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; or, results of benthic or aquatic organism tissue sampling) that a pollutant is present in the effluent above an effluent limitation and either of the following is true:

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

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

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

- 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, chapter 3, subchapter 14 (CWC section 13625).
- 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 alt, 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.

5. Special Provisions for Federally and Publicly-Owned Treatment Facilities

- a. This provision is based on 40 CFR part 123. The Regional Water Board may reopen the Order to modify conditions and requirements. Causes for modifications include the promulgation of new regulations, modification in sludge use or disposal practices, or adoption of new regulations by the State Regional Water Board, including revisions to the Basin Plan or Ocean Plan.
- b. Sludge Disposal Requirements
 - i. CWA section 405 and implementing regulations at 40 CFR part 503 require that producers of sewage sludge/biosolids meet certain reporting, handling, and use or disposal requirements. The state has not been delegated the authority to implement this program; therefore, USEPA is the implementing agency. This Order contains sewage sludge/biosolids requirement pursuant to 40 CFR 503 that are applicable to the Discharger.All sludge generated at the wastewater treatment plant must be disposed of, treated or applied to land in accordance with federal regulations contained in 40 CFR Part 503. These requirements are enforceable by USEPA.
 - iii. The Discharger shall ensure compliance with the requirements in State Water Board Order No. 2004-10-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.
 - iv. The Discharger shall comply, if applicable, with WDRs issued by other Regional Water Boards to which jurisdiction the biosolids are transported and applied.
 - v. The Discharger shall furnish this Regional Water Board with a copy of any report submitted to USEPA, the State Water Board or other Regional Water Board, with respect to municipal sludge or biosolids.
 - vi. Please refer to Attachment I Biosolids/Sludge Management
- c. Collection System Requirements
 - i. The Discharger's collection system is part of the system that is subject to this Order. As such, the Discharger must properly operate and maintain its collection system (40 CFR part 122.41(e)). The Discharger must report any non-compliance (40 CFR parts 122.41(l)(6) and (7)) and mitigate any discharge from the collection system in violation of this Order (40 CFR part 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

a. Initial Notification

This requirement is an appropriate mechanism to ensure that the agencies that have first responder duties are notified in a timely manner in order to protect public health and beneficial uses. For certain spills, overflows and bypasses, the discharger shall make notifications as required below:

- i. In accordance with the requirements of Health and Safety Code section 5411.5, for any discharges of sewage or other waste that results in a discharge, or probably will cause a discharge, to any waters of the state, to a drainage channel or a surface water, the Discharger shall, as soon as possible, but no later than two hours after becoming aware of the discharge, notify the State Office of Emergency Services, the local health officer or directors of environmental health with jurisdiction over affected water bodies, and the Regional Water Board.
- ii. In accordance with the requirements of CWC section 13271, the Discharger shall provide notification to the California Emergency Management Agency (Cal EMA) 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 releases to Cal EMA is (800) 852-7550
- The Discharger shall notify the Regional Water Board of any unauthorized release of sewage from its Facility 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. This initial notification does not need to be made if the Discharger has notified Cal EMA and the local health officer or the director of environmental health with jurisdiction over the affected water body. As soon as possible, but no later than 24 hours after becoming aware of a discharge to a drainage channel or a surface water, the Discharger shall submit to the Regional Water Board a certification that the State Office of Emergency Services and the local health officer or directors of environmental health with iurisdiction over the affected water bodies have been notified of the discharge. The phone number for reporting 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:

- 1. The location, date, and time of the release;
- 2. The water body(s) that received or will receive the discharge;
- 3. An estimate of the amount of sewage or other waste released and the amount that reached waters of the state at the time of notification;
- 4. If ongoing, the estimated flow rate of the release at the time of the notification;

- 5. The name, organization, phone number, and email address of the reporting representative; and,
- 6. A certification that the State Office of Emergency Services and the local health officer or directors of environmental health with jurisdiction over the affected water bodies have been notified of the discharge.

b. Monitoring

For spills, overflows and bypasses reported under section VI.C.5.c.i,, the Discharger shall monitor as required below:

- i. To define the geographical extent of spill's impact, the discharger shall obtain grab samples (if feasible, accessible, and safe) for all spills, overflows or bypasses of any volume that reach receiving waters; and for all spills, overflows or bypasses of 1,000 gallons or more. The Discharger shall analyze the samples for total and fecal coliform or E. coli, and enterococcus, and relevant pollutants of concern, upstream and downstream of the point of entry of the spill (if feasible, accessible, and safe). This monitoring shall be done on a daily basis from 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 Health Services authorizes cessation of monitoring.
- ii. The Discharger shall obtain a grab sample (if feasible, accessible, and safe) for spills, overflows, or bypasses of any volume that flowed to receiving waters, entered a shallow groundwater aquifer, or have the potential for public exposure; and for all spills, overflows or bypasses of 1,000 gallons or more. The Discharger shall characterize the sample for total and fecal coliform or E. coli, and enterococcus, and analyze relevant pollutants of concern depending on the area and nature of spills or overflows (if feasible, accessible, and safe).

c. Reporting

The Regional Water Board initial notification shall be followed by:

- i. As soon as possible, but not later than 24 hours, after becoming aware of an unauthorized discharge of sewage or other waste from its Facility to any waters of the State or of 1,000 gallons or more, the Discharger shall submit a report to the Regional Water Board by email at aanijielo@waterboards.ca.gov. If the discharge is 1,000 gallons or more, this report shall certify that the Cal EMA has been notified of the discharge in accordance with CWC section 13271 and section VI.C.5.c.i. This report shall also certify that the local health officer or director of environmental health with jurisdiction over the affected water body has been notified of the discharge in accordance with Health and Safety Code section 5411.5 and section VI.C.5.c.i. This report shall also include at a minimum the following information:
 - a. Agency, NPDES No., Order No., and MRP CLNo., if applicable;
 - b. The location, date and time of discharge;
 - c. The water body(s) 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 waters of the state;
- f. The Cal EMA control number and the date and time that notification of the incident was provided to the Cal EMA; and,
- g. The name of the local health officer or director of environmental health 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 working days after disclosure of the incident is required. Submission to the California Integrated Water Quality System (CIWQS) SSO event number shall satisfy this requirement. Within 30 days after submitting the preliminary report, the Discharger shall submit the final written report to this Regional Water Board. A copy of the final written report for a given incident already submitted to a statewide general WDR for wastewater collection system agencies may be submitted to the Regional Water Board to satisfy this requirement. The final written report shall document the information required in paragraph d. below, monitoring results and any other information required in the 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 report.
- iii. The Discharger shall include a certification in the annual summary report (due according to the schedule in the MRP) stating 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 preventative 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, recycling 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, or bypass, including gross volume, amount recovered ,amount not recovered, and 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 under the SSO WDR.

e. Activities Coordination

In addition, the Regional Water Board expects that the Discharger 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, and reporting requirements (if applicable); and, the SSO WDR.

f. Consistency with SSO WDRs

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

The requirements contained in this Order in sections VI.C.3.b. (Spill Contingency Plan Section), VI.C.4. (Construction, Operation and Maintenance Specifications Section), and VI.C.6. (Spill Reporting Requirements) are intended to be consistent with the requirements of the SSO WDR. The Regional Water Board recognizes that there may be some overlap between these NPDES permit provisions and SSO WDR requirements, at least as related to the collection systems. The requirements of the SSO WDR are considered the minimum thresholds (State Water Board Order No. 2006-0003-DWQ). To encourage efficiency, the Regional Water Board will accept the documentation prepared by the Permittees under the SSO WDR for compliance purposes, as satisfying the requirements in sections VI.C.3.b., VI.C.4., and VI.C.6., provided the monitoring more stringent provisions requirements contained in this NPDES permit Order in sections IV.9.B.d. and IV.9.B.e. are also addressed. Pursuant to the SSO WDR, State Water Board Order No. 2006-0003-DWQ, section D., provision 2.(iii) and (iv), the provisions of this NPDES permit supercede the SSO WDR, for all purposes, as satisfying the requirements in sections VI.C.3.b, VI.C.4, and CI.C.6, provided any more specific or stringent provisions enumerated in this Order have also been addressed.

Regardless of the coverage obtained under the SSO WDR, the Discharger's collection system is a part of the federally-owned treatment works 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), report any non-

compliance (40 CFR parts 122.41(I)(6) and (7)), and mitigate any discharge from the collection system in violation of this Order (40 CFR part 122.41(d)).

g. Standby or Emergency Power

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.

7. 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 reportable 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 reportable pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the RML.

1. Compliance with Effluent Limitations expressed as Single Constituent

Dischargers are deemed out of compliance with an effluent limitation if the concentration of the monitoring sample is greater than the effluent limitation and greater than or equal to the reported ML.

2. Compliance with Effluent Limitations expressed as Sum of Several Constituents

Dischargers are out of compliance with an effluent limitation that applies to the sum of a group of chemicals (e.g., PCBs) 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 ND or DNQ.

B. Multiple Sample Data

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

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

C. Sufficient Sampling and Analysis

Sufficient sampling and analysis shall be required to determine compliance with the effluent limitation. If the analytical result of any single sample (daily discharge) monitored monthly, quarterly, semiannually, or annually, exceeds the average monthly effluent limitation (AMEL), the Discharger shall increase sampling frequency to weekly until compliance with the AMEL is demonstrated. All analytical results shall be reported as specified in the MRP. 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 alleged 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 taken 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. 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 taken, 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 shall 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 (or when applicable, the median determined by subsection B above for multiple sample data) of daily discharges over a calendar week exceeds the AWEL for a given parameter, this will represent a single alleged violation, though the Discharger may be considered out of compliance for each day of that week for that parameter, resulting in seven days of non-compliance. If only a single sample is taken during the calendar week and the analytical result for that sample exceeds the AWEL, the Discharger may be considered out of compliance for that calendar week. The Discharger will only be considered out of compliance for days when the discharge occurs. For any one calendar week during which no sample (daily discharge) is taken, 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 the calendar month will be carried forward to the next month in order to calculate and report a consecutive seven-day average value on Saturday.

E. Maximum Daily Effluent Limitation (MDEL)

If a daily discharge (or when applicable, determined by subsection B above for multiple sample data of a daily discharge) exceeds the MDEL for a given parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for that day for that parameter. 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, the Discharger may 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 taken 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, the Discharger may 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 taken 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 or a given parameter, the Discharger may 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 taken. If only a single sample is taken during a given 180-day period and the analytical result for that sample exceeds the six-month median, the Discharger may be considered out of compliance for the 180-day period. For any 180-day period during which no sample is taken, no compliance determination can be made for the six-month median effluent limitation.

I. 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})] x 100 %

J. 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.

K. 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" above) in the monitoring sample is greater than the effluent limitation and greater than or equal to the RML.

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

Dischargers may be considered out of compliance with an effluent limitation that applies to the sum of a group of chemicals (e.g., PCBs) 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.

M. Mass Emission Rate

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

Daily discharge mass emission rate (lb/day) =
$$\frac{8.337}{N} \sum_{i=1}^{N} Q_i C_i$$

Daily discharge mass emission rate (kg/day) =
$$\frac{3.785}{N} \sum_{i=1}^{N} Q_i C_i$$

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 taken in 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:

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

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.

N. Bacterial Standards and Analysis

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

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

where n is the number of days samples were collected during the period and C is the concentration of bacteria (MPN/100 mL or CFU/100 mL) found on each day of sampling.

- 2. For bacterial analyses, sample dilutions should be performed so the expected range of values is bracketed (for example, with multiple tube fermentation method or membrane filtration method, 2 to 16,000 per 100 ml for total and fecal coliform, at a minimum, and 1 to 1000 per 100 ml for enterococcus). The detection methods used for each analysis shall be reported with the results of the analyses.
- 3. Detection methods used for coliforms (total and fecal) shall be those presented in Table 1A of 40 CFR part 136 (revised May 18, 2012), unless alternate methods have been approved by USEPA pursuant to 40 CFR part 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 part 136 (revised May 18, 2012) or in 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.

O. 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.
- For purpose outside of CWC section 13385, subsections (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, subsections (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).