

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
Facility Address	Naval Auxiliary Landing Field, San Clemente Island
	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:	<u>180 days prior to the Order expiration date</u>
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.

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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.

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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 communitation, equalization, activated

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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.~~ The daily average discharge for each month is not authorized in excess of 0.025 mgd.

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).

Table 5 Description of Discharge Point 002

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

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.	<u>Existing:</u> 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). <u>Potential:</u> 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:

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Table 7 Ocean Plan Beneficial Uses

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.

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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 (SSOs)

~~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.~~ Sanitary sewer reporting requirements specific to the SCI WWTP federally-owned treatment works (FOTW) has been provided in Attachment K. Both Attachment K and general spill reporting requirements (section VI.C.6) shall be complied with in the event of an SSO.

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.

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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;
2. 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).

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- 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 (l) and (m) of the CWC.
- L.** The discharge of any substances in concentrations toxic to animal or plant is prohibited.

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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 three 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.

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Table 8 Effluent Limitations and Performance Goals for Discharge Point 002

Parameter	Units	Effluent Limitations ¹					Performance Goals ²
		Average Monthly	Average Weekly	Maximum Daily ³	Instantaneous Minimum ⁴	Instantaneous Maximum ⁴	Average Monthly
Major Wastewater Constituents							
Biochemical Oxygen Demand (BOD) 5-day @ 20°C ⁵	mg/L	30	45	--	--	--	--
	lbs/day ⁶	6.3	9.4	19	--	--	--
Total Suspended Solids (TSS) ^{5,7}	mg/L	30	45	--	--	--	8.0
	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	--	--	75	2.0
	lbs/day ⁶	5.2	8.3	--	--	15	--
Settleable Solids ⁸	ml/L	1.0	1.5	--	--	3.0	--
Turbidity ^{7,8}	NTU	75	100	--	--	225	3.0
Marine Aquatic Life 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.

³ The 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(l)(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.~~

Parameter	Units	Effluent Limitations ¹					Performance Goals ²
		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	--	--	--	--	--	5.1
Endosulfan ^{11,17}	µg/L	--	--	--	--	--	0.022

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

¹¹ 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.

¹² 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.

¹³ 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:

$$\text{Log } y = -0.43(\text{log } x) + 1.8$$

Where: y = the water quality objective (in µg/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.

¹⁴ The total chlorine residual daily discharge limitation was carried over from Order No. 00-090, Table a, per 40 CFR 122.44(l)(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.

¹⁵ 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.

Parameter	Units	Effluent Limitations ¹					Performance Goals ²
		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	4.5	2.0	2.5	--	--	--
Chronic Toxicity ¹⁹	TUc	--	--	137	--	--	--
Radioactivity ²⁰ Not to exceed limits specified in title 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	--	--	--	--	--	--
Tritium	PCi/L	--	--	--	--	--	--
Strontium-90	PCi/L	--	--	--	--	--	--
Uranium	PCi/L	--	--	--	--	--	--
Human Health Toxicants – 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	--	--	--	--	--	5.1

¹⁷ Please refer to Attachment A for definitions.

¹⁸ Expressed as Acute Toxicity Units (TUa)

$TUa = 100/LC50$

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.

²⁰ Analyze these radiochemicals by the following USEPA methods: method 900.0 for gross alpha and gross beta, method 903.0 or 903.1 for radium-226, method 904.0 for radium-228, method 906.0 for tritium, method 905.0 for strontium-90, and method 908.0 for uranium. 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.

Parameter	Units	Effluent Limitations ¹					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	--	--	--	--	--	5.1
Dichlorobenzenes ^{11,21}	µg/L	--	--	--	--	--	5.1
Diethyl phthalate ¹¹	µg/L	--	--	--	--	--	5.1
Dimethyl phthalate ¹¹	µg/L	--	--	--	--	--	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 Toxicants – Carcinogens							
Acrylonitrile ¹¹	µg/L	--	--	--	--	--	3.0
Aldrin ²²	µg/L	0.003	--	--	--	--	--
Benzene ¹¹	µg/L	--	--	--	--	--	1.0
Benzidene ²²	µg/L	0.0005	--	--	--	--	--
Beryllium ¹¹	µg/L	--	--	--	--	--	0.50
Bis(2-chloroethyl) ether ¹¹	µg/L	--	--	--	--	--	5.1
Bis(2-ethylhexyl) phthalate ¹¹	µg/L	--	--	--	--	--	12
Carbon tetrachloride ¹¹	µg/L	--	--	--	--	--	1.0
Chlordane ^{22,23}	µg/L	0.0032	--	--	--	--	--

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

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

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

Parameter	Units	Effluent Limitations ¹					Performance Goals ²
		Average Monthly	Average Weekly	Maximum Daily ³	Instantaneous Minimum ⁴	Instantaneous Maximum ⁴	Average Monthly
Chlorodibromomethane ¹¹	µg/L	--	--	--	--	--	29
Chloroform ¹¹	µg/L	--	--	--	--	--	47
DDT ²⁴	µg/L	0.024	--	--	--	--	--
	lbs/day ⁶	5.0 x 10 ⁻⁶	--	--	--	--	--
1,4-Dichlorobenzene ¹	µg/L	--	--	--	--	--	5.1
3,3'-Dichlorobenzidine ²²	µg/L	1.1	--	--	--	--	--
1,2-Dichloroethane ¹¹	µg/L	--	--	--	--	--	1.0
1,1-Dichloroethylene ¹	µg/L	--	--	--	--	--	1.0
Dichlorobromomethane ¹¹	µg/L	--	--	--	--	--	43
Dichloromethane ¹	µg/L	--	--	--	--	--	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-Diphenylhydrazine ¹¹	µg/L	--	--	--	--	--	5.1
Halomethanes ^{11, 25}	µg/L	--	--	--	--	--	69
Heptachlor ²²	µg/L	0.00069	--	--	--	--	--
Heptachlor epoxide ²²	µg/L	0.0027	--	--	--	--	--
Hexachlorobenzene ²²	µg/L	0.029	--	--	--	--	--
Hexachlorobutadiene ¹¹	µg/L	--	--	--	--	--	5.1
Hexachloroethane ¹¹	µg/L	--	--	--	--	--	5.1
Isophorone ¹¹	µg/L	--	--	--	--	--	5.1
N-Nitrosodimethylamine 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.

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

Parameter	Units	Effluent Limitations ¹					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	4.2	--	--	--	--	--
PCBs ^{11,22,27}	µg/L	0.0026	--	--	--	--	--
TCDD equivalents ²⁸	µg/L	5.3×10^{-7}	--	--	--	--	--
	lbs/day ⁶	1.1×10^{-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

²⁶ PAHs (polynuclear aromatic hydrocarbons) shall mean the sum of acenaphthylene, anthracene, 1, 2-benzanthracene, 3,4 benzo[fluoranthene, benzo[k] fluoranthene, 1, 12-benzoperylene, benzo[a]pyrene, chrysene, dibenzo[ah]anthracene, fluorene, indeno[1, 2, 3-cd]pyrene, phenanthrene and pyrene.

²⁷ 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
1,2,3,7,8-penta CDF	0.05
2,3,4,7,8-penta CDF	0.5
2,3,7,8-hexa CDFs	0.1
2,3,7,8-hepta CDFs	0.01
octa CDF	0.001

- 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

a. 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

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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.

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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.
- b. 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.
- f. 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)

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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.
- l. These requirements do not exempt the operator of the waste disposal facility from compliance with any other laws, regulations, or ordinances which may be

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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.
- o. 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

1. The Discharger shall comply with the MRP, and future revisions thereto, in Attachment E of this Order.
2. 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.

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- 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:

- i. 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

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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 a 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 dry-weather flow equals or exceeds 75 percent of the design capacity of waste treatment and/or disposal facilities. However, for the SCI WWTP, the authorized 0.025 mgd already exceeds the 75 percent capacity of the 0.03 mgd tertiary treatment plant. In the case of the SCI WWTP, the written report shall be prepared prior to any proposed WWTP changes or construction related to expansion on the island that could increase the daily flow rate to equal or exceed the design capacity. The Discharger's senior administrative officer shall sign a letter, which transmits that report and certifies that the discharger's policy-making body is adequately informed of the report's contents. The report shall include the following:

- i. The average daily flow for the 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. Refer to spill reporting requirements in section VI.C.6 and Attachment K for additional requirements and information.

~~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,

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- 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:

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

4. Construction, Operation and Maintenance Specifications

- a. Wastewater treatment facilities subject to this Order shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to CCR title 23, 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

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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.

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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, it is recommended that 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, it is recommended that 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
- iii. 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 not later than 24 hours after becoming aware of a discharge to a drainage channel or a surface water, it is recommended that 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 jurisdiction 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;

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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, it is recommended that 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. It is also recommended that 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. The recommended contents of this report shall also include at a minimum the following information:
 - a. Agency, NPDES No., Order No., and MRP CI No., if applicable;
 - b. The location, date and time of 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, as required by Attachment K, 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 in accordance with Attachment K.

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 recommended coordination listed in Attachment K.

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, p~~Pursuant to federal regulations, the Discharger must properly operate and maintain its collection system (40 CFR 122.41 (e)), report any non-compliance (40 CFR 122.41(1)(6) and (7)), and mitigate any discharge from the collection system in violation of this NPDES permit (40 CFR 122.41(d)). As such, the Discharger must comply with all requirements in Attachment K.

The requirements contained in this Order in Attachment K, 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 VI.C.6., provided any more specific or stringent provisions enumerated in this Order have also been addressed.~~

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~~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(l)(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)

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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

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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).

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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 for 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:

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

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:

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

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

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:

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

in which N is the number of component waste streams. Q_i and C_i are the flow rate (mgd) and the constituent concentration (mg/L), respectively, which are associated with each of the N waste streams. Q_t is the total flow rate of the combined waste streams.

N. Bacterial Standards and Analysis

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

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

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

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

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2. A Discharger may assert SOU to limit liability only for those violations which the Discharger submitted notice of the upset as required in provision V.E.2(b) of Attachment D – Standard Provisions.
3. For purpose outside of CWC section 13385, 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).

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A.

ATTACHMENT A – DEFINITIONS

Acute Toxicity

a. Acute Toxicity (TUa)

Expressed in Toxic Units Acute (TUa)

$$TUa = \frac{100}{96\text{-hr LC } 50\%}$$

b. Lethal Concentration 50% (LC 50)

LC 50 (percent waste giving 50% survival of test organisms) shall be determined by static or continuous flow bioassay techniques using standard marine test species as specified in Ocean Plan Appendix III. If specific identifiable substances in wastewater can be demonstrated by the discharger as being rapidly rendered harmless upon discharge to the marine environment, but not as a result of dilution, the LC 50 may be determined after the test samples are adjusted to remove the influence of those substances.

When it is not possible to measure the 96-hour LC 50 due to greater than 50 percent survival of the test species in 100 percent waste, the toxicity concentration shall be calculated by the expression:

$$TUa = \frac{\log (100 - S)}{1.7}$$

where:

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

Areas of Special Biological Significance (ASBS)

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

Average Monthly Effluent Limitation (AMEL)

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

Average Weekly Effluent Limitation (AWEL)

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

Best Management Practice (BMP)

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

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Best Professional Judgment (BPJ)

BPJ is the method used by permit writers to develop technology-based NPDES permit conditions on a case-by-case basis using all reasonably available and relevant data.

Bioaccumulative Pollutants

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

Bioassay

A test used to evaluate the relative potency of a chemical or a mixture of chemicals by comparing its effect on a living organism with the effect of a standard preparation on the same type of organism.

Biochemical Oxygen Demand (BOD)

A measurement of the amount of oxygen utilized by the decomposition of organic material, over a specified time period (usually 5 days) in a wastewater sample; it is used as a measurement of the readily decomposable organic content of a wastewater.

Biosolids

Sewage sludge that is used or disposed through land application, surface disposal, incineration, or disposal in a municipal solid waste landfill.

Bypass

Bypass means that the intentional diversion of waste streams from any portion of a treatment (or pretreatment) facility whose operation is necessary to maintain compliance with the terms and conditions of this Order.

Chlordane

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

Chlorinated Phenolic Compounds

Chlorinated phenolic compounds shall mean the sum of 2-chlorophenol, 2,4-dichlorophenol, 4-chloro-3-methylphenol, 2,4,6-trichlorophenol, and pentachlorophenol.

Chronic Toxicity

This parameter shall be used to measure the acceptability of waters for supporting a healthy marine biota until improved methods are developed to evaluate biological response.

a. Chronic Toxicity (TUc)

Expressed as Toxic Units Chronic (TUc)

$$TUc = \frac{100}{NOEL}$$

b. No Observed Effect Level (NOEL)

The NOEL is expressed as the maximum percent effluent or receiving water that causes no observable effect on a test organism, as determined by the result of a critical life stage toxicity test listed in Ocean Plan Appendix III, Table III-1.

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Clean Water Act (CWA)

The Clean Water Act is an act passed by the U.S. congress to control water pollution. It was formerly referred to as the Federal Water Pollution control Act of 1972 or Federal Water Pollution Control Act Amendments of 1972 (Public Law 92-500), 33 U.S.C. 1251 et seq., as amended by: Public Law 96-483; Public Law 97-117; Public Laws 95-217, 97-117, 97-440, and 100-04.

Code of Federal Regulation (CFR): A codification of the final rules published daily in the Federal Register. Title 40 of the CFR contains the environmental regulations.

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

Composite sample means, for other than flow rate measurement,

- a. A combination of at least eight individual portions obtained at equal time intervals for 24 hours, or the duration of the discharge, whichever is shorter. The volume of each individual portion shall be directly proportional to the discharge flow rate at the time of sampling; or,
- b. A combination of at least eight individual portions of equal volume obtained over a 24-hour period. The time interval will vary such that the volume of wastewater discharged between sampling remains constant.

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

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

Conventional Pollutants

Pollutants typical of municipal sewage, and for which municipal secondary treatment plants are typically designed; defined at 40CFR part 401.16 as BOD, TSS, fecal coliform, bacteria, oil and grease, and pH.

Daily Discharge

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

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

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

Dichlorodiphenyltrichloroethane (DDT)

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

Degrade

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

Detected, but Not Quantified (DNQ)

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

Dichlorobenzenes

Shall mean the sum of 1,2- and 1,3-dichlorobenzene.

Downstream Ocean Waters

Waters downstream with respect to ocean currents.

Dredged Material

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

Enclosed Bays

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

Endosulfan

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

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

Federal Facilities are any buildings, installations, structures, land, public works, equipment, aircraft, vessels, and other vehicles and property, owned by, or constructed or manufactured for the purpose of leasing to, the federal government.

Grab Sample

Grab Sample is defined as any individual sample collected in a short period of time not exceeding 15 minutes. Grab samples shall be collected during normal peak loading conditions for the parameter of

interest, which may or may not be during hydraulic peaks. It is used primarily in determining compliance with the maximum daily effluent limitations and the instantaneous maximum effluent limitations.

Halomethanes

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

Hazardous Substance means any substance designated under 40 CFR part 116 pursuant to section 311 of the Clean Water Act and/or a hazardous waste, as defined in 40 CFR part 116 pursuant to section 311 of the Clean Water Act and/or a hazardous waste, as defined in 40 CFR part 261.3

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

Initial Dilution

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

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

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

Instantaneous Maximum Effluent Limitation

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

Instantaneous Minimum Effluent Limitation

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

Kelp Beds

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

Land Application is the spraying or spreading of sewage sludge onto the land surface; the injection of sewage sludge below the land surface; or the incorporation of sewage sludge into the soil so that the sewage sludge can either condition the soil or fertilize crops or vegetation grown in the soil.

Local Limits: Conditional discharge limits imposed by municipalities upon industrial or commercial facilities that discharge to the municipal sewage treatment system.

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Mariculture

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

Material

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

Maximum Daily Effluent Limitation (MDEL)

The highest allowable daily discharge of a pollutant.

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

Method Detection Limit (MDL)

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

Minimum Level (ML)

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

Natural Light

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

Nearshore is defined as the zone bounded by the shoreline and a line 1,000 feet from the shoreline or the 30-foot depth contours, whichever is further from the shoreline.

Non-Chlorinated Phenolic Compounds shall mean the sum of 2,4-dimethylphenol, 2-nitrophenol, 4-nitrophenol, 2,4-dinitrophenol, 2-methyl-4,6-dinitrophenol, and phenol.

Nonconventional Pollutants: All pollutants that are not included in the list of conventional or toxic pollutants in 40CFR part 401. These include pollutants such as chemical oxygen demand (COD), total organic carbon (TOC), nitrogen, and phosphorus.

Not Detected (ND)

Those sample results less than the laboratory's MDL.

Ocean Waters

The territorial marine waters of the State as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. If a discharge outside the territorial waters of

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the state could affect the quality of the waters of the state, the discharge may be regulated to assure no violation of the Ocean Plan will occur in ocean waters.

PAHs (polynuclear aromatic hydrocarbons)

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

Pass Through is defined as the discharge through the federally-owned treatment works (FOTW) to navigable waters which, alone or in conjunction with discharges from other sources, is a cause of a violation of FOTW's NPDES permit.

PCBs (polychlorinated biphenyls)

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.

Pollutant Minimization Program (PMP)

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

Pretreatment: The reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into a federally or publicly owned treatment works (40 CFR § 403.3(q)).

Priority Pollutants are those constituents referred to in 40 CFR part 401.15; a list of these pollutants is provided as Appendix A to 40 CFR part 423.

Publicly Owned Treatment Works (POTW): A treatment works, as defined by section 212 of the CWA, that is owned by the State or municipality. This definition includes any devices and systems used in the storage, treatment, recycling, and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes, and other conveyances only if they convey wastewater to a POTW treatment plant (40 CFR part 403.3).

Rare, threatened or Endangered species (RARE) means that one or more rare species utilize all ocean, bays, estuaries, and coastal wetlands for foraging and/or nesting.

Reported Minimum Level (RML)

The ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Regional Water Board either from Appendix II of the Ocean Plan in accordance with section III.C.5.a. of the Ocean Plan or established in accordance with section III.C.5.b. of the Ocean Plan. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any

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matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the reported ML.

Sanitary Sewer: a pipe or conduit (sewer) intended to carry wastewater or water-borne wastes from homes, businesses, and industries to the FOTW.

Sanitary Sewer Overflows (SSO): Untreated or partially treated sewage overflows from a sanitary sewer collection system.

Satellite Collection System

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

Secondary Treatment Standards: Technology-based requirements for direct discharging municipal sewage treatment facilities. Standards are based on a combination of physical and biological processes typical for the treatment of pollutants in municipal sewage. Standards are expressed as a minimum level of effluent quality in terms of: BOD5, total suspended solids (TSS), and pH (except as provided for special considerations and treatment equivalent to secondary treatment).

Severe Property Damage means substantial physical damage, to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a “bypass” or “overflow.” It does not mean economic loss caused by delays in production.

Shellfish

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

Significant Difference

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

Six-Month Median Effluent Limitation

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

State Water Quality Protection Areas (SWQPAs)

Non-terrestrial marine or estuarine areas designated to protect marine species or biological communities from an undesirable alteration in natural water quality. All AREAS OF SPECIAL BIOLOGICAL SIGNIFICANCE (ASBS) that were previously designated by the State Water Board in Resolution No.s 74-28, 74-32, and 75-61 are now also classified as a subset of State Water Quality Protection Areas and require special protections afforded by the Ocean Plan.

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TCDD Equivalents

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

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

Technology-based Effluent Limit: A permit limit for a pollutant that is based on the capability of a treatment method to reduce the pollutant to a certain concentration.

Total Maximum Daily Load (TMDL): The amount of pollutant, or property of a pollutant, from point, nonpoint, and natural background sources, that may be discharged to a water quality-limited receiving water. Any pollutant loading above the TMDL results in violation of applicable water quality standards.

Toxic Pollutant: Pollutants or combinations of pollutants, including disease-causing agents, which after discharge and upon exposure, ingestion, inhalation or assimilation into any organism, either directly – from the environment or indirectly by ingestion through food chains, will, on the basis of information available to the Administrator of USEPA, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions, (including malfunctions in reproduction) or physical deformations, in such organisms or their offspring. Toxic pollutants also include those pollutants listed by the Administrator under CWA section 307(a)(1) or any pollutant listed under section 405(d) which relates to sludge management.

Toxicity Reduction Evaluation (TRE)

A study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an evaluation of facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. (A TIE is a set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.)

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with the Order because of factors beyond the reasonable control of the permittee. It does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities,

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inadequate treatment facilities, lack of preventive maintenance, careless or improper operation, or those problems the discharger should have foreseen.

Waste

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

Wasteload Allocation (WLA): The proportion of a receiving water's total maximum daily load that is allocated to one of its existing or future point sources of pollution.

Water Quality-Based Effluent Limit (WQBEL): A value determined by selecting the most stringent of the effluent limits calculated using all applicable water quality criteria (e.g., aquatic life, human health, and wildlife) for a specific point source to a specific receiving water for a given pollutant.

Water Quality Criteria: Comprised of numeric and narrative criteria. Numeric criteria are scientifically derived ambient concentrations developed by USEPA or States for various pollutants of concern to protect human health and aquatic life. Narrative criteria are statements that describe the desired water quality goal.

Water Quality Standard: A law or regulation that consists of the beneficial use or uses of a water body, the numeric and narrative water quality criteria that are necessary to protect the use or uses of that particular water body, and an antidegradation statement.

Water Reclamation

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

Whole Effluent Toxicity (WET): The total toxic effect of an effluent measured directly with a toxicity test.

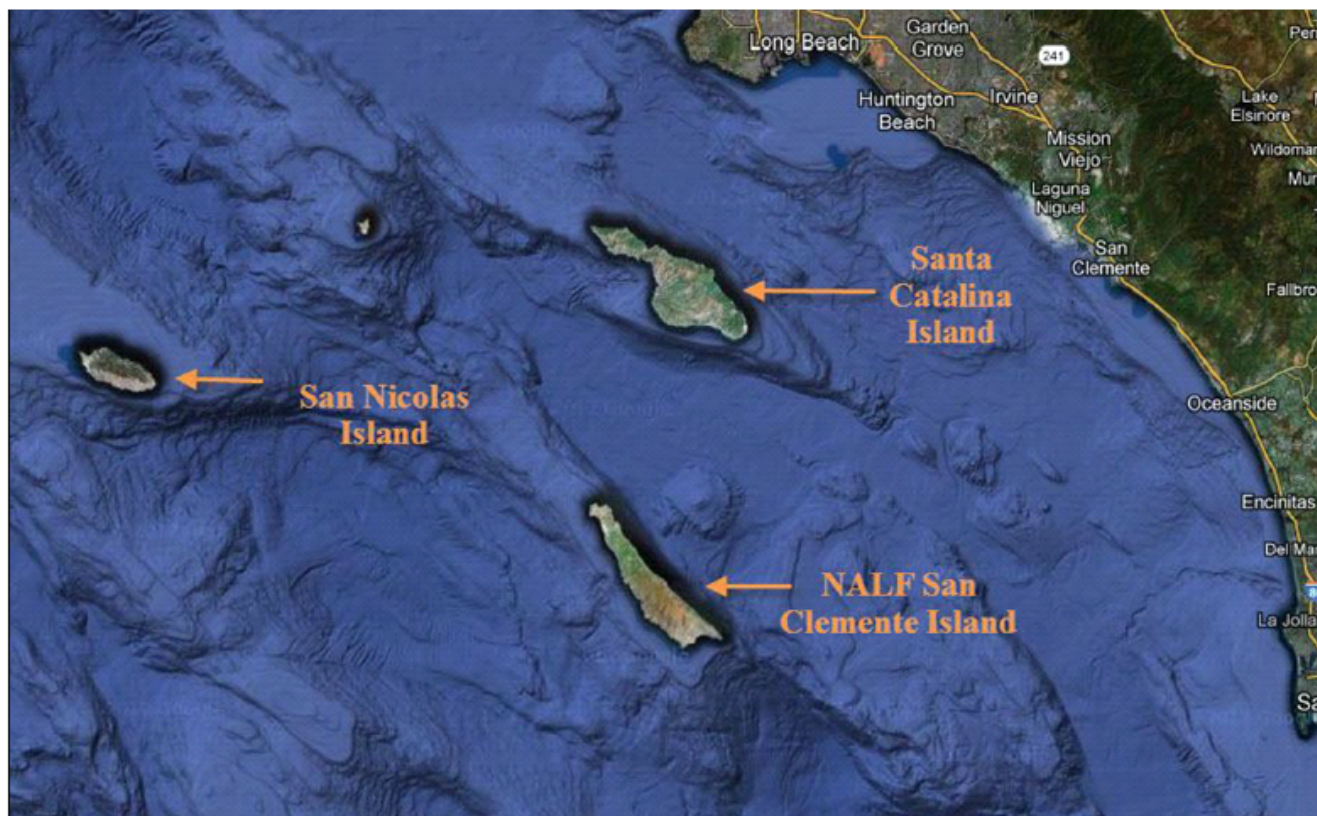
Zone of Initial Dilution (ZID) means, for purposes of designating monitoring stations, the region within a horizontal distance equal to a specified water depth (usually depth of outfall or average depth of diffuser) from any point of the diffuser or end of the outfall and the water column above and below that region, including the underlying seabed.

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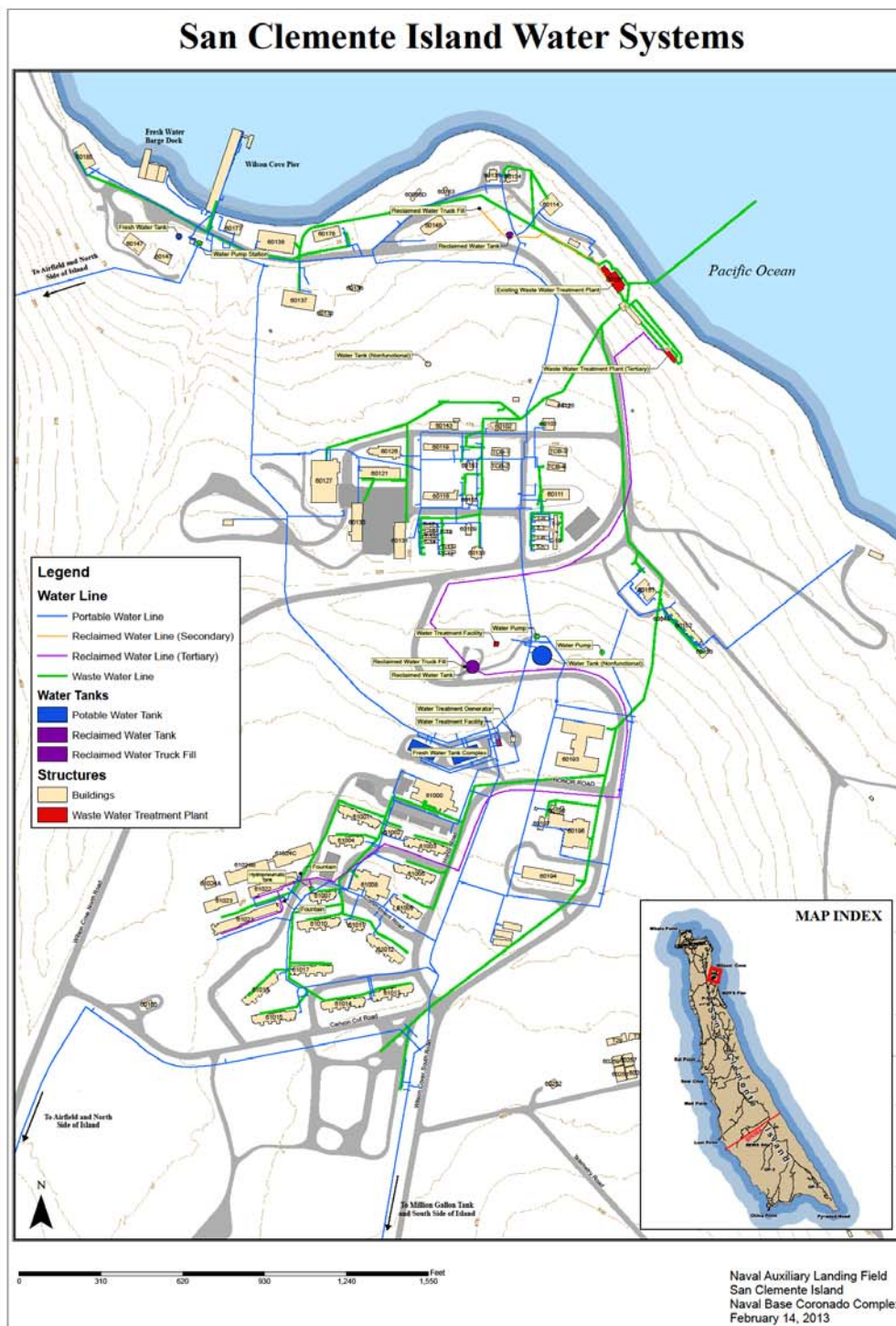
ATTACHMENT B – MAPS

Location Map for NALF San Clemente Island



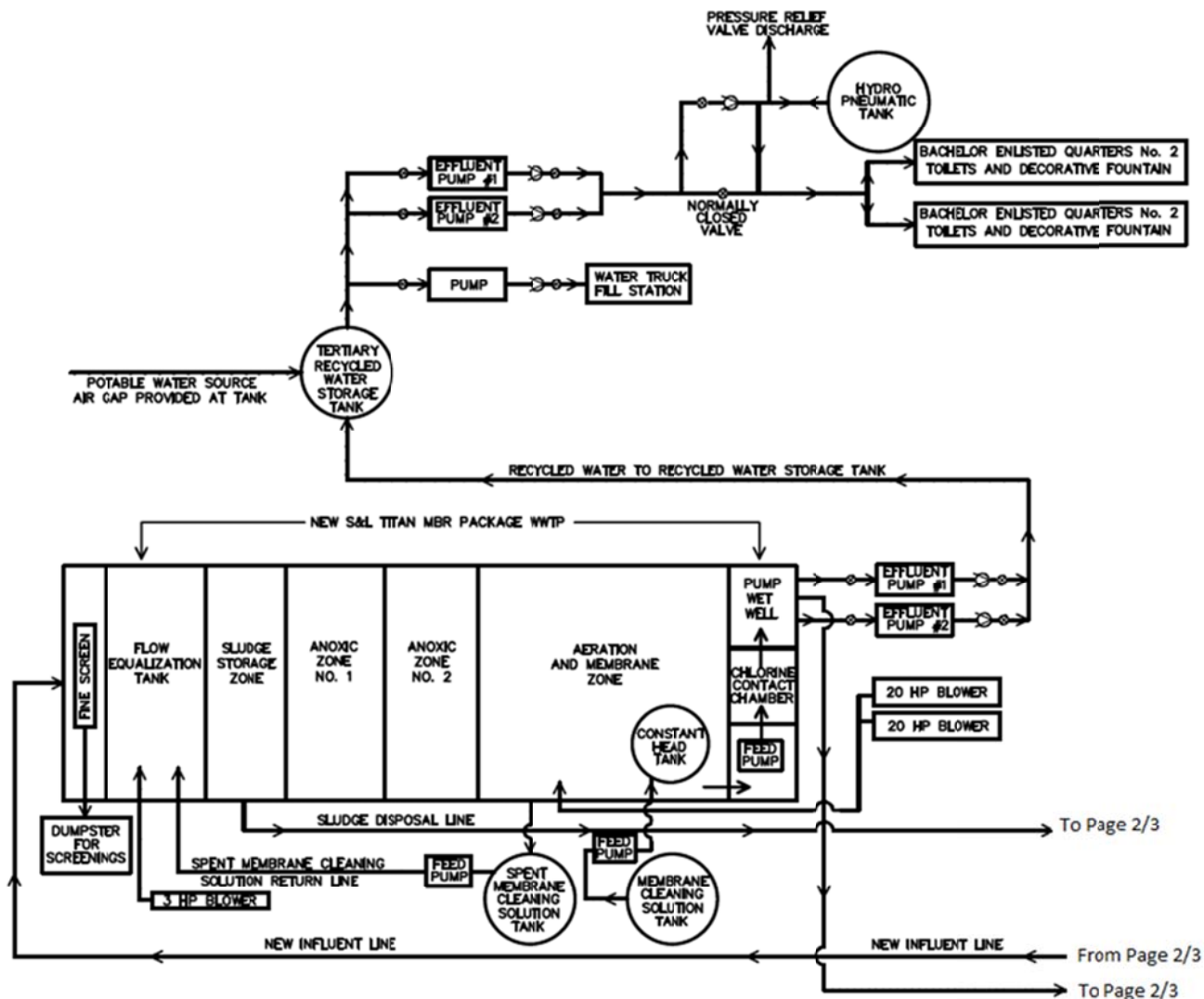
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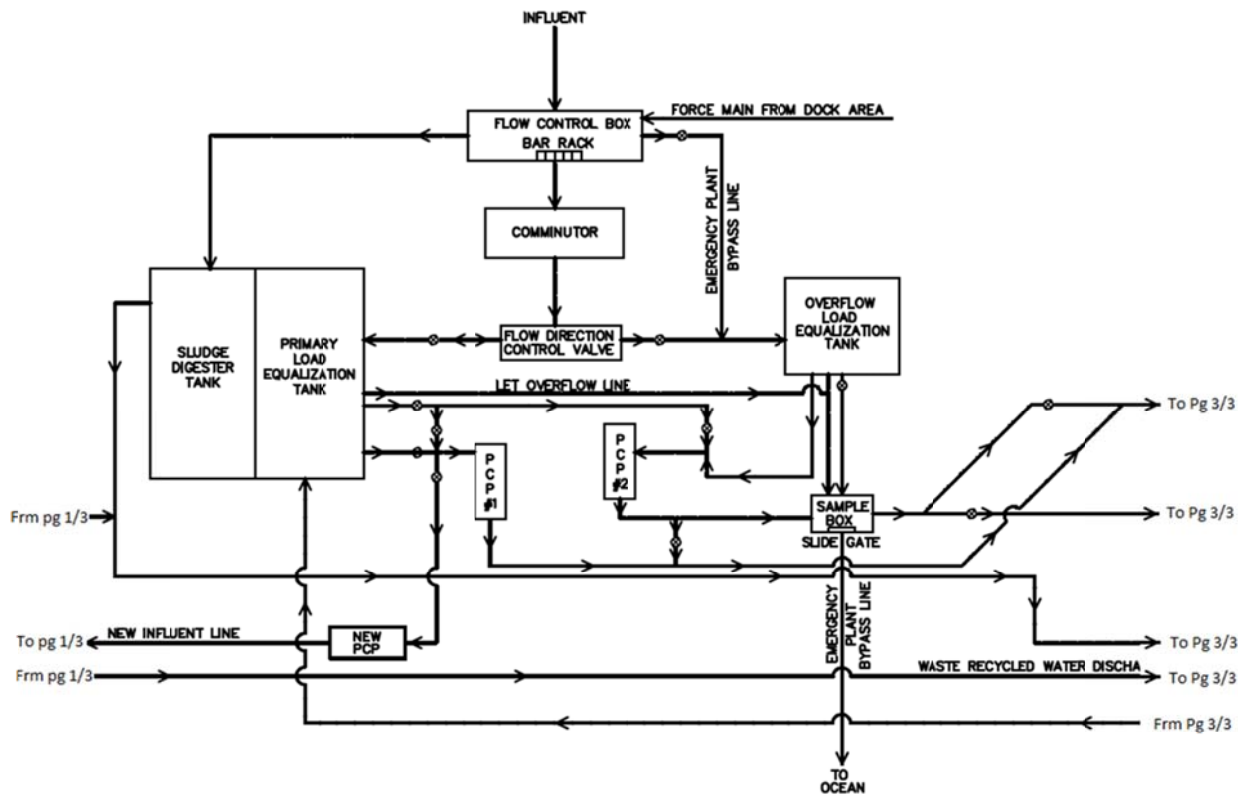
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ATTACHMENT C – FLOW SCHEMATIC

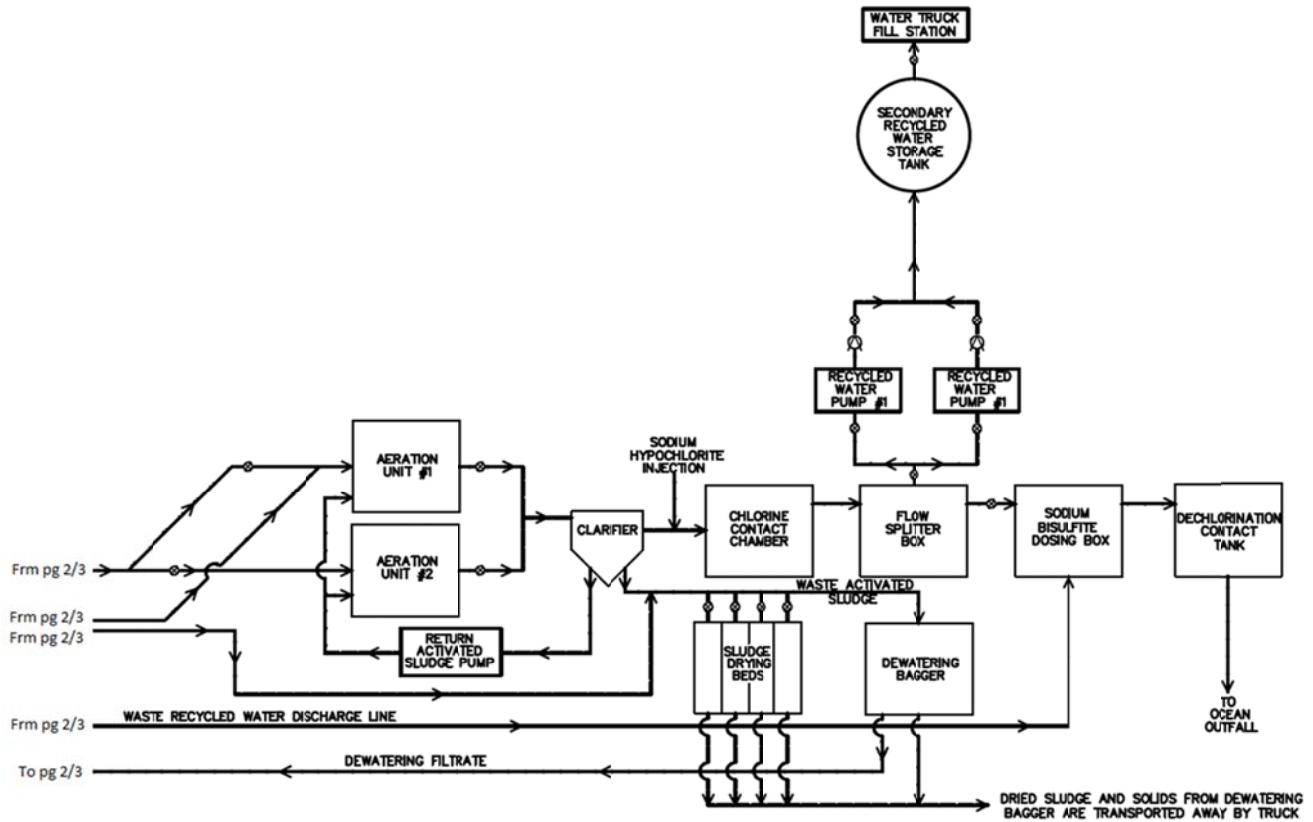


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ATTACHMENT D – STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. DUTY TO COMPLY

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

B. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE

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

C. DUTY TO MITIGATE

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

D. PROPER OPERATION AND MAINTENANCE

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

E. PROPERTY RIGHTS

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

F. INSPECTION AND ENTRY

The Discharger shall allow the Regional Water Board, State Water Board, United States Environmental Protection Agency (USEPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to (40 CFR part 122.41(i); CWC part 13383):

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

G. BYPASS

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

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- a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. (40 CFR part 122.41(m)(3)(i).)
- b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). (40 CFR part 122.41(m)(3)(ii).)

H. UPSET

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

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

II. STANDARD PROVISIONS – PERMIT ACTION

A. GENERAL

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

B. DUTY TO REAPPLY

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

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C. TRANSFERS

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

III. STANDARD PROVISIONS – MONITORING

- A.** Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 CFR part 122.41(j)(1).)
- B.** Monitoring results must be conducted according to test procedures under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503 unless other test procedures have been specified in this Order. (40 CFR part 122.41(j)(4); part 122.44(i)(1)(iv).)

IV. STANDARD PROVISIONS – RECORDS

- A.** Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by Part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time. (40 CFR part 122.41(j)(2).)
- B.** Records of monitoring information shall include:
 - 1. The date, exact place, and time of sampling or measurements (40 CFR part 122.41(j)(3)(i));
 - 2. The individual(s) who performed the sampling or measurements (40 CFR part 122.41(j)(3)(ii));
 - 3. The date(s) analyses were performed (40 CFR part 122.41(j)(3)(iii));
 - 4. The individual(s) who performed the analyses (40 CFR part 122.41(j)(3)(iv));
 - 5. The analytical techniques or methods used (40 CFR part 122.41(j)(3)(v)); and
 - 6. The results of such analyses. (40 CFR part 122.41(j)(3)(vi).)
- C.** Claims of confidentiality for the following information will be denied (40 CFR part 122.7(b)):
 - 1. The name and address of any permit applicant or Discharger (40 CFR part 122.7(b)(1)); and
 - 2. Permit applications and attachments, permits and effluent data. (40 CFR part 122.7(b)(2).)

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V. STANDARD PROVISIONS – REPORTING

A. DUTY TO PROVIDE INFORMATION

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

B. SIGNATORY AND CERTIFICATION REQUIREMENTS

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below. (40 CFR part 122.41(k).)
2. All permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA). (40 CFR part 122.22(a)(3).)
3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 CFR part 122.22(b)(1));
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 CFR part 122.22(b)(2)); and
 - c. The written authorization is submitted to the Regional Water Board and State Water Board. (40 CFR part 122.22(b)(3).)
4. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the Regional Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 CFR part 122.22(c).)
5. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above shall make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly

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responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.” (40 CFR part 122.22(d).)

C. MONITORING REPORTS

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 CFR part 122.41(l)(4).)
2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices. (40 CFR part 122.41(l)(4)(i).)
3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board. (40 CFR part 122.41(l)(4)(ii).)
4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 CFR part 122.41(l)(4)(iii).)

D. COMPLIANCE SCHEDULES

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

E. TWENTY-FOUR HOUR REPORTING

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. (40 CFR part 122.41(l)(6)(i).)
2. The following shall be included as information that must be reported within 24 hours under this paragraph (40 CFR part 122.41(l)(6)(ii)):
 - a. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 CFR part 122.41(l)(6)(ii)(A).)
 - b. Any upset that exceeds any effluent limitation in this Order. (40 CFR part 122.41(l)(6)(ii)(B).)
3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 CFR part 122.41(l)(6)(iii).)

F. PLANNED CHANGES

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

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) (40 CFR part 122.41(l)(1)(i)); or
2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in this Order nor to notification requirements under CFR part 122.42(a)(1) (see Additional Provisions—Notification Levels VII.A.1). (40 CFR part 122.41(l)(1)(ii).)
3. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 CFR part 122.41(l)(1)(iii).)

G. ANTICIPATED NONCOMPLIANCE

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

H. OTHER NONCOMPLIANCE

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E above. (40 CFR part 122.41(l)(7).)

I. OTHER INFORMATION

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

J. STANDARD PROVISIONS – ENFORCEMENT

The Regional Water Board is authorized to enforce the terms of this Order under several provisions of the CWC, including, but not limited to, sections 13385, 13386, and 13387

K. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

Federally-Owned Treatment Works (FOTWs)

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

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

2. Any substantial change in the volume or character of pollutants being introduced into that FOTW by a source introducing pollutants into the FOTW at the time of adoption of the Order. (40 CFR part 122.42(b)(2).)
3. Adequate notice shall include information on the quality and quantity of effluent introduced into the FOTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the FOTW. (40 CFR part 122.42(b)(3).)

VI. STANDARD PROVISIONS – ENFORCEMENT

- A. The Regional Water Board is authorized to enforce the terms of this Order under several provisions of the CWC, including, but not limited to, sections 13385, 13386, and 13387
- B. The CWA provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the CWA, or any permit condition or limitation implementing any such sections in a permit issued under CWA section 402, or any requirement imposed in a pretreatment program approved under CWA sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not less than \$5,000 nor more than \$50,000 per day for each violation, 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). Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the CWA, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the CWA, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions (40 CFR 122.41(a)(2)).
- C. Any person may be assessed an administrative penalty by the Administrator for violating section 301, 302, 306, 307, 308, 318 or 405 of the CWA, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the CWA. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000. (40 CFR 122.41(a)(3)).
- D. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this Order shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both. (40 CFR 122.41(j)(5)).
- E. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this Order, including monitoring reports or reports of compliance or non-compliance shall, upon

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conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both. (40 CFR 122.41(k)(2))

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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Attachment E – Monitoring and Reporting Program (MRP)

Title 40 of the Code of Federal Regulations (40 CFR) part 122.48 requires that all NPDES permits specify monitoring and reporting requirements. CWC sections 13267 and 13383 also authorize the Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements, which implement the federal and California regulations.

I. GENERAL MONITORING PROVISIONS

A. Principles, Framework, and Design of Monitoring Program

1. NPDES compliance monitoring focuses on the effects of a specific point source discharge. Generally, it is not designed to assess impacts from other sources of pollution (e.g., nonpoint source runoff, aerial fallout) or to evaluate the current status of important ecological resources in the water body. The scale of existing compliance monitoring programs does not match the spatial and, to some extent, temporal boundaries of the important physical and biological processes in the ocean. In addition, the spatial coverage provided by compliance monitoring programs is less than ten percent of the nearshore ocean environment. Better technical information is needed about status and trends in ocean waters to guide management and regulatory decisions, to verify the effectiveness of existing programs, and to shape policy on marine environmental protection.
2. The Regional Water Board and the United States Environmental Protection Agency (USEPA), working with other groups, have developed a comprehensive basis for effluent and receiving water monitoring appropriate to large publicly-owned treatment works (POTWs) and federally-owned treatment works (FOTWs) discharging to waters of the Southern California Bight. This effort has culminated in the publication by the Southern California Coastal Water Research Project (SCCWRP) of the Model Monitoring Program guidance document (Schiff, K.C., J.S. Brown and S.B. Weisberg. 2001. *Model Monitoring Program for Large Ocean Dischargers in Southern California*. SCCWRP Tech. Rep #357. Southern California Coastal Water Research Project, Westminster, CA. 101 pp.). This guidance provides the principles, framework and recommended design for effluent and receiving water monitoring elements that have guided development of the monitoring program described below.

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

- a. Core monitoring is local in nature and focused on monitoring trends in quality and effects of the point source discharge. This includes effluent monitoring as well as some aspects of receiving water monitoring. In the monitoring program described below these core components are typically referred to as local monitoring. Core monitoring is also supported by the State Water Board (Memo dated March 8, 2013).
- b. Regional Monitoring is focused on questions that are best answered by a region-wide approach that incorporates coordinated survey design and sampling techniques. The major objective of regional monitoring is to collect information required to assess how safe it is to swim in the ocean, how safe it is to eat seafood from the ocean, and whether the marine ecosystem is being protected. Key components of regional monitoring include elements to address pollutant mass

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emission estimations, public health concerns, monitoring of trends in natural resources, assessment of regional impacts from all contaminant sources, and protection of beneficial uses. The final design of regional monitoring programs is developed by means of steering committees and technical committees comprised of participating agencies and organizations, and is not specified in this Order.

- c. Special studies are focused on refined questions regarding specific effects or development of monitoring techniques and are anticipated to be of short duration and/or small scale, although multiyear studies may also be needed. Questions regarding effluent or receiving water quality, discharge impacts, ocean processes in the area of the discharge, or development of techniques for monitoring the same, arising out of the results of core or regional monitoring, may be pursued through special studies. These studies are by nature ad hoc and cannot be typically anticipated in advance of the five-year permit cycle.
3. Pollutants shall be analyzed using the analytical methods described in 40 CFR parts 136.3, 136.4, and 136.5 (revised May 18, 2012); or where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board. Laboratories analyzing effluent samples and receiving water samples shall be certified by the California Department of Public Health (CDPH) Environmental Laboratory Accreditation Program (ELAP) or approved by the Executive Officer and must include quality assurance/quality control (QA/QC) data in their reports and be in compliance with the provision of CWC section 13176. A copy of the laboratory certification shall be provided each time a new certification and/or renewal of the certification is obtained from ELAP.
4. Water/wastewater samples must be analyzed within allowable holding time limits as specified in 40 CFR part 136.3 (revised May 18, 2012). All QA/QC analyses must be run on the same dates that samples are actually analyzed. The Discharger shall retain the QA/QC documentation in its files and make available for inspection and/or submit them when requested by the Regional Water Board. Proper chain of custody procedures must be followed and a copy of that documentation shall be submitted with the quarterly report.
5. The Discharger shall calibrate and perform maintenance procedures on all monitoring instruments and to ensure accuracy of measurements, or shall ensure that both equipment activities will be conducted.
6. For any analyses performed for which no procedure is specified in the USEPA guidelines, or in the MRP, the constituent or parameter analyzed and the method or procedure used must be specified in the monitoring report.
7. Each monitoring report must affirm in writing that "all analyses were conducted at a laboratory certified for such analyses by the California Department of Public Health or approved by the Executive Officer and in accordance with current USEPA guideline procedures or as specified in this Monitoring and Reporting Program."
8. The monitoring report shall specify the USEPA analytical method used, the Method Detection Limit (MDL), and the Reporting Level (RL) [the applicable minimum level (ML) or Reported Minimum Level (RML)] for each pollutant. The MLs are those published by the State Water Board in the 2009 Ocean Plan, Appendix II. The ML represents the lowest quantifiable concentration in a sample, based on the proper application of all method-based analytical procedures and the absence of any matrix interference. When

all specific analytical steps are followed and after appropriate application of method specific factors, the ML also represents the lowest standard in the calibration curve for that specific analytical technique. When there is deviation from the method analytical procedures, such as dilution or concentration of samples, other factors may be applied to the ML depending on the sample preparation. The resulting value is the reported ML.

9. In accordance with section II.C.5.b of the 2009 Ocean Plan, the Regional Water Board Executive Officer, in consultation with the State Water Board's Quality Assurance Program Manager, may establish an ML that is not contained in Appendix II of the 2009 Ocean Plan to be included in the discharger's permit in any of the following situations:
 - a. When a pollutant is not listed in Appendix II;
 - b. When the discharger and the Regional Water Board agree to include in the permit a test method that is more sensitive than those specified in 40 CFR part 136 (revised as of May 18, 2012);
 - c. When the discharger agrees to use an ML that is lower than those listed in Appendix II;
 - d. When the discharger demonstrates that the calibration standard matrix is sufficiently different from that used to establish the ML in Appendix II and proposes an appropriate ML for the matrix; or,
 - e. When the discharger uses a method, which quantification practices are not consistent with the definition of the ML. Examples of such methods are USEPA-approved method 1613 for dioxins, and furans, method 1624 for volatile organic substances, and method 1625 for semi-volatile organic substances. In such cases, the discharger, the Regional Water Board, and the State Water Board shall agree on a lowest quantifiable limit and that limit will substitute for the ML for reporting and compliance determination purposes.
10. If the Discharger samples and performs analyses (other than for process/operational control, startup, research, or equipment testing) on any influent, effluent, or receiving water constituent more frequently than required by this program using approved analytical methods, the results of those analyses shall be included in the report. These results shall be reflected in the calculation of the average used in demonstrating compliance with average effluent, receiving water, etc., limitations.
11. The Discharger shall develop and maintain a record of all spills and bypasses of raw or partially treated sewage from its collection system or treatment plant according to the requirements in the WDR section of this Order. This record shall be made available to the Regional Water Board upon request and a spill summary shall be included in the Annual Summary Report.
12. For all bacteriological 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.
 - a. 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.
 - b. Detection methods used for enterococcus shall be those presented in Table 1A of 40 CFR part 136 (revised May 18, 2012) or in the USEPA publication EPA 600/4-

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85/076, *Test Methods for Escherichia coli and Enterococci in Water By Membrane Filter Procedure*, or any improved method determined by the Regional Water Board to be appropriate.

13. Laboratories analyzing monitoring samples shall be certified by CDPH, in accordance with the provisions of CWC section 13176, and must include QA/QC data with their reports.

II. MONITORING LOCATIONS

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

Table 1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
Influent Monitoring Station		
--	INF-001	Sampling stations shall be established at each point of inflow to the sewage treatment plant and shall be located upstream of any in-plant return flows and/or where representative samples of the influent can be obtained. Influent samples shall be obtained on the same day effluent samples are obtained.
Effluent Monitoring Station		
002	EFF-001	The effluent sampling station shall be located downstream of any in-plant return flows and effluent streams from both the tertiary and secondary treatment systems, where representative samples of the mixed effluent can be obtained.
Shoreline Bacteria Monitoring Stations		
--	SBM-001 SBM-002	See Figure 1 for a generalized schematic location. As part of Ocean Plan core monitoring, weekly <u>monthly</u> bacteria monitoring shall occur at the shoreline nearest the outfall. Samples may be collected along the shoreline at a point as near to the shoreline as can be negotiated safely by boat. The report shall contain actual latitude and longitude of sample location.
Offshore Receiving Water Monitoring Stations		

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Discharge Point Name	Monitoring Location Name	Monitoring Location Description
--	RSW-001 RSW-002 RSW-003 RSW-004 RSW-005	<p>See Figure 1 for a generalized schematic location.</p> <p>In order to determine area of special biological significance (ASBS) compliance, the Discharger shall monitor 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. Only one of the five RSW locations shall be sampled in order to determine ASBS compliance, depending on current flow. The RSW that is selected must be located downstream of the current flow. Dissolved oxygen and pH should be sampled separately at a single up-current location from the RSW.</p> <p>The report shall contain actual depth, latitude, and longitude of sample upstream and downstream location.</p>
Sediment Monitoring (Subtidal Benthic) Stations		
--	SM-001 near field SM-002 near field SM-003 near field SM-004 near field SM-005 near field SM-006 far field SM-007 far field SM-008 far field	<p>See Figure 1 for a generalized schematic location.</p> <p>Discharger shall perform a benthic biota survey (intertidal and subtidal) once per permit cycle, at multiple stations both near field and far field. This shall be conducted at each SM-00X location and at IBM-001 (see below). This activity also satisfies ASBS compliance for determining the status of marine aquatic life.</p> <p>The report shall include the actual latitude and longitude of the location sampled.</p>
Intertidal Benthic Monitoring		
--	IBM-001 near field	<p>See Figure 1 for a generalized schematic location for IBM-001.</p> <p>The initial point of discharge and intertidal benthic monitoring station (IBM-001) is located at Discharge Point 001 (no longer in service). The outfall was historically located at Discharge Point 001 at a latitude of 32 ° 59' 50" N, and a longitude of 118 ° 32' 45" W.</p> <p>Discharger shall perform a benthic biota survey (intertidal and subtidal) once per permit cycle, at multiple stations both near field and far field. This shall be conducted at IBM-001 and at each SM-00X location (see above). This activity also satisfies ASBS compliance for determining the status of marine aquatic life.</p> <p>The report shall include the actual latitude and longitude of the location sampled.</p>
Outfall Vicinity Location		

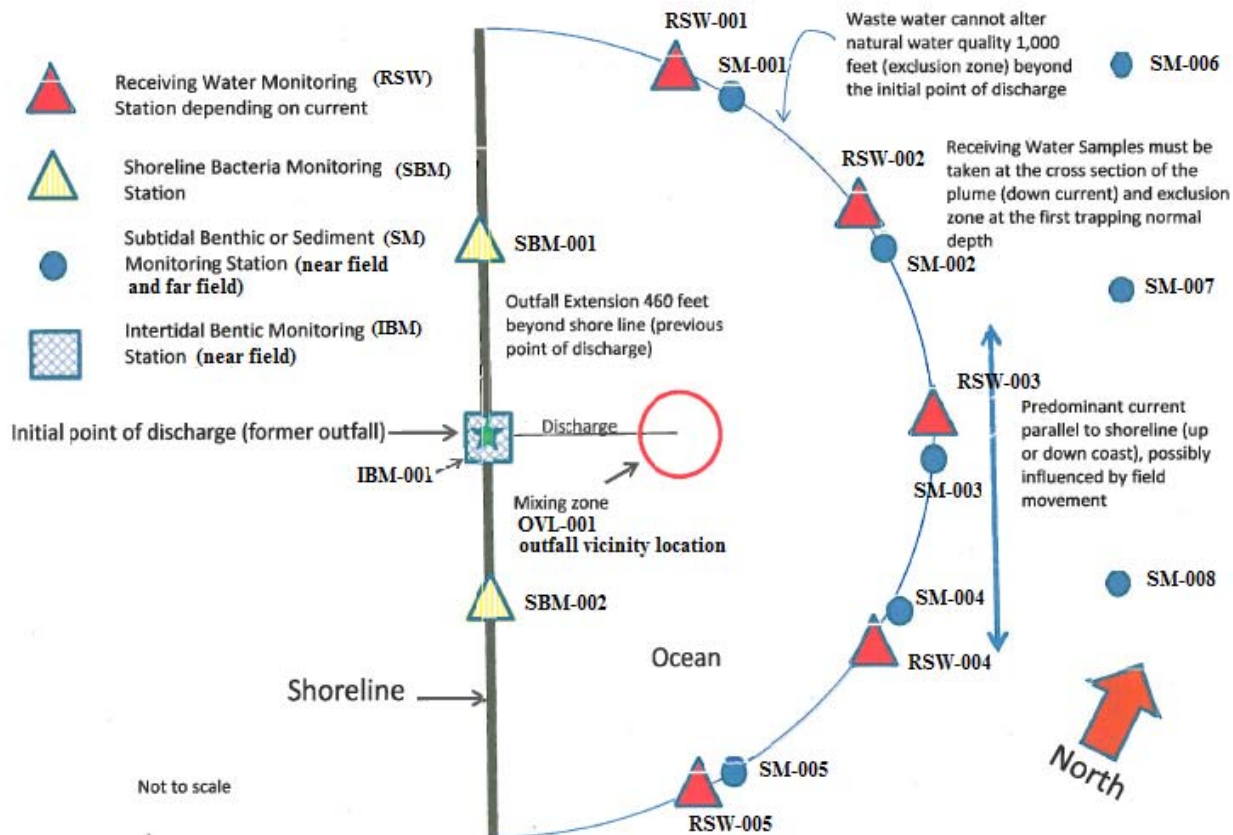
Discharge Point Name	Monitoring Location Name	Monitoring Location Description
--	OVL-001	<p>See Figure 1 for a generalized schematic location for OVL-001.</p> <p>As part of State Water Board required monitoring (Memo dated March 8, 2013) Discharger shall collect temperature and salinity data in the vicinity of the outfall on a monthly basis during the summer for two years to enable more relevant plume model mixing zone predictions. The data should be collected from area of similar depth as the outfall for a period of two years.</p> <p>The report shall include the actual depth versus outfall depth and the latitude and longitude of the location sampled.</p>

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Figure 1

SCI Monitoring Sites Plan view schematic



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III. INFLUENT MONITORING REQUIREMENTS

Influent monitoring is required to determine compliance with NPDES permit conditions and assess treatment plant performance. The Discharger shall monitor influent to the facility at INF-001 as follows:

Table 2. Influent Monitoring - INF-001

Parameter	Units	Sample Type ¹	Minimum Sampling Frequency	Required Analytical Test Method
Flow	mgd	recorder/totalizer	continuous ²	--
BOD ₅ 20°C	mg/L	24-hr composite	monthly	³
TSS	mg/L	24-hr composite	monthly	³
pH	pH units	grab	monthly	³
Oil and grease	mg/L	grab ⁴	monthly	³
Pesticides	µg/L	24-hr composite	semi-annually	³
Remaining pollutants in Table B of the 2009 Ocean Plan (excluding residual chlorine, acute and chronic toxicity, and ammonia)	µg/L	24-hr composite	semi-annually	³

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

² When continuous monitoring of flow is required, total daily flow and peak daily flow (24-hr basis) shall be reported.

³ Pollutants shall be analyzed using the analytical methods described in 40 CFR part 136; where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or State Water Board. For any pollutant whose effluent limitation is lower than all MLs specified in Appendix II of the 2009 Ocean Plan, the analytical method with the lowest ML must be selected.

⁴ Oil and grease monitoring in the influent and effluent shall consist of a single grab sample at peak flow over a 24-hour period.

IV. EFFLUENT MONITORING REQUIREMENTS

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

The Discharger shall monitor secondary effluent at EFF-001 as follows in Table 3. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding MLs:

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Table 3. Effluent Monitoring – EFF-001

Parameter	Units	Sample Type ⁵	Minimum Sampling Frequency	Required Analytical Test Method and (Minimum Level, units), respectively
Flow	mgd	recorder	continuous ⁶	--
BOD ₅ 20°C	mg/L	24-hr composite	monthly	⁷
TSS	mg/L	24-hr composite	monthly	⁷
Total chlorine residual	mg/L	grab	monthly	⁷
pH	pH units	grab	monthly	⁷
Oil and grease	mg/L	grab ⁴	monthly	⁷
Temperature	°C	grab	monthly	⁷
Settleable solids	mL/L	grab	monthly	⁷
Turbidity	NTU	24-hr composite	monthly	⁷
Total coliform	CFU/100 mL or MPN/100 mL	grab	monthly	⁷
Enterococcus	CFU/100 mL or MPN/100 mL	grab	monthly	⁷
Fecal coliform	CFU/100 mL or MPN/100 mL	grab	monthly	⁷
Ammonia nitrogen	mg/L	24-hr composite	semi-annually	⁷
Nitrate nitrogen	mg/L	24-hr composite	semi-annually	⁷
Nitrite nitrogen	mg/L	24-hr composite	semi-annually	⁷
Organic nitrogen	mg/L	24-hr composite	semi-annually	⁷
Arsenic	µg/L	24-hr composite	semi-annually	⁷

⁵ For 24-hour composite samples, if the duration of the discharge is less than 24 hours but greater than 8 hours, at least eight flow-weighted samples shall be obtained during the discharge period and composited. For discharger durations of less than eight hours, individual “grab samples” may be substituted. A grab sample is an individual sample collected in less than 15 minutes.

⁶ When continuous monitoring of flow is required, total daily flow and peak daily flow (24-hr basis) should be reported.

⁷ Pollutants shall be analyzed using the analytical methods described in 40 CFR part 136; where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or State Water Board. For any pollutant whose effluent is lower than all the MLs specified in Appendix II of the 2009 Ocean Plan, the analytical method with the lowest ML must be selected.

Parameter	Units	Sample Type ⁵	Minimum Sampling Frequency	Required Analytical Test Method and (Minimum Level, units), respectively
Copper	µg/L	24-hr composite	quarterly	⁷
Nickel	µg/L	24-hr composite	semi-annually	⁷
Zinc	µg/L	24-hr composite	quarterly	⁷
Halomethanes	µg/L	24-hr composite	semi-annually	⁷
Antimony	µg/L	24-hr composite	semi-annually	⁷
Chlorodibromomethane	µg/L	24-hr composite	semi-annually	⁷
Chloroform	µg/L	24-hr composite	semi-annually	⁷
Dichlorobromomethane	µg/L	24-hr composite	semi-annually	⁷
Chromium (VI)	µg/L	24-hr composite	semi-annually	⁷
Lead	µg/L	24-hr composite	semi-annually	⁷
Selenium	µg/L	24-hr composite	semi-annually	⁷
Cyanide	µg/L	24-hr composite	semi-annually	⁷
HCH	µg/L	24-hr composite	semi-annually	⁷
Chromium (III)	µg/L	24-hr composite	semi-annually	⁷
Bis(2-ethylhexyl) phthalate	µg/L	24-hr composite	semi-annually	⁷
Toxicity, acute	TUa	24-hr composite	quarterly	⁷
Toxicity, chronic ⁸	TUc	24-hr composite	quarterly	⁷
DDT ⁹	µg/L	24-hr composite	quarterly	⁷
TCDD equivalents	pg/L	24-hr composite	quarterly	⁷
Tributyltin ¹⁰	µg/L	24-hr composite	semi-annually	⁷
Aldrin ¹⁰	µg/L	24-hr	semi-annually	⁷

⁸ California Ocean Plan requires a numeric WQBEL for chronic toxicity.

⁹ 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.

¹⁰ Frequency shall increase to quarterly if the ML stipulated in the Ocean Plan decreases to below the calculated Ce and/or if the laboratory result is not ND.

Parameter	Units	Sample Type ⁵	Minimum Sampling Frequency	Required Analytical Test Method and (Minimum Level, units), respectively
		composite		
Benzidine ⁴⁰	µg/L	24-hr composite	semi-annually	7
Chlordane ⁴⁰	µg/L	24-hr composite	semi-annually	7
3,3-dichlorobenzidine ⁴⁰	µg/L	24-hr composite	semi-annually	7
Dieldrin ⁴⁰	µg/L	24-hr composite	semi-annually	7
Heptachlor ⁴⁰	µg/L	24-hr composite	semi-annually	7
Heptachlor epoxide ⁴⁰	µg/L	24-hr composite	semi-annually	7
Hexachlorobenzene ⁴⁰	µg/L	24-hr composite	semi-annually	7
PAHs ⁴⁰	µg/L	24-hr composite	semi-annually	7
PCBs ⁴⁰	µg/L	24-hr composite	semi-annually	7
Toxaphene ⁴⁰	µg/L	24-hr composite	semi-annually	7
Remaining pollutants in Table B of the 2009 Ocean Plan (excluding residual chlorine, acute and chronic toxicity, and ammonia)	µg/L	24-hr composite	semi-annually	3
Radioactivity ¹¹ (Including gross alpha, gross beta, combined radium-226 and radium-228, tritium, strontium-90 and uranium)	pCi/L	24-hr composite	semi-annually	12
Pesticides	µg/L	24-hr composite	semi-annually	7

¹¹ Analysis for combined Radium-226 & 228 shall be conducted only if Gross alpha results for the same sample exceed 15 pCi/L or beta greater than 50 pCi/L. If Radium-226 & 228 exceeds the stipulated criteria, analyze for Tritium, Strontium-90 and Uranium.

¹² Analyze these radiochemicals by the following USEPA methods: method 900.0 for gross alpha and gross beta, method 903.0 or 903.1 for radium-226, method 904.0 for radium-228, method 906.0 for tritium, method 905.0 for strontium-90, and method 908.0 for uranium.

V. WHOLE EFFLUENT TOXICITY (WET) TESTING REQUIREMENTS

A. Acute Toxicity Testing (Not Applicable)

~~a. Methods and test species~~

~~The Discharger shall conduct 96-hour static renewal acute toxicity tests on flow-weighted 24-hour composite effluent samples. When conducting toxicity tests in accordance with the specified chronic test methods manual, if daily observations of mortality make it possible to also calculate acute toxicity for the desired exposure period and the dilution series for the toxicity test includes the acute in-stream waste concentration (IWC), such method may be used to estimate the 96-hour LC50.~~

~~The presence of acute toxicity shall be estimated as specified in *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms* (EPA-821-R-02-012, 2002), with preference for West Coast vertebrate and invertebrate species.~~

~~b. Frequency~~

- ~~i. Screening—The Discharger shall conduct the first acute toxicity test screening for three consecutive months in 2012. Re-screening is required every 24 months. The Discharger shall re-screen with a marine vertebrate species and a marine invertebrate species and continue to monitor with the most sensitive species. If the first suite of re-screening tests demonstrates that the same species is the most sensitive, then the re-screening does not need to include more than one suite of tests. If a different species is the most sensitive or if there is ambiguity, then the Discharger shall proceed with suites of screening tests for a minimum of three, but not to exceed five, suites~~
- ~~ii. Regular toxicity tests—After the screening period, monitoring shall be conducted monthly using the most sensitive marine species.~~

~~c. Toxicity Units~~

~~The acute toxicity of the effluent shall be expressed and reported in Acute Toxic Units, TUa, where,~~

$$\text{TUa} = \frac{100}{96\text{-hr LC } 50\%}$$

~~The 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.~~

B. Chronic Toxicity Testing

1. Chronic Whole Effluent Toxicity

For compliance with the Basin Plan's narrative toxicity objective, this Order requires the Discharger to conduct chronic WET testing. Furthermore, this Provision requires the Discharger to investigate the causes of, and identify corrective actions to reduce or eliminate, effluent toxicity. If the discharge exceeds the numeric toxicity monitoring trigger during accelerated monitoring established in this Provision, the Discharger is required to initiate a Toxicity Reduction Evaluation (TRE) in accordance with an approved TRE Work Plan, and take actions to mitigate the impact of the discharge and

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prevent recurrence of toxicity. A TRE is a site-specific study conducted in a stepwise process to identify the source(s) of toxicity and the effective control measures for effluent toxicity. TREs are designed to identify the causative agents and sources of whole effluent toxicity, evaluate the effectiveness of the toxicity control options, and confirm the reduction in effluent toxicity. This provision includes requirements for the Discharger to develop and submit a TRE work plan and includes procedures for accelerated chronic toxicity monitoring and TRE initiation.

2. Numeric Toxicity Monitoring Trigger

~~The numeric toxicity monitoring trigger to initiate a TRE is > 1 TUc (where TUc = 100/NOEL). The monitoring trigger is not an effluent limitation; it is the toxicity threshold at which~~ If the effluent toxicity test result exceeds the limitation (137 TUc), then the Discharger is required to begin accelerated monitoring and initiate a TRE:

- a. If the results of four (4) consecutive accelerated monitoring tests do not exceed the monitoring trigger, the Discharger may cease accelerated monitoring and resume regular chronic toxicity monitoring. However, notwithstanding the accelerated monitoring results, if there is adequate evidence of a pattern of effluent toxicity, the Executive Officer may require that the Discharger initiate a TRE.
- b. If the source(s) of the toxicity is easily identified (e.g., temporary plant upset), the Discharger shall make necessary corrections to the facility and shall continue accelerated monitoring until four (4) consecutive accelerated tests do not exceed the monitoring trigger. Upon confirmation that the effluent toxicity has been removed, the Discharger may cease accelerated monitoring and resume regular chronic toxicity monitoring.
- c. If the result of any accelerated toxicity test exceeds the monitoring trigger, the Discharger shall cease accelerated monitoring and begin a TRE to investigate the cause(s) of, and identify corrective actions to reduce or eliminate effluent toxicity. Within thirty (30) days of notification by the laboratory of any test result exceeding the monitoring trigger during accelerated monitoring, the Discharger shall submit a TRE Action Plan to the Regional Water Board including, at minimum:
 - i. Specific actions the Discharger will take to investigate and identify the cause(s) of toxicity, including a TRE WET monitoring schedule;
 - ii. Specific actions the Discharger will take to mitigate the impact of the discharge and prevent the recurrence of toxicity; and
 - iii. A schedule for these actions.

3. Methods and test species

The Discharger shall conduct critical life stage chronic toxicity tests on 24-hour composite, 100 percent effluent samples in accordance with USEPA's *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms*, 1995, (EPA/600/R-95/136). Pursuant to the 2009 Ocean Plan, upon the approval of the Executive Officer of the Regional Water Board, the Discharger may use a second tier organism (e.g., silverside) if first tier organisms (e.g., topsmelt) are not available. However, the Discharger is required to immediately resume the chronic toxicity test using the original testing organism as soon as this organism becomes available.

4. Frequency

- a. Screening – The Discharger shall conduct the first chronic toxicity test screening for three consecutive months in 2013. Re-screening is required every 24 months. The Discharger shall re-screen with a marine vertebrate species, a marine invertebrate species, and a marine alga species and continue to monitor with the most sensitive species. If the first suite of rescreening tests demonstrates that the same species is the most sensitive, then the re-screening does not need to include more than one suite of tests. If a different species is the most sensitive or if there is ambiguity, then the Discharger shall proceed with suites of screening tests for a minimum of three, but not to exceed five, suites.
- b. Regular toxicity tests – After the screening period, monitoring shall be conducted quarterly using the most sensitive species

5. Toxicity Units

$$TUC = \frac{100}{NOEL}$$

The NOEL is expressed as the maximum percent effluent or receiving water that causes no observable effect on a test organism, as determined by the result of a critical life stage toxicity test listed in the 2009 Ocean Plan Appendix III, table III-1

C. Quality Assurance

1. Concurrent testing with a reference toxicant shall be conducted. Reference toxicant tests shall be conducted using the same test conditions as the effluent toxicity tests (e.g., same test duration, etc.).
2. If either the reference toxicant test or effluent test does not meet all test acceptability criteria (TAC) as specified in the test methods manual (EPA-821-R-02-012 and/or EPA/600/R-95/136), then the Discharger must re-sample and re-test within 14 days.
3. Control and dilution water should be laboratory water, as described in the manual. If the dilution water used is different from the culture water, a second control using culture water shall be used.
4. A series of at least five (5) dilutions and a control shall be tested. The dilution series shall include the IWC, and two dilutions above and two below the IWC. The chronic IWC for Discharge Point 002 is 0.73% effluent where the chronic IWC = $1/(\text{dilution credit} + 1) \times 100$.
5. Following paragraph 10.2.6.2 of USEPA's chronic freshwater test methods manual (EPA/821/R-02/013, 2002, as specified in CFR part 136), the Discharger shall review the concentration-response relationship for each multi-concentration test to ensure that calculated test results are interpreted appropriately. All WET test results should be reviewed and reported following *Method Guidance and Recommendations for WET Testing* (EPA/821/B-00-004, 2000).
6. Because this Order requires sublethal hypothesis testing endpoints from the 1995 West Coast marine and estuarine WET test methods manual and the 2002 East Coast marine and estuarine WET test methods manual, within test variability must be reviewed and variability criteria [e.g., Minimum Significance Difference (MSD) bound, Percent Minimum Significance Difference (PMSD) bounds] must be applied, as specified in the test

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methods manuals. The calculated MSD (or PMSDs) for both reference toxicant test and effluent toxicity test results must meet the MDS bound (or PMSD bounds) variability criteria specified in the test methods manuals.

7. pH drift during the toxicity test may contribute to artifactual toxicity when pH-dependent toxicants (e.g., ammonia, metals) are present in an effluent. To determine whether or not pH drift during the toxicity test is contributing to artifactual toxicity, the Discharger shall conduct three sets of parallel toxicity tests, in which the pH of one treatment is controlled at the pH of the effluent and the pH of the other treatment is not controlled, as described in section 11.3.6.1 of the test methods manual, *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA/821/R-02/013, 2002). Toxicity is confirmed to be artifactual and due to pH drift when no toxicity above the chronic WET permit limit or trigger is observed in the treatments controlled at the pH of the effluent. If toxicity is confirmed to be artifactual and due to pH drift, then following written approval by the permitting authority, the Discharger may use the procedures outlined in section 11.3.6.2 of the test methods manual to control sample pH during the toxicity test.

D. Accelerated Monitoring

When the numeric toxicity monitoring trigger is exceeded during regular chronic toxicity monitoring, and the testing meets all test acceptability criteria, the Discharger shall initiate accelerated monitoring. The Discharger shall initiate a TRE to address effluent toxicity if any WET testing results exceed the numeric toxicity monitoring trigger during accelerated monitoring.

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 working days of receipt of the test results exceeding the toxicity limitation.

1. If all the results of the six additional tests are in compliance with the toxicity limitation, the Discharger may resume regular monthly testing.
2. If the result of any of the six additional tests exceeds the limitation, then the Discharger shall continue to monitor once every two weeks until six consecutive biweekly tests are in compliance. At that time, the Discharger may resume regular monthly testing.
3. 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 TIE and implement the initial investigation TRE work plan.
4. If implementation of the initial investigation TRE work plan (see item D below) indicates the source of toxicity (e.g., a temporary plant upset, etc.), then the Discharger shall return to the regular testing frequency.

E. Preparation of an Initial Investigation TRE Work Plan

If the discharge consistently exceeds an effluent limitation for toxicity or an effluent limitation for an Ocean Plan Table B water quality objective, the Discharger shall conduct a TRE, as defined in Attachment A. The TRE shall include all reasonable steps to identify the source of toxicity. The Discharger shall take all reasonable steps to reduce toxicity to the required level once the source of the toxicity is defined.

The Discharger shall prepare and submit a copy of the Discharger's initial investigation TRE work plan to the Executive Officer of the Regional Water Board for approval within 90 days of

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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 most current version. At a minimum, the 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 the following, at a minimum:

1. 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.
2. 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,
3. If a TIE is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor). See MRP section V.E.3 for guidance manuals.

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.

F. TRE and TIE steps

1. If results of the implementation of the facility's initial investigation TRE work plan 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. The detailed work plan shall include, but not be limited to the following:
 - a. Further actions to investigate and identify the cause of toxicity;
 - b. Actions the Discharger will take to mitigate the impact of the discharge and prevent the recurrence of toxicity; and
 - c. A schedule for these actions.
2. The following section summarizes the stepwise approach used in conducting the TRE:
 - a. Step 1 includes basic data collection.
 - b. Step 2 evaluates optimization of the treatment system operation, facility housekeeping, and selection and use of in-plant process chemicals.
 - c. If Steps 1 and 2 are unsuccessful, Step 3 implements a TIE and employment of all reasonable efforts using currently available TIE methodologies. The objective of the TIE shall be to identify the substance or combination of substances causing the observed toxicity.
 - d. Assuming successful identification or characterization of the toxicant(s), Step 4 evaluates final effluent treatment options.
 - e. Step 5 evaluates in-plant treatment options.
 - f. Step 6 consists of confirmation once a toxicity control method has been implemented.

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Many recommended TRE elements parallel source control, pollution prevention, and storm water control program best management practices (BMPs). To prevent duplication of efforts, evidence of compliance with those requirements may be sufficient to comply with TRE requirements. By requiring the first steps of a TRE to be accelerated testing and review of the facility's TRE work plan, a TRE may be ended in its early stages. All reasonable steps shall be taken to reduce toxicity to the required level. The TRE may be ended at any stage if monitoring indicates there are no longer toxicity violations.

The Discharger may initiate a TIE as part of the TRE process to identify the cause(s) of toxicity. The Discharger shall use the USEPA acute manual, chronic manual, EPA/600/R-96-054 (Phase I), EPA/600/R-92/080 (Phase II), and EPA-600/R-92/081 (Phase III), as guidance.

If a TRE/TIE is initiated prior to completion of the accelerated testing required in section V.C. of this program, then the accelerated testing schedule may be terminated, or used as necessary in performing the TRE/TIE, as determined by the Executive Officer.

The Regional Water Board recognizes that toxicity may be episodic and identification of causes of and reduction of sources of toxicity may not be successful in all cases. Consideration of enforcement action by the Board will be based, in part, on the Discharger's actions and efforts to identify and control or reduce sources of consistent toxicity.

G. Ammonia Removal

Except with prior approval from the Executive Officer of the Regional Water Board, ammonia shall not be removed from bioassay samples. The Discharger must demonstrate the effluent toxicity is caused by ammonia because of increasing test pH when conducting the toxicity test. It is important to distinguish the potential toxic effects of ammonia from other pH sensitive chemicals, such as certain heavy metals, sulfide, and cyanide. The following may be steps to demonstrate that the toxicity is caused by ammonia and not other toxicants before the Executive Officer would allow for control of pH in the test.

- a. There is consistent toxicity in the effluent and the maximum pH in the toxicity test is in the range to cause toxicity due to increased pH.
- b. Chronic ammonia concentrations in the effluent are greater than 4 mg/L total ammonia.
- c. Conduct graduated pH tests as specified in the TIE methods. For example, mortality should be higher at pH 8 and lower at pH 6.
- d. Treat the effluent with a zeolite column to remove ammonia. Mortality in the zeolite treated effluent should be lower than the non-zeolite treated effluent. Then add ammonia back to the zeolite-treated samples to confirm toxicity due to ammonia.

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

H. Reporting

The Discharger shall submit a full report of the toxicity test results, including any accelerated testing conducted during the month, as required by this Order. Test results shall be reported

in Acute Toxicity Units (TUa) or Chronic Toxicity Units (TUc), as required, with the self-monitoring report (SMR) for the month in which the test is conducted.

If an initial investigation indicates the source of toxicity and accelerated testing is unnecessary, pursuant to section V.D.4, then those results also shall be submitted with the SMR for the period in which the investigation occurred.

1. The full report shall be received by the Regional Water Board by the 15th day of the second month following sampling.
2. The full report shall consist of (1) the results; (2) the dates of sample collection and initiation of each toxicity test; (3) the toxicity limit.
3. Test results for toxicity tests also shall be reported according to the appropriate manual chapter on Report Preparation and shall be attached to the SMR. Routine reporting shall include the following, at a minimum, as applicable, for each test, as appropriate:

- a. sample collection date(s)
- b. test initiation date
- c. test species
- d. end point values for each dilution (e.g. number of young, growth rate, percent survival)
- e. LC₅₀ value(s) in percent effluent
- f. TUa value(s)

$$TUa = \frac{100}{96\text{-hr LC } 50\%}$$

- g. The NOEL is expressed as the maximum percent effluent or receiving water that causes no observable effect on a test organism, as determined by the result of a critical life stage toxicity test listed in Ocean Plan Appendix III, Table III-1.
- h. TUc values

$$TUc = \frac{100}{NOEL}$$

- i. Mean percent mortality (+standard deviation) after 96 hours in 100% effluent (if applicable)
- j. IC/EC₂₅ value(s) in percent effluent

Inhibition Concentration (IC_P) is a point estimate of the toxicant concentration that causes a given percent reduction (p) in a non-quantal biological endpoint (e.g., reproduction, growth) calculated from a continuous model (e.g., EPA Interpolation Model).

Effective Concentration (EC_P) is a point estimate of the toxicant concentration that causes a given percent reduction (p) in a quantal biological measurement (e.g., development, survival) calculated from a continuous model (e.g., Probit).

- k. NOEL and LOEC (Lowest Observable Effect Concentration) values for reference toxicant test(s)

- l. Available water quality measurements for each test (e.g., pH, D.O., temperature, conductivity, hardness, salinity, ammonia).
- m. The Discharger shall provide a compliance summary that includes a summary table of toxicity data from at least eleven of the most recent samples.
- n. The Discharger shall notify this Regional Water Board immediately of any toxicity exceedance and in writing 14 days after the receipt of the results of an effluent limit. The notification will describe actions the Discharger has taken or will take to investigate and correct the cause(s) of toxicity. It may also include a status report on any actions required by the Order, with a schedule for actions not yet completed. If no actions have been taken, the reasons shall be given.

VI. LAND DISCHARGE MONITORING REQUIREMENTS (NOT APPLICABLE)

VII. RECLAMATION MONITORING REQUIREMENTS (NOT APPLICABLE)

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

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VIII. RECEIVING WATER MONITORING REQUIREMENTS

A. Receiving Water Quality Monitoring

This monitoring addresses the question: Are Ocean Plan, ASBS, and Basin Plan objectives being met? Data collected provide the information necessary to demonstrate compliance with the standards.

1. The Discharger shall conduct offshore water quality monitoring at RSW-001, RSW-002, RSW-003, RSW-004, and RSW-005 (see Figure 1 and Table 1) as follows in Table 4:

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Table 4 Offshore Receiving Water Quality Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Dissolved Oxygen	mg/L	continuous profile from surface to bottom (or maximum depth of 100 meters)	annually	¹³
Water Temperature	°C	continuous profile from surface to bottom (or maximum depth of 100 meters)	monthly during summer for first 2 years	¹³
Salinity	ppt	continuous profile from surface to bottom (or maximum depth of 100 meters)	monthly during summer for first 2 years	¹³
pH	pH units	continuous profile from surface to bottom (or maximum depth of 100 meters)	annually	¹⁴
Total residual chlorine	mg/L	Grabs at 0.5 meters below the surface at RSW-002 only	annually	¹⁵
Transmissivity	% transmission	continuous profile from surface to bottom (or maximum depth of 100 meters)	annually	¹⁶
Chlorophyll	µg/L	continuous profile from surface to bottom (or maximum depth of 100 meters)	annually	¹³
Visual observations ¹⁷	--	--	annually	--

¹³ Pollutants shall be analyzed using the analytical methods described in 40 CFR part 136; where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or State Water Board. For any pollutant whose effluent is lower than all the MLs specified in Appendix II of the 2009 Ocean Plan, the analytical method with the lowest ML must be selected.

¹⁴ Water quality methods and protocols shall follow those described in the most current edition of the *Field Operations Manual for Marine Water Column, Benthic and Trawl Monitoring in Southern California*.

¹⁵ Pollutants shall be analyzed using the analytical methods described in 40 CFR part 136; where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or State Water Board.

¹⁶ Light transmittance (transmissivity) shall be measured with a transmissometer, using equipment and procedure similar to that described by L.V. Whitney ["Transmission of Solar Energy and the Scattering Produced by Suspensoids in Lake Waters," Transactions of the Wisconsin Academy of Sciences, Arts, and Letters, Vol. 31 (1938)]. Results shall be expressed as the percent of light transmittance. Path length of transmissometer should be noted.

¹⁷ Observations of wind (direction and speed), weather (cloudy, sunny, rainy), current (directions), and tidal condition (high, low) shall be made and recorded at the time that samples of the ocean (shore, nearshore and offshore) are collected. Receiving water observations of water color, turbidity, odor and unusual or abnormal amounts of floating or suspended matter in the water or on the beach, rocks and jetties or beach structures, shall be made and recorded at each receiving water station. The character and extent of such matter shall be

Sampling techniques shall follow protocols described in the most current edition of the *Field Operations Manual for Marine Water-column, Benthic, and Trawl Monitoring in Southern California*, SCCWRP. Data shall be analyzed to approximate the typical wastewater plume movement and data under different seasonal and weather conditions. The Discharger shall monitor 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. Only one of the five RSW locations shall be sampled in order to determine ASBS compliance, depending on current flow. The RSW that is selected must be located downstream of the current flow. Dissolved oxygen and pH should be sampled separately at a single up-current location from the RSW. Monitoring results for total residual chlorine and visual observations at the selected downstream RSW location shall be reported in the quarterly self-monitoring report.

2. The Discharger shall monitor bacteria and ammonia at 5 offshore receiving water monitoring stations including RSW-001, RSW-002, RSW-003, RSW-004, and RSW-005 and 2 shoreline bacteria monitoring stations including SBM-001 and SBM-002 (see Figure 1 and Table 1) as follows in Table 5:

Table 5 Shoreline and Offshore Receiving Water Quality Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Total coliform	MPN or CFU/100 mL	grab, surface and mid-depth and near bottom ¹⁸	monthly	¹⁹
Fecal coliform	MPN or CFU/100 mL	grab, surface and mid-depth and near bottom ¹⁸	monthly	¹⁹
Enterococcus	MPN or CFU/100 mL	grab, surface and mid-depth and near bottom ¹⁸	monthly	¹⁹
Ammonia nitrogen	mg/L	grab, surface and mid-depth and near bottom ¹⁸	annually	¹⁹

3. In order to monitor ASBS compliance, the Discharger shall monitor water quality, at the boundary of the exclusion zone, at a single down-current location. Discharger shall choose one downstream RSW location depending upon current flow during monitoring activities, see from RSW-001, RSW-002, RSW-003, RSW-004, and RSW-005 (see Figure 1 and Table 1), at the first trapping normal depth, to demonstrate that natural

described. The dates, times and depths of sampling and observations also shall be reported. Visual observations shall be recorded at each station.

¹⁸ Bottom sampling shall be done 2.0 m (6.6 ft) above the seabed.

¹⁹ Pollutants shall be analyzed using the analytical methods described in 40 CFR part 136; where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or State Water Board. For any pollutant whose effluent is lower than all the MLs specified in Appendix II of the 2009 Ocean Plan, the analytical method with the lowest ML must be selected.

water quality is not altered in the ASBS outside of the exclusion zone in comparison to an unaffected reference site.

Constituents to be measured include Ocean Plan (2009) Table B objectives for marine aquatic life beneficial use (except that only chronic toxicity for three species should be measured, not acute toxicity), Ocean Plan (2009) Table A constituents, dissolved oxygen, nitrates, and phosphates.

Additionally, dissolved oxygen and pH shall be sampled separately at a single up-current location that is up-current from the selected downstream RSW that is sampled.

The frequency shall be twice per permit cycle, and shall be done at the same time as effluent sampling is performed.

B. Benthic Sediments Monitoring

1. Local Benthic Trends Survey

This survey addresses the questions: Are benthic conditions under the influence of the discharge changing over time? The resulting physical and chemical data will be used for assessment of trends in sediment contamination and to draw inferences concerning the relationship between effluent-derived alteration of the benthic habitat and patterns in infaunal community structure. This data also satisfies ASBS compliance for determining the status of marine aquatic life.

a. Intertidal and Subtidal Benthic Biota Survey

The Discharger shall monitor the 8 subtidal and 1 intertidal benthic monitoring stations at SM-001, SM-002, SM-003, SM-004, SM-005, SM-006, SM-007, SM-008, and IBM-001 (see Figure 1 and Table 1) as follows in Table 6:

Table 6. Infauna Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Benthic infauna community ²⁰	--	0.1 square meter Van Veen grab	once per permit cycle	--
Total organic carbon	mg/L	0.1 square meter Van Veen grab (upper 2 centimeters)	once per permit cycle	²¹
Organic nitrogen	mg/L	0.1 square meter Van Veen grab (upper 2 centimeters)	once per permit cycle	²¹
Grain size	phi size	0.1 square meter Van Veen grab (upper 2	once per permit cycle	²¹

²⁰ Community analysis of benthic infauna shall include number of species, number of individuals per species, total numerical abundance per station, benthic response index (BRI) and biological indices, plus utilize appropriate regression analyses, parametric and nonparametric statistics, and multivariate techniques or other appropriate analytical techniques.

²¹ Analytical methods should be USEPA approved method or any method approved in advance by the State Water Board or the Regional Water Board.

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

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

Benthic infauna monitoring shall be conducted annually during the month of **July**. One sample shall be taken at each station for benthic infaunal community analysis. The entire contents of each sample shall be passed through a 1.0 millimeter screen to retrieve the benthic organisms. Sampling methods and protocols shall follow those described in the most current edition of the *Field Operations Manual for Marine Water Column, Benthic and Trawl Monitoring in Southern California*. All organisms contained within the sample shall be identified to the lowest possible taxon and counted. The resulting data shall be used to describe community structure at each station.

2. Regional Benthic Survey

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

A regional survey of benthic conditions within the Southern California Bight occurred in 2008 (Bight '08) and is planned subsequently every five years. The final survey design will be determined cooperatively by the participants as represented at the Regional Steering Committee. The Discharger is encouraged to support the Bight '13 benthic survey and subsequent surveys by participating in or performing the following activities:

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

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IX. OTHER MONITORING REQUIREMENTS

A. Special Study – Data for Plume Model Mixing Predictions

This survey answers the question: Does data from actual site receiving water conditions result in water quality modeling results that confirm the State Water Board determined minimum initial dilution value of 136?

Ocean Unit staff applied data from California Cooperative Oceanic Fisheries Investigations nearshore stations surveyed in the summers of 2010 and 2011 to evaluate the minimum initial dilution for Discharge Point 002. Based on the results, State Water Board staff determined that 136 is the value for the Minimum Initial Dilution, as defined in the 2009 Ocean Plan for use in this permit. However, neither the ambient data used by staff to model near field mixing nor the ambient data used by the US 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 as described below.

The Discharger shall collect temperature and salinity data from throughout the water column in the vicinity of the Discharge Point 002 at OVL-001 (see Figure 1 and Table 1) 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 shall be collected from areas of similar depth as the outfall for two years.

B. Special Study – Constituents of Emerging Concern (CEC) in Effluent

This survey answers the question: Are CECs present in the effluent discharge at SCI WWTP?

In recent years, this Regional Water Board has incorporated monitoring of a select group of man-made chemicals, particularly pesticides, pharmaceuticals and personal care products, known collectively as constituents of emerging concern (CECs), into permits issued to wastewater treatment plants to better understand the propensity, persistence and effects of CECs in our environment. Recently adopted permits in this region contain requirements for CEC monitoring and submittal of a work plan identifying the CECs to be monitored in effluent, sample type, frequency and methodology. Based on feedback we have received from permittees and our review of the results of a recent CEC-related study by SCCWRP and the State Water Board, we have modified our CEC monitoring program to respond to feedback while proceeding to fill identified data gaps without overly burdening any one permittee.

1. The Discharger shall conduct a special study to investigate CECs in the effluent. Specifically, within 6 months 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.
2. Consistent with CWC section 13267 and 13383, the CECs listed in Table 7 shall be monitored once per permit cycle. Unless required by another condition of this Order, there is no need to collect additional data for constituents for which at least 2 years of data have already been collected. The Regional Water Board has determined that 2 years is an appropriate time period to determine those CECs that are present in wastewater effluent. Monitoring results shall be reported as part of the annual summary report. Existing data shall be summarized and reported in the 2013 annual summary report.

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Table 7 CEC Monitoring Requirements

Parameter	Unit	Sample Type	Minimum Sampling Frequency	Analytical Test Method and (Minimum Level, units)
17 α -Ethinyl Estradiol	ng/L	To be proposed	Once per permit cycle	To be proposed
17 β -Estradiol	ng/L	To be proposed	Once per permit cycle	To be proposed
Estrone	ng/L	To be proposed	Once per permit cycle	To be proposed
Bisphenol A	ng/L	To be proposed	Once per permit cycle	To be proposed
Nonylphenol & Nonylphenol polyethoxylates	ng/L	To be proposed	Once per permit cycle	To be proposed
Octylphenol & octylphenol polyethoxylates	ng/L	To be proposed	Once per permit cycle	To be proposed
Polybrominated diphenyl ethers	ng/L	To be proposed	Once per permit cycle	To be proposed
Acetaminophen	ng/L	To be proposed	Once per permit cycle	To be proposed
Amoxicillin	ng/L	To be proposed	Once per permit cycle	To be proposed
Azithromycin	ng/L	To be proposed	Once per permit cycle	To be proposed
Carbamazepine	ng/L	To be proposed	Once per permit cycle	To be proposed
Caffeine	ng/L	To be proposed	Once per permit cycle	To be proposed
Ciprofloxacin	ng/L	To be proposed	Once per permit cycle	To be proposed
N,N-Diethyl-m-toluamide (DEET)	ng/L	To be proposed	Once per permit cycle	To be proposed
Dilantin	ng/L	To be proposed	Once per permit cycle	To be proposed
Gemfibrozil	ng/L	To be proposed	Once per permit cycle	To be proposed
Ibuprofen	ng/L	To be proposed	Once per permit cycle	To be proposed
Lipitor (Atorvastatin)	ng/L	To be proposed	Once per permit cycle	To be proposed
Iodinated contrast media (iopromide)	ng/L	To be proposed	Once per permit cycle	To be proposed
Sulfamethoxazole	ng/L	To be proposed	Once per permit cycle	To be proposed
Trimethoprim	ng/L	To be proposed	Once per permit cycle	To be proposed

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Parameter	Unit	Sample Type	Minimum Sampling Frequency	Analytical Test Method and (Minimum Level, units)
Salicylic acid	ng/L	To be proposed	Once per permit cycle	To be proposed
TCEP, TCPP and TDCPP	ng/L	To be proposed	Once per permit cycle	To be proposed
Triclosan	ng/L	To be proposed	Once per permit cycle	To be proposed
Bifenthrin	ng/L	To be proposed	Once per permit cycle	To be proposed
Permethrin	ng/L	To be proposed	Once per permit cycle	To be proposed
Chlorpyrifos	ng/L	To be proposed	Once per permit cycle	To be proposed
Galaxolide	ng/L	To be proposed	Once per permit cycle	To be proposed
Diclofenac	ng/L	To be proposed	Once per permit cycle	To be proposed
Butylbenzyl Phthalate	ng/L	To be proposed	Once per permit cycle	To be proposed
Perfluorooctane Sulfonate (PFOS)	ng/L	To be proposed	Once per permit cycle	To be proposed
Fipronil	ng/L	To be proposed	Once per permit cycle	To be proposed
Meprobamate	ng/L	To be proposed	Once per permit cycle	To be proposed

C. Outfall Inspection

This survey answers the question: Are the outfall structures in serviceable condition ensuring their continued safe operation? The data collected will be used for a periodic assessment of the integrity of the outfall pipes and ballast system.

The entire ocean outfall for Discharge Point 002 shall be inspected externally a minimum of ~~once a year~~ **twice per permit cycle** during the month of July or August. This shall consist of:

1. An examination of the outfall for plugs, leaks, and flow distribution. A detailed structural analysis of the pipes every five years submitted with the ROWD shall be conducted using underwater television/videotape and submarine visual inspection, where appropriate, to provide a comprehensive report on the discharge pipe systems from shallow water to the respective termini. The annual visual inspection shall be conducted on the external condition of the outfall and ballast systems. A written report documenting conditions shall be prepared and submitted with the Annual Summary Report to this Regional Water Board.
2. A visual inspection at and in the vicinity of the outfall system to determine thickness of any "cloud" of unsettled solids, bottom flora and fauna, and any other biological and physical conditions. Inspections shall include general observations and photographic

records of the outfall pipe and the surrounding ocean bottom. A report (including photographs) discussing the above information shall be submitted with the Annual Summary Report to this Regional Water Board.

D. Sludge Monitoring and Reporting

1. The Discharger must comply with all requirements of 40 CFR parts 257, 258, 501, and 503, including all applicable monitoring, recordkeeping, and reporting requirements.
2. The Discharger must comply with the monitoring and reporting requirements outlined in Attachment I of this Order (Biosolids/Sludge Management).
3. A monthly report shall be provided, noting the moisture content, weight, and volume of screenings, sludges, grit, and other solids removed from the wastewater. The point(s) from which these wastes were obtained and the disposal sites to which waste solids are transported shall be specified in monthly reports.

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. The Discharger shall comply with all General Monitoring Provisions in Section I. of this MRP and Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.
2. All samples shall be representative of the waste discharge under conditions of peak load. Weekly effluent analyses shall be performed on different weekdays during each month. Quarterly influent and effluent analyses shall be performed during the months of January, April, July, and October. Semiannual influent and effluent analyses shall be performed during the months of May and November. Annual influent and effluent analyses shall be performed during the month of August. Should there be instances when monitoring could not be done during these specified months, the Discharger must notify the Regional Water Board, state the reason why the monitoring could not be conducted, and obtain approval from the Executive Officer for an alternate schedule. Results of quarterly, semiannual, and annual analyses shall be reported in the quarterly monitoring report following the analysis, unless otherwise specified.
3. If there is no discharge during any reporting period, the report shall so state.
4. Each monitoring report shall contain a separate section titled "Summary of Non-Compliance" which discusses the compliance record and the corrective actions taken or planned that may be needed to bring the discharge into full compliance with waste discharge requirements. This section shall clearly list all non-compliance with discharge requirements, as well as all excursions of effluent limitations.
5. The Discharger shall inform the Regional Water Board well in advance of any proposed construction activity that could potentially affect compliance with applicable requirements.

B. Self Monitoring Reports (SMRs)

1. At any time during the term of this Order, the State or Regional Water Board may notify the Discharger to electronically submit Self-Monitoring Reports (eSMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) Program website (<http://www.waterboards.ca.gov/ciwqs/index.html>). Until such notification is given, the Discharger shall submit hard copy SMRs. The CIWQS website will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal.

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2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections III through IX. The Discharger shall submit monthly, quarterly, semiannual, annual SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
3. Monitoring periods and reporting for all required monitoring except monitoring required under sections VIII.B (excluding residual chlorine monitoring and visual observations) through VIII.D, shall be completed according to the following schedule on Table 8:

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Table 8 Monitoring Periods and Reporting Schedule

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

4. Reporting Protocols. The Discharger shall report with each sample result the applicable reported ML and the current MDL, as determined by the procedure in 40 CFR part 136.

For each numeric effluent limitation identified in Table B of the 2009 Ocean Plan, the Discharger shall select one or more Minimum Levels (ML) and their associated analytical methods from Appendix II of the 2009 Ocean Plan. The "reported" ML is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from Appendix II.

The Discharger must select all MLs from Appendix II that are below the effluent limitation. If the effluent limitation is lower than all the MLs in Appendix II, the Discharger must select the lowest ML from Appendix II.

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

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

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DNQ. The estimated chemical concentration of the sample shall also be reported.

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

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

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

- i. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.
- ii. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.
- iii. SMRs must be submitted to the Regional Water Board, signed and certified as required by the Standard Provisions (Attachment D). Paper SMRs should be converted to a Portable Document Format (PDF). Documents that are less than 10 megabytes (MB) shall be emailed to losangeles@waterboards.ca.gov. Documents that are 10 MB or larger shall be transferred to a disk and mailed to the address listed below:

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.

Dischargers who have been certified to only submit electronic SMRs to CIWQS should continue doing so, as previously required.

C. Discharge Monitoring Reports (DMRs)

1. As described in section X.B.1 above, at any time during the term of this Order, the State or Regional Water Board may notify the Discharger to electronically submit SMRs that will satisfy federal requirements for submittal of Discharge Monitoring Reports (DMRs). Until such notification is given, the Discharger shall submit DMRs in accordance with the requirements described below.
2. DMRs must be signed and certified as required by the Standard Provisions (Attachment D). The Discharger shall submit the original DMR and one copy of the DMR to the address listed below:

STANDARD MAIL	FEDEX/UPS/ OTHER PRIVATE CARRIERS
State Water Resources Control Board Division of Water Quality c/o DMR Processing Center PO Box 100 Sacramento, CA 95812-1000	State Water Resources Control Board Division of Water Quality c/o DMR Processing Center 1001 I Street, 15 th Floor Sacramento, CA 95814

3. All discharge monitoring results must be reported on the official USEPA pre-printed DMR forms (EPA Form 3320-1). Forms that are self-generated will not be accepted unless they follow the exact same format of EPA Form 3320-1.

D. Other Reports

1. The Discharger shall report the results of any special studies, acute and/or chronic toxicity testing, TRE/TIE, PMP, and Pollution Prevention Plan, etc. required by Special Provisions – section VI.C of this Order. The Discharger shall report the progress in satisfaction of compliance schedule dates specified in Special Provisions – section VI.C.7 of this Order. The Discharger shall submit reports in compliance with reporting schedules described in each section.
2. **Annual Summary Report**
By April 15 of each year, the Discharger shall submit an annual summary report containing a discussion of the previous year's influent/effluent analytical results and receiving water bacterial monitoring data. The annual summary report shall contain tabular summaries of the monitoring analytical data. The annual summary report shall also contain an overview of any plans for upgrades to the treatment plant's collection system, the treatment processes, or the outfall system, and sewer and plant maintenance activities. The Discharger shall submit a hard copy annual summary report to the Regional Water Board in accordance with the requirements described in subsection B.5 above.

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.

3. **Receiving Water Monitoring Report**

An annual summary of the receiving water monitoring data collected during each sampling year (January – December) shall be prepared and submitted so that it is received by the Regional Water Board by April 15 of the following year. The first annual receiving water monitoring summary report is due by April 15, 2014, covering the period from January 1, 2013 through December 31, 2013.

By April 15 of every other year, a biennial receiving water monitoring report instead of the annual summary report shall be prepared and submitted to the Regional Water Board. This report shall include an in-depth discussion of the results from the Receiving Water Monitoring programs conducted during the previous two calendar years. The report may be limited to discussion of those components of the Receiving Water Monitoring Program that are local in nature. Results of regional surveys need not be included. Temporal and spatial trends in the data shall be analyzed, with particular reference to comparisons between stations with respect to distance from the outfall and comparisons to data collected during previous years. Appropriate statistical tests and indices, subject to approval of the Executive Officer, shall be calculated and included in the biennial report. The first biennial report shall be due on April 15, 2015 covering the period from January 1, 2013 through December 31, 2014.

Submission of reports of the results of regional monitoring programs in which the Regional Water Board and Discharger are co-participants will not be the responsibility of the Discharger.

4. **Outfall Inspection Report**

A summary of the Outfall Inspection findings shall be submitted by April 15 of the year following an outfall inspection survey. This written report, augmented with videographic and/or photographic images, will provide a description of the observed external condition of the discharge pipes from shallow water to their respective termini. The first report is due on April 15, 2014.

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ATTACHMENT F – FACT SHEET

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ATTACHMENT F – FACT SHEET

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

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

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table 1. Facility Information

WDID	4B190703003
Discharger	United States Navy (US Navy)
Name of Facility	San Clemente Island Waste Water Treatment Plant (SCI WWTP)
Facility Address	Navy Auxiliary Landing Field
	San Clemente Island, CA
	Los Angeles County
Facility Contact, Title and Phone	Thomas Niday, Utilities System Operator (619) 524-9125
Authorized Person to Sign and Submit Reports	Brian Gordon, Water Quality Program Manager, US Navy Region Southwest I, (619) 532-2273
Mailing Address	Naval Station San Diego Bldg 3212 San Diego, Ca 92135
Billing Address	Same
Type of Facility	Federally-owned Treatment Works (FOTW)
Major or Minor Facility	Minor ¹
Threat to Water Quality	1
Complexity	B
Pretreatment Program	No
Reclamation Requirements	Producer and User
Facility Permitted Flow	0.025 million gallons per day (mgd) monthly average
Facility Design Flow	0.06 mgd design capacity for secondary treated discharge and 0.03 mgd design capacity for tertiary treated discharge
Watershed	San Clemente Island Watershed
Receiving Water	Pacific Ocean
Receiving Water Type	Ocean waters

- A. The United States Navy (US Navy) is the operator of the San Clemente Island Wastewater Treatment Plant (Facility or SCI WWTP), a federally-owned treatment works (FOTW). The

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

US Navy owns the property at the Navy Auxiliary Landing Field, San Clemente Island, California, on which the Facility is located.

- B.** The Facility discharges wastewater to the Pacific Ocean, a water of the United States. The Discharger was previously regulated by Order No. 00-090 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0110175 adopted on June 29, 2000, and expired on July 10, 2005. The terms and conditions of the current Order have been automatically continued and remain in effect until new Waste Discharge Requirements (WDRs) and NPDES permit are adopted pursuant to this Order. Attachment B provides a map of the area around the Facility. Attachment C provides a flow schematic of the Facility.

Prior to making any change in the point of discharge, place of use, or purpose of use of treated wastewater that results in a decrease of flow in any portion of a surface or subterranean stream, the Discharger must file a petition with the State Water Resources Control Board (State Water Board), Division of Water Rights, and receive approval for such a change. The State Water Board retains the jurisdictional authority to enforce such requirements under CWC section 1211.

- C.** The Discharger filed a report of waste discharge (ROWD) and submitted an application for renewal of its WDRs and NPDES permit on August 22, 2012. Supplemental information was requested on September 20, 2012 and on December 10, 2012 and all requested items were received on February 27, 2013. The application was deemed complete on March 19, 2013. A site visit was conducted on August 14, 2012, to observe operations and collect data to develop permit limitations and requirements for waste discharge.]

II. FACILITY DESCRIPTION

A. Description of Wastewater and Biosolids Treatment or Controls

The Discharger owns and operates SCI WWTP. The treatment plant is located at 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 separate 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 communitation, equalization, activated sludge extended aeration, clarification, chlorination, and dechlorination.

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

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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 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 No. 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 Area of Special Biological Significance (ASBS) exclusion area (State Water Board Resolution No. 77-11), 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.

B. Discharge Points and Receiving Waters

The SCI WWTP has two discharge point (Discharge Point 002) 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)

Table 2 Description of Discharge Point 002

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

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

Effluent limitations contained in the 2000 Order for discharges from Discharge Point 002 and representative monitoring data (September 2007 to October 2012) from the term of the Previous Order is as follows:

Table 3 Historic Effluent Limitations and Monitoring Data (Major Wastewater Constituents/Parameters)

Parameter	Units	Effluent Limitation			Monitoring Data (From September 2007 – To October 2012)		
		Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
Total Waste Flow	gal/day	25,000	25,000	25,000	22,126	--	--
BOD ₅	mg/L	30	45	--	8.19	--	--
TSS	mg/L	30	45	--	10	--	--
Oil & Grease	mg/L	25	40	75	<5.5	--	--
Settleable Solids	ml/L	1.0	1.5	3.0	<1.0	--	--
Total dissolved solids	mg/L	--	--	--	1110	--	--
Turbidity	NTU	--	--	--	5.04	--	--
pH	pH units	≥ 6 and ≤ 9	≥ 6 and ≤ 9	≥ 6 and ≤ 9	--	--	--
Temperature	°F	≤ 100 °F	≤ 100 °F	≤ 100 °F	73.9	--	--
Fecal Coliform	MPN/100 ml	--	--	--	300	--	--
Total Coliform	MPN/100 ml	--	--	--	500	--	--
Enterococcus	CFU/100 ml	--	--	--	13	--	--

Table 4 Historic Effluent Limitations and Monitoring Data (Toxic Pollutants)

Parameter	Units	Effluent Limitation				Monitoring Data (From September 2007 – To October 2012)		
		Average Monthly	Average Weekly	Maximum Daily	Instant Maximum	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
Chlorine Residual	µg/L	--	--	--	--	6.3	--	--

D. Compliance Summary

Monitoring data was reviewed to compare actual performance by the Discharger with (1) the performance goals and effluent limitations in Table A and (2) the performance goals in Table B, as specified in Order No. 00-090. From September 2007 through October 2012, twenty-six exceedances of Order No. 00-090 were noted. These include exceedances for copper (2012), zinc (2012), residual chlorine (2011, 2009), chronic toxicity (2011, 2008, 2007), chlorine total residual monthly average (2010), and pH (2011, 2009, 2008). In addition ten reporting violations were noted in the self-monitoring reports (SMRs) during the period September 2007 through October 2012: chronic toxicity (2008); hexavalent chromium, mercury, dichloromethane, and dichlorobenzene (2009); and pH reporting related to exceeding the holding time (2011, 2012).

E. Planned Changes (Not Applicable)

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

A. Legal Authorities

This Order 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. California Environmental Quality Act (CEQA)

Under CWC section 13389, this action to adopt an NPDES permit is exempt from the provisions of Chapter 3 of CEQA, (commencing with section 21100) of division 13 of Public Resources Code (PRC).

C. State and Federal Regulations, Policies, and Plans

1. Water Quality Control Plans

The Los Angeles Regional Water Quality Control Board (Regional Water Board) adopted a Water Quality Control Plan for the Los Angeles Region (Basin Plan) on June 13, 1994, as amended, 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 in the vicinity of San Clemente Island are as follows:

Table 5 Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
002	Pacific Ocean San Clemente Island Nearshore Zone (The zone bounded by the shoreline and a line 1000 feet from the shoreline or the 30-foot depth contours, whichever is further from the shoreline).	<u>Existing:</u> 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). <u>Potential:</u> Spawning, Reproduction, and/or Early Development (SPWN).

Requirements of this Order implement the Basin Plan.

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2. 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 September 15, 2009 and it became effective on October 8, 2010. 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 6 Ocean Plan Beneficial Uses

Discharge Point	Receiving Water	Beneficial Uses
Outfall 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 the beneficial uses, the Ocean Plan establishes water quality objectives and a program of implementation. Requirements of this Order implement the Ocean Plan.

3. California Thermal Plan

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

4. Alaska Rule

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

5. Stringency of Requirements for Individual Pollutants

This Order contains both technology-based effluent limitations (TBELs) and water quality-based effluent limitations (WQBELs) for individual pollutants. The TBELs consist of restrictions on biological 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. In addition, this Order contains effluent limitations more stringent than the minimum, federal technology-based requirements that are carried over from the previous permit.

WQBELs have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have

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been approved pursuant to federal law and are the applicable federal water quality standards. All beneficial uses and water quality objectives contained in the Basin Plan and the Ocean Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless “applicable water quality standards for purposes of the CWA” pursuant to 40 CFR part 131.21(c)(1). Collectively, this Order’s restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA

6. 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 is deemed to incorporate the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board’s Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provision of 40 CFR part 131.12 and State Water Board Resolution No. 68-16.

7. Anti-Backsliding Requirements

Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 CFR part 122.44(l) restrict backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed.

8. Endangered Species Act (ESA)

This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California ESA (Fish and Game Code (FGC) sections 2050 to 2097) or the federal ESA (16 United States Code (USC) sections 1531 to 1544). This Order requires compliance with effluent limitations, receiving water limitations, and other requirements to protect the beneficial uses of waters of the state. The Discharger is responsible for meeting all requirements of the applicable ESA.

9. Water Rights

Prior to making any change in the point of discharge, place of use, or purpose of use of treated wastewater that results in a decrease of flow in any portion of a surface or subterranean stream, the Discharger must file a petition with the State Water Board (State Water Board), Division of Water Rights, and receive approval for such a change. The State Water Board retains the jurisdictional authority to enforce such requirements under CWC section 1211. However, since this is an ocean discharge, CWC section 1211 is not applicable to this permit.

10. 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 MRP establishes monitoring and reporting requirements to implement federal and state requirements. This MRP is provided in Attachment E.

11. Sewage Sludge/Biosolids Requirements

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. The state has not been delegated the authority to implement this program; therefore, USEPA is the implementing agency. This Order contains sewage sludge/biosolids requirements pursuant to 40 CFR part 503 that are applicable to the Discharger

D. Impaired Water Bodies on CWA 303(d) List (Not Applicable)

E. Other Plans, Policies and Regulations

1. Secondary Treatment Regulations

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

2. Watershed Management.

The Regional Water Board has been implementing a Watershed Management Approach to address water quality protection in Los Angeles and Ventura Counties. The approach is in accordance with USEPA guidance on *Watershed Protection: A Project Focus* (EPA841-R-95-003, August 1995). The objective is to provide a comprehensive and integrated strategy resulting in water resource protection, enhancement and restoration, while balancing economic and environmental impacts within a hydrologically defined drainage basin or watershed. The approach emphasizes cooperative relationships between regulatory agencies, the regulated community, environmental groups, and other stakeholders in the watershed to achieve the greatest environmental improvements with the resources available. This Order and the accompanying *Monitoring and Reporting Program* (MRP) (Attachment E) fosters implementation of this approach.

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in CFR part 122.44(a) requires that permits include applicable technology-based limitations and standards (TBELs); and CFR part 122.44(d) requires that permits include water quality-based effluent limitations (WQBELs) to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water.

A. Discharge Prohibitions

This Order authorizes the discharge of secondary treated wastewater through Discharge Point 002. Discharge prohibitions in this Order are based on the requirements in section III.I of the Ocean Plan.

B. Technology-Based Effluent Limitations (TBELs)

1. Scope and Authority

Section 301(b) of the CWA and implementing USEPA permit regulations at part 122.44, title 40 of the 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.

2. Applicable TBELs

CWA section 301 (b)(1)(B), 304 (d)(1), and implementing USEPA permit regulations at part 122.44, title 40 of the 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. USEPA has established standards of performance for secondary treatment at 40 CFR part 133. Secondary treatment is defined in terms of three parameters – 5-day biochemical oxygen demand (BOD₅), total suspended solids (TSS), and pH. The following summarizes the TBELs for secondary treatment, which are applicable to the Facility:

Table 7 USEPA TBELs for Secondary Treatment Facilities by USEPA at 40 CFR part 133.102

Constituent	Average Monthly	Average Weekly	Percent Removal
BOD ₅	30 mg/L	45 mg/L	85%
TSS	30 mg/L	45 mg/L	85%
pH	6.0 to 9.0		

Table A of the Ocean Plan (2009) also establishes the following TBELs, which are applicable to the Facility:

Table 8 TBELs established by the Ocean Plan (2009)

Constituent	Average Monthly	Average Weekly	Instantaneous Maximum	Percent Removal
Oil & Grease	25 mg/L	40 mg/L	75 mg/L	--
TSS*	--	--	--	75%*
Settleable Solids	1.0 ml/L	1.5 ml/L	3.0 ml/L	--
Turbidity	75 NTU	100 NTU	225 NTU	--
pH	6.0 to 9.0			
* Discharger shall, as a monthly average, remove 75% of TSS from the influent stream before discharging to the ocean, except that the effluent limitation to be met shall not be lower than 60 mg/L.				

All TBELs from Order No. 00-090 for BOD, TSS, oil and grease, settleable solids, pH, and turbidity are retained by this Order with minor changes for turbidity as described below. Limitations for TSS, and pH are based on secondary treatment standards established by the USEPA at 40 CFR part 133. Limitations for oil and grease, turbidity, and settleable solids are based on the requirements in the 2009 Ocean Plan. To be consistent with the Ocean Plan, daily maximum limitations for these three constituents in the 2000 Order have been prescribed as instantaneous maximum limitations in this Order. All TBELs are not dependent upon the dilution ratio for the discharge outfall. In addition to the concentration-based effluent limitations, mass-based effluent limitations

based on a maximum monthly average flow rate of 0.025 million gallons per day are also included. The following table summarizes the TBELs for the discharge from the Facility:

Table 9 Summary of TBELs at Discharge Point 002

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
BOD ₅ 20°C	mg/L	30	45	--	--	--
	% removal	85	--	--	--	--
Total Suspended Solids (TSS)	mg/L	30	45	--	--	--
	% removal	85	--	--	--	--
Oil and Grease	mg/L	25	40	--	--	75
Settleable Solids	ml/L	1.0	1.5	--	--	3.0
Turbidity	NTU	75	100	--	--	225
pH	pH unit	6.0 to 9.0				

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

Section 301(b) of the CWA and CFR part 122.44(d) require that permits include limitations more stringent than applicable federal TBELs where necessary to achieve applicable water quality standards.

CFR part 122.44(d)(1)(i) requires that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, WQBELs must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in CFR part 122.44(d)(1)(vi).

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

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

The Basin Plan and the Ocean Plan establish the beneficial uses for ocean waters of the State. The beneficial uses of the receiving waters affected by the discharge have been described previously in this Fact Sheet. The Ocean Plan also contains water quality objectives for bacterial characteristics, and radioactivity. The Basin Plan also contains the bacteria objectives for water bodies designated for water contact recreation that was

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amended by Resolution No. 01-018. These water quality objectives from the Ocean Plan with consideration of the bacteria objective in the Basin Plan were included as receiving water limitations in this Order.

Table B of the Ocean Plan includes the numerical water quality objectives for toxic pollutants.

- a. 6-month median, daily maximum, and instantaneous maximum objectives for 21 chemicals and chemical characteristics, including total residual chlorine, acute and chronic toxicity, for the protection of marine aquatic life.
- b. 30-day average objectives for 20 non-carcinogenic chemicals for the protection of human health.
- c. 30-day average objectives for 42 carcinogenic chemicals for the protection of human health.

3. Expression of WQBELs

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

The WQBELs for marine aquatic life toxicants contained in this Order are based on water quality objectives contained in the 2009 Ocean Plan that are expressed as 6 month median, daily maximum, and instantaneous maximum water quality objectives. The 6 month median objectives for the marine aquatic life toxicants in the 1997 Ocean Plan were prescribed in the 2000 permit as monthly average limitations. Ocean Plan Table B parameters in the 2000 permit do not have calculated effluent limits based on the statistical performance of the treatment plant; rather they are taken directly from Ocean Plan Table B and applied as instantaneous maximum, daily maximum and monthly average performance goals.

This Order uses effluent limitations derived from 6 month median water quality objectives for marine aquatic life toxicants in Table B of the 2009 Ocean Plan as monthly average limitations.

4. Determining the Need for WQBELs

Order No. 00-090 contains effluent limitations for some of the non-conventional and toxic pollutant parameters in Table B of the 2009 Ocean Plan. For this Order, the need for effluent limitations based on water quality objectives in Table B of the 2009 Ocean Plan was reevaluated in accordance with the Reasonable Potential Analysis (RPA) procedures contained in Appendix VI of the 2009 Ocean Plan. The statistical RPA method (Reasonable Potential Calculator – Rpcalc v2.0) accounts for the averaging period of the water quality objective, accounts for and captures the long-term variability of the pollutant in the effluent, accounts for limitations associated with sparse data sets, accounts for uncertainty associated with censored data sets, and assumes a lognormal distribution of the facility-specific effluent data. The program calculates the upper confidence bound (UCB) of an effluent population percentile after complete mixing. In the evaluation employed in this Order, the UCB is calculated as the one-sided, upper 95 percent confidence bound for the 95th percentile of the effluent distribution after complete mixing. The calculated UCB_{95/95} is then compared to the appropriate objective to determine the potential for an exceedance of that objective and the need for an effluent limitation. For constituents that have an insufficient number of monitoring data or have

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substantial number of non-detected (ND) data (greater than 80 percent of the data is ND) with a reporting limit higher than the respective water quality objective, the RPA result is likely to be inconclusive. As suggested by the Ocean Plan, existing performance goals and/or effluent limitations for these constituents are to be retained in the 2013 Order. The MRP (Attachment E) of this Order also requires the Discharger to continue to monitor for these constituents for the determination of reasonable potential for these constituents in future permit renewals and/or updates.

~~For Table B Ocean Plan (2009) parameters with an inconclusive RPA result that have all ND data, further best professional judgment (BPJ) considerations were taken. If the calculated $Ce = Co + Dm * (Co - Cs)$ is lower than both the laboratory method detection limit (MDL) and the Ocean Plan specified minimum level (ML), WQBELs were assigned.~~

Using this statistical procedure in combination with effluent data provided by the Discharger from September 2007- October 2012, BPJ and a State Water Board-approved minimum initial dilution ratio of 136:1 for Discharge Point 002, Regional Water Board staff has determined that the following constituents have the reasonable potential to exceed Ocean Plan objectives, and therefore, require effluent limitations:

- a. The statistical procedure has shown that TCDD Equivalents and DDT have the reasonable potential to exceed Ocean Plan objectives. Effluent limitations have been assigned.
- b. Wastewater disinfection with chlorine usually produces chlorine residual and the byproducts of chlorination are highly toxic to aquatic life. Although the RPA determination based on daily chlorine residual data shows no RP for chlorine residual or acute or chronic toxicity, the daily maximum and instantaneous maximum limitations for chlorine residual are prescribed in this Order based on [Ocean Plan requirements and](#) the fact that effluent from the SCI WWTP is routinely chlorinated before discharge and based on Ocean Plan (2009) requirements applicable to a dilution ratio of 136:1.
- c. ~~The monitoring data for aldrin, benzdine, dieldrin, heptachlor, tributyltin, chlordane, 3,3-dichlorobenzidine, heptachlor epoxide, hexachlorobenzene, PAHs, PCBs, and toxaphene is all ND. Since the calculated Ces for these constituents are less than both the laboratory MDLs and/or the Ocean Plan MLs, the RPA is inconclusive. Based on BPJ, effluent limitations for these constituents have been assigned.~~

In general, ~~f~~or constituents that have been determined to have no reasonable potential to cause or contribute to excursions of water quality objectives, no numerical effluent limitations are prescribed. Instead performance goals are based on the more stringent of (1) carryover from Order No. 00-090, or (2) data provided by the Discharger from September 2007 – October 2012, and a narrative statement to comply with all Ocean Plan requirements, including laboratory MLs in Appendix II of the Ocean Plan (2009), have been assigned. The Discharger is required to monitor for these constituents to gather data for use in RPAs for future permit renewals and/or updates.

5. WQBEL Calculations

From the Table B water quality objectives of the Ocean Plan, WQBELs are calculated according to the following equation for all pollutants, except for chronic toxicity, acute toxicity, and radioactivity:

$$Ce = Co + Dm(Co - Cs)$$

where

- Ce = the effluent limitation (µg/L)
Co = the water quality objective to be met at the completion of initial dilution(µg/L)
Cs = background seawater concentration (µg/L) (see Table below)
Dm = minimum probable initial dilution expressed as parts seawater per part wastewater.

The Dm is based on observed waste flow characteristics, receiving water density structure, and the assumption that no currents of sufficient strength to influence the initial dilution process flow across the discharge structure. Prior to issuance of Order No. 00-090, staff of the State Water Board had determined that no dilution factor was to be allowed for Discharge Point 001 (no longer in use). In this Order, the State Water Board reviewed data, reviewed water quality modeling information, and conducted water quality modeling analyses prior to approving a dilution ratio of 136:1 which has been applied to Discharge Point 002, where Dm = 136.

Initial dilution is the process that results in the rapid and irreversible turbulent mixing of wastewater with ocean water around the point of discharge. For a submerged buoyant discharge, characteristic of most municipal and industrial wastes that are released from the submarine outfalls the momentum of the discharge and its initial buoyancy act together to produce turbulent mixing. Initial dilution in this case is completed when the diluting wastewater ceases to rise in the water column and first begins to spread horizontally. As site-specific water quality data is not available, in accordance with Table B implementing procedures (Ocean Plan, 2009), Cs equals zero for all pollutants, except the following:

Table 10 Pollutants with Background Seawater Concentrations

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

As examples, WQBELs for copper, ~~chlorine residual~~, and chronic toxicity are calculated as follows:

Table 11 Ocean Plan Water Quality Objectives for Copper, Chronic Toxicity, and Tributyltin

Constituents	6-Month Median	Daily Maximum	Instantaneous Maximum	30 Day Average
Copper	3 µg/L	12 µg/L	30 µg/L	--
Chronic Toxicity	--	1 TUc	--	--
Tributyltin	--	--	--	0.0014 µg/L

Using the equation, $C_e = C_o + D_m (C_o - C_s)$, effluent limitations are calculated as follows before rounding to two significant digits. All calculations are based on discharge through

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Discharge Point 002 and, therefore, a dilution ratio (Dm) of 136:1 is applied, where Dm = 136.

Copper

$C_e = 3 + 136 (3-2) = 139 \mu\text{g/L}$ (monthly average, see section 3 above)

$C_e = 12 + 136 (12-2) = 1372 \mu\text{g/L}$ (daily maximum)

$C_e = 30 + 136 (30-2) = 3838 \mu\text{g/L}$ (instantaneous maximum)

Chronic Toxicity

$C_e = 1 + 136 (1-0) = 137 \text{ TUc}$ (daily maximum)

Tributyltin

~~$C_e = 0.0014 + 136 (0.0014 - 0) = 0.1918 \mu\text{g/L}$ (average monthly)~~

Based on the implementing procedures described above, effluent limitations have been calculated for all 2009 Ocean Plan Table B pollutants (excluding acute toxicity and radioactivity) from the Ocean Plan and incorporated into this Order when applicable.

Determination of radioactivity limitation: Since the descriptive water quality objective for radioactivity in the 2009 California Ocean Plan fails to establish an applicable narrative or numerical effluent limit for radionuclides, the Regional Water Board staff used BPJ to establish radioactivity limitations for the effluent using the equation $C_e = C_o + D_m (C_o - C_s)$ calculated similarly as above, except the C_o value is taken from the RPA statistical analysis of historic data from September 2007- to October 2012. The C_o value is equal to the Normal UCB (Upper 95% Confidence Bound for the 95th percentile with the assumption that the water quality objective for radioactivity is equal to 0).

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Table 12 WQBELs and Performance Goals at Discharge Point 002 (dilution ratio = 136:1)

Parameter	Units	Effluent Limitations ²					Performance Goals ³
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	Average Monthly
<u>Marine Aquatic Life Protection</u>							
Arsenic ⁴	µg/L	--	--	--	--	--	8.0
Cadmium ⁴	µg/L	--	--	--	--	--	1.0
Chromium (hexavalent)	µg/L	--	--	--	--	--	2.0
Copper ⁴	µg/L	--	--	--	--	--	3.0
Lead ⁴	µg/L	--	--	--	--	--	2.0
Mercury ⁴	µg/L	--	--	--	--	--	0.04
Nickel ⁴	µg/L	--	--	--	--	--	5.0
Selenium ⁴	µg/L	--	--	--	--	--	15.0
Silver ⁴	µg/L	--	--	--	--	--	0.70
Zinc ⁴	µg/L	--	--	--	--	--	20
Cyanide	µg/L	--	--	--	--	--	0.015
Total chlorine residual	µg/L	274	--	100 ⁵	--	8200	0.9
	lbs/day	0.06	--	0.021	--	1.7	--
Ammonia as N	µg/L	--	--	--	--	--	0.6

² 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.

The daily mass emission calculations are based on the average design flow rate of 0.025 million gallons per day (mgd) according to the Ocean Plan equation: lbs/day = 0.00834 x Ce (effluent concentration, ug/L) x Q (flow rate, mgd). 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.

³ The performance goals are based upon the actual performance data (September 2007 to October 2012) of the SCI WWTP and are specified only as an indication of the treatment efficiency of the plant. They are not considered effluent limitations or standards for the treatment plant. SCI WWTP shall make 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 Fact Sheet for procedures.

⁴ Performance goals were carried over from Order No. 00-090, Table B., based on 40 CFR part 122.44(l)(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.

⁵ The total chlorine residual daily discharge limitation was carried over from Order No. 00-090, Table A., based on 40 CFR part 122.44(l)(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.

Parameter	Units	Effluent Limitations ²					Performance Goals ³
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	Average Monthly
Acute toxicity ⁶	TUa	1.5	2.0	2.5	--	--	--
Chronic toxicity	TUc	--	--	137	--	--	--
Phenolic compounds (chlorinated)	µg/L	--	--	--	--	--	5.1
Phenolic compounds (non-chlorinated)	µg/L	--	--	--	--	--	5.1
Endosulfan	µg/L	--	--	--	--	--	0.022
Endrin	µg/L	--	--	--	--	--	0.022
HCH	µg/L	--	--	--	--	--	0.050
Radioactivity ⁷ Not to exceed limits specified in title 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	--	--	--	--	--	--
Tritium	PCi/L	--	--	--	--	--	--
Strontium-90	PCi/L	--	--	--	--	--	--
Uranium	PCi/L	--	--	--	--	--	--
Human Health Protection - Noncarcinogens							
Acrolein	µg/L	--	--	--	--	--	3.0
Antimony	µg/L	--	--	--	--	--	0.74
Bis(2-chloro-ethoxy) methane	µg/L	--	--	--	--	--	5.1
Bis(2-chloro-isopropyl) ether	µg/L	--	--	--	--	--	5.1
Chloro-benzene	µg/L	--	--	--	--	--	1.0

⁶ The acute toxicity effluent limitations were carried over from Order No. 00-090, Table A., based on 40 CFR part 122.44(l)(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.

⁷ Analyze these radiochemicals by the following USEPA methods: method 900.0 for gross alpha and gross beta, method 903.0 or 903.1 for radium-226, method 904.0 for radium-228, method 906.0 for tritium, method 905.0 for strontium-90, and method 908.0 for uranium.

Analysis for combined radium-226 & 228 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.

Parameter	Units	Effluent Limitations ²					Performance Goals ³
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	Average Monthly
Chromium (III)	µg/L	--	--	--	--	--	0.73
Di-n-butyl-phthalate	µg/L	--	--	--	--	--	5.1
Dichloro-benzenes	µg/L	--	--	--	--	--	5.1
Diethyl phthalate	µg/L	--	--	--	--	--	5.1
Dimethyl phthalate	µg/L	--	--	--	--	--	5.1
4,6-dinitro-2-methylphenol	µg/L	--	--	--	--	--	5.1
2,4-Dinitrophenol	µg/L	--	--	--	--	--	5.1
Ethyl benzene	µg/L	--	--	--	--	--	1.0
Fluoranthene	µg/L	--	--	--	--	--	5.1
Hexachloro-cyclo-pentadiene	µg/L	--	--	--	--	--	5.1
Nitrobenzene	µg/L	--	--	--	--	--	5.1
Thallium	µg/L	--	--	--	--	--	0.50
Toluene	µg/L	--	--	--	--	--	1.0
Tributyltin ⁸	µg/L	0.19	--	--	--	--	--
1,1,1-Trichloro-ethane	µg/L	--	--	--	--	--	2.5
Human Health Protection – Carcinogens							
Acrylonitrile	µg/L	--	--	--	--	--	3.0
Aldrin ⁹	µg/L	0.003	--	--	--	--	--
Benzene	µg/L	--	--	--	--	--	1.0
Benzidine ⁹	µg/L	0.0095	--	--	--	--	--
Beryllium	µg/L	--	--	--	--	--	0.50
Bis(2-chloroethyl) ether	µg/L	--	--	--	--	--	5.1
Bis(2-ethylhexyl) phthalate	µg/L	--	--	--	--	--	12
Carbon tetrachloride	µg/L	--	--	--	--	--	1.0
Chlordane ⁹	µg/L	0.0032	--	--	--	--	--

⁸ BPJ effluent limitation applies, since all data provided was non-detect and the laboratory method selected for the highest non-detect level did not meet the minimum level required in the Ocean Plan (2009). Please refer to Fact Sheet narrative for details.

Parameter	Units	Effluent Limitations ²					Performance Goals ³
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	Average Monthly
Chloro-dibromo-methane ¹⁰	µg/L	--	--	--	--	--	29
Chloroform ¹⁰	µg/L	--	--	--	--	--	47
DDT	µg/L	0.024	--	--	--	--	--
	lbs/day	5.0 x 10 ⁻⁶	--	--	--	--	--
1,4-Dichloro-benzene	µg/L	--	--	--	--	--	5.1
3,3'-Dichloro-benzidine ⁹	µg/L	4.4	--	--	--	--	--
1,2-Dichloro-ethane	µg/L	--	--	--	--	--	1.0
1,1-Dichloro-ethylene	µg/L	--	--	--	--	--	1.0
Dichloro-bromo-methane	pg/L	--	--	--	--	--	43
Dichloro-methane	µg/L	--	--	--	--	--	1.3
1,3-Dichloro-propene	µg/L	--	--	--	--	--	1.0
Dieldrin ⁹	µg/L	0.0055	--	--	--	--	--
2,4-Dinitro-toluene	µg/L	--	--	--	--	--	5.1
1,2-Diphenyl-hydrazine	µg/L	--	--	--	--	--	5.1
Halomethanes	µg/L	--	--	--	--	--	69
Heptachlor ⁹	µg/L	0.00069	--	--	--	--	--
Heptachlor epoxide ⁹	µg/L	0.0027	--	--	--	--	--
Hexachloro-benzene ⁹	µg/L	0.029	--	--	--	--	--
Hexachloro-butadiene	µg/L	--	--	--	--	--	5.1
Hexachloro-ethane	µg/L	--	--	--	--	--	5.1
Isophorone	µg/L	--	--	--	--	--	5.1
N-Nitrosodi-methylamine	µg/L	--	--	--	--	--	5.1
N-Nitrosodi-N-propylamine	µg/L	--	--	--	--	--	--
N-Nitrosodi-phenylamine	µg/L	--	--	--	--	--	5.1
PAHs	µg/L	--	--	--	--	--	4.2
PCBs ⁹	µg/L	0.0026	--	--	--	--	--
TCDD	µg/L	5.3 x 10 ⁻⁷	--	--	--	--	--

REVISED TENTATIVE

Parameter	Units	Effluent Limitations ²					Performance Goals ³
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	Average Monthly
Equivalents	lbs/day	1.1 x 10 ⁻¹⁰	--	--	--	--	--
1,1,2,2-Tetrachloro-ethane	µg/L	--	--	--	--	--	1.0
Tetrachloro-ethylene	µg/L	--	--	--	--	--	--
Toxaphene ⁹	µg/L	0.029	--	--	--	--	0.029
Trichloro-ethylene	µg/L	--	--	--	--	--	1.0
1,1,2-Trichloro-ethane	µg/L	--	--	--	--	--	2.5
2,4,6-Trichloro-phenol	µg/L	--	--	--	--	--	5.1
Vinyl Chloride	µg/L	--	--	--	--	--	1.0

REVISED
TENTATIVE

6. Whole Effluent Toxicity (WET)

The 2009 Ocean Plan specifies that the Discharger shall conduct chronic toxicity testing for ocean water discharges with minimum initial dilution factors ranging from 100:1 to 350:1. The Regional Water Board may require that acute toxicity testing be conducted in addition to chronic as necessary for the protection of beneficial uses of ocean waters.

Additional analysis for chronic and acute toxicity: Wastewater disinfection with chlorine usually produces chlorine residual and the byproducts of chlorination are highly toxic to aquatic life. Although the RPA determination based on daily chlorine residual data shows no RP for chlorine residual or acute or chronic toxicity, the daily maximum and instantaneous maximum limitations for chlorine residual are prescribed in this Order based on the fact that effluent from the SCI WWTP is routinely chlorinated before discharge.

The procedure for calculating chronic toxicity is described on page F-16. The Ocean Plan 2009 formula for calculating acute toxicity is as follows:

$$C_e = C_a + (0.1) D_m (C_a)$$

Where

~~C_a = the concentration (water quality objective) to be met at the edge of the acute mixing zone.~~

~~D_m = minimum probable initial dilution expressed as parts seawater per part wastewater (This equation applies when $D_m > 24$. Since $D_m = 136$, this equation applies).~~

D. Final Effluent Limitations

1. Satisfaction of Anti-Backsliding Requirements

Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40, CFR section 122.44(l) prohibit backsliding in NPDES permits. 40 CFR section 122.62(a)(1) addresses carryover of water quality standards. The alterations that have occurred include the extension of the outfall that was completed August 8, 2008. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. The effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order for all parameters except acute toxicity. An acute toxicity effluent limit is included in Order 00-090, but has been removed in this Order. The removal of the effluent limit for acute toxicity is consistent with the statutory exception found in the Clean Water Act (CWA) Section 402(o)(2)(A). The removal of this limit is acceptable since material and substantial alterations have occurred at this facility that result in reduced toxicity. Removing this limit will not result in lowering water quality since the outfall has been moved and the treatment has been upgraded from secondary to tertiary.

2. Satisfaction of Antidegradation Policy

On October 28, 1968, the State Water Board adopted Resolution No. 68-16, *Maintaining High Quality of Waters in California*, which established an antidegradation policy for State and Regional Water Boards. The State Water Board has, in State Water Board Order No. 86-17 and an October 7, 1987 guidance memorandum, interpreted Resolution No. 68-16 to be fully consistent with the federal antidegradation policy. Similarly, the CWA (section 304(d)(4)(B)) and USEPA regulations (40 CFR part 131.12) require that all

permitting actions be consistent with the federal antidegradation policy. Together, the State and Federal policies are designed to ensure that a water body will not be degraded resulting from the permitted discharge. Discharges in conformance with the provisions of this Order will not result in a lowering of water quality and therefore conform to the antidegradation policies.

This Order is consistent with State and federal antidegradation policies in that it does not authorize any increase in pollutant mass emission rates, nor does it authorize a relaxation in the manner of treatment of the discharge. Pollutant limit mass emission rates continue to be based on the design flow rate of the treatment plant under the 2000 permit of 0.025 mgd. Further, an improvement in the level of effluent treatment with the tertiary treatment system is anticipated. As a result, both the quantity of the discharged pollutants and quality of the discharge are expected to remain relatively constant or improve during this permit term, consistent with antidegradation policies. The accompanying MRP (Attachment E) requires continued data collection and if monitoring data show a reasonable potential for a constituent to cause or contribute to an exceedance of water quality standards, the permit will be reopened to incorporate appropriate WQBELs. Such an approach ensures that the discharge will adequately protect water quality standards for designated beneficial uses and conforms to antidegradation policies and antibacksliding provisions.

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Table 13 Summary of Final Effluent Limitations at Discharge Point 002 (dilution ratio = 136:1)

Parameter	Units	Effluent Limitations ⁹					Performance Goals ¹⁰	Basis
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	Average Monthly	
Biochemical oxygen demand (BOD) 5-day @ 20°C ^{11,13}	mg/L	30	45	--	--	--	--	Existing/ Secondary Treatment Standard
	lbs/day	6.3	9.4	19	--	--	--	
Total suspended solids (TSS) ¹²	mg/L	30	45	--	--	--	8.0	Existing/ Secondary Treatment Standard
	lbs/day	6.3	9.4	19	--	--	--	
pH ¹³	pH units	--	--	--	6	9	--	Secondary Treatment Standard/ Ocean Plan
Oil and Grease ¹³	mg/L	25	40	--	--	75	2.0	Existing/ Ocean Plan
	lbs/day	5.2	8.3	--	--	15	--	
Settleable solids ¹³	ml/L	1	1.5	--	--	3	--	Existing/ Ocean Plan
Turbidity ¹³	NTU	75	100	--	--	225	3.0	Ocean Plan
Marine Aquatic Life Protection¹⁴								
Arsenic	µg/L	--	--	--	--	--	8.0	Existing/ No RP
Cadmium	µg/L	--	--	--	--	--	1.0	Existing/ No RP

⁹ 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). The daily mass emission calculations are based on the average design flow rate of 0.025 million gallons per day (mgd) specified in Order No. 00-090 according to the Ocean Plan equation: lbs/day = 0.00834 x C_e (effluent concentration, ug/L) x Q (flow rate, mgd).

¹⁰ The performance goals are based upon the actual performance data (September 2007 to October 2012) of the SCI WWTP and are specified only as an indication of the treatment efficiency of the plant. They are not considered effluent limitations or standards for the treatment plant. SCI WWTP shall make 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 Fact Sheet for procedures.

¹¹ The effluent limitations are based on secondary treatment standards, 40 CFR 133.102.

¹² Performance goals were carried over from Order No. 00-090, Tables A. and B., based on 40 CFR part 122.44(l)(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.

¹³ Based on Ocean Plan Table A effluent limitations.

¹⁴ Effluent limitations for these constituents are based on Ocean Plan Table B objectives using initial dilution ratios of 136:1 (i.e., 136 parts of seawater to 1 part effluent).

Parameter	Units	Effluent Limitations ⁹					Performance Goals ¹⁰	Basis
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	Average Monthly	
Chromium (hexavalent)	µg/L	--	--	--	--	--	2.0	Existing/ No RP
Copper	µg/L	--	--	--	--	--	3.0	Existing/ No RP
Lead	µg/L	--	--	--	--	--	2.0	Existing / No RP
Mercury	µg/L	--	--	--	--	--	0.04	Existing/ No RP
Nickel	µg/L	--	--	--	--	--	5.0	Existing/ No RP
Selenium	µg/L	--	--	--	--	--	15.0	Existing/ No RP
Silver	µg/L	--	--	--	--	--	0.7	Existing/ No RP
Zinc	µg/L	--	--	--	--	--	20	Existing/ No RP
Cyanide	µg/L	--	--	--	--	--	0.015	No RP
Total Chlorine Residual ¹⁵	µg/L	--	--	100	--	8200	0.9	Existing/ RP by BPJ/Ocean Plan
	lbs/day	--	--	0.23	--	1.7	--	
Ammonia as N	µg/L	--	--	--	--	--	600	Existing/ No RP
Acute Toxicity ¹⁶¹⁷	TUa	1.5	2.0	2.5	—	—	—	Existing/ RP by

¹⁵ 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:

$$\log y = -0.43(\log x) + 1.8$$

where: y = the water quality objective (in µg/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 2009 Ocean Plan.

¹⁶ Expressed as Acute Toxicity Units (TUa): 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 LC 50 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.

¹⁷ Acute toxicity effluent limitations were carried over from Order No. 00-090, Table A., based on 40 CFR part 122.44(l)(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.

Parameter	Units	Effluent Limitations ⁹					Performance Goals ¹⁰	Basis
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	Average Monthly	
								BPJ/Ocean Plan
Chronic Toxicity ¹⁸	TUc	--	--	137	--	--	--	RP by BPJ/Ocean Plan
Phenolic compounds (chlorinated) ¹⁹	µg/L	--	--	--	--	--	5.1	No RP
Phenolic compounds (non-chlorinated) ²⁰	µg/L	--	--	--	--	--	5.1	No RP
Endosulfan ²¹	µg/L	--	--	--	--	--	0.022	No RP
Endrin ¹³	µg/L	--	--	--	--	--	0.022	No RP
HCH ²²	µg/L	--	--	--	--	--	0.050	No RP
Radioactivity Not to exceed limits specified in title 22, section 64442 of the CCR.								
Gross alpha	PCi/L	--	--	--	--	--	4.5	No RP
Gross beta	PCi/L	--	--	--	--	--	10.0.	No RP
Combined Radium-226 & Radium-228	PCi/L	--	--	--	--	--	--	No RP
Tritium	PCi/L	--	--	--	--	--	--	No RP
Strontium-90	PCi/L	--	--	--	--	--	--	No RP
Uranium	PCi/L	--	--	--	--	--	--	No RP
Human Health Protection – Noncarcinogens¹⁰								
Acrolein	µg/L	--	--	--	--	--	3.0	No RP
Antimony	µg/L	--	--	--	--	--	0.74	No RP
Bis(2-chloro-ethoxy) methane	µg/L	--	--	--	--	--	5.1	No RP
Bis(2-chloro-	µg/L	--	--	--	--	--		No RP

¹⁸ 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.

¹⁹ Chlorinated phenolic compounds mean the sum of 2-Chlorophenol, 2,4-Dichlorophenol, 4-Chloro-3-methylphenol, 2,4,6-Trichlorophenol, and Pentachlorophenol.

²⁰ Nonchlorinated phenolic compounds shall mean the sum of Phenol, 2,4-Dimethylphenol, 2-Nitrophenol, and 4-Nitrophenol, 2,4-Dinitrophenol and 2-Methyl-4,6-dinitrophenol.

²¹ Endosulfan shall mean the sum of endosulfan-alpha, endosulfan-beta, and endosulfan sulfate.

²² HCH shall mean the sum of alpha, beta, gamma (lindane), and delta isomers of hexachlorocyclohexane.

Parameter	Units	Effluent Limitations ⁹					Performance Goals ¹⁰	Basis
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	Average Monthly	
isopropyl) ether							5.1	
Chloro-benzene	µg/L	--	--	--	--	--	1.0	No RP
Chromium (II)	µg/L	--	--	--	--	--	0.73	No RP
Di-n-butyl-phthalate	µg/L	--	--	--	--	--	5.1	No RP
Dichloro-benzenes ²³	µg/L	--	--	--	--	--	5.1	No RP
Diethyl phthalate	µg/L	--	--	--	--	--	5.1	No RP
Dimethyl phthalate	µg/L	--	--	--	--	--	5.1	No RP
4,6-dinitro-2-methyl-phenol	µg/L	--	--	--	--	--	5.1	No RP
2,4-Dinitrophenol	µg/L	--	--	--	--	--	5.1	No RP
Ethyl benzene	µg/L	--	--	--	--	--	1.0	No RP
Fluoranthene	µg/L	--	--	--	--	--	5.1	No RP
Hexachloro-cyclopentadiene	µg/L	--	--	--	--	--	5.1	No RP
Nitro-benzene	µg/L	--	--	--	--	--	5.1	No RP
Thallium	µg/L	--	--	--	--	--	0.50	No RP
Toluene	µg/L	--	--	--	--	--	1.0	No RP
Tributyltin ²⁴	µg/L	0.19	--	--	--	--	--	BPJ
1,1,1-Trichloro-ethane	µg/L	--	--	--	--	--	2.5	No RP
Human Health Protection - Carcinogens								
Acrylonitrile	µg/L	--	--	--	--	--	3.0	No RP
Aldrin ²⁵	µg/L	0.003	--	--	--	--	--	BPJ
Benzene	µg/L	--	--	--	--	--	1.0	No RP
Benzidine ²⁶	µg/L	0.0095	--	--	--	--	--	BPJ
Beryllium	µg/L	--	--	--	--	--	0.50	No RP
Bis(2-chloroethyl) ether	µg/L	--	--	--	--	--	5.1	No RP

²³ Dichlorobenzenes shall mean the sum of 1,2- and 1,3-dichlorobenzene.

²⁴ BPJ effluent limitation applies since all data provided was non-detect 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	Effluent Limitations ⁹					Performance Goals ¹⁰	Basis
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	Average Monthly	
Bis(2-ethylhexyl) phthalate	µg/L	--	--	--	--	--	12	No RP
Carbon tetrachloride	µg/L	--	--	--	--	--	1.0	No RP
Chlordane ²⁵	µg/L	0.0032	--	--	--	--	--	BPJ
Chloro-dibromo-methane	µg/L	--	--	--	--	--	29	No RP
Chloroform	µg/L	--	--	--	--	--	47	No RP
DDT ²⁶	µg/L	0.024	--	--	--	--	--	RP / Ocean Plan
	lbs/day	5.0 x 10 ⁻⁶	--	--	--	--	--	
1,4-Dichloro-benzene	µg/L	--	--	--	--	--	5.1	No RP
3,3'-Dichloro-benzidine ²⁵	µg/L	1.1	--	--	--	--	--	BPJ
1,2-Dichloro-ethane	µg/L	--	--	--	--	--	1.0	No RP
1,1-Dichloro-ethylene	µg/L	--	--	--	--	--	1.0	No RP
Dichloro-bromo-methane	pg/L	--	--	--	--	--	43	No RP
Dichloro-methane	µg/L	--	--	--	--	--	1.3	No RP
1,3-Dichloro-propene	µg/L	--	--	--	--	--	1.0	No RP
Dieldrin ²⁵	µg/L	0.0055	--	--	--	--	--	BPJ
2,4-Dinitro-toluene	µg/L	--	--	--	--	--	5.1	No RP
1,2-Diphenyl-hydrazine	µg/L	--	--	--	--	--	5.1	No RP
Halomethanes ²⁷	µg/L	--	--	--	--	--	69	No RP
Dichlorobromo methane	µg/L	--	--	--	--	--	43	No RP
Heptachlor ²⁵	µg/L	0.00069	--	--	--	--	--	BPJ
Heptachlor epoxide ²⁵	µg/L	0.0027	--	--	--	--	--	BPJ

²⁵ Chlordane shall mean the sum of chlordane-alpha, chlordane-gamma, chlordan-alpha, chlordan-gamma, nonachlor-alpha, nonachlor-gamma and oxychlordane.

²⁶ 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.

²⁷ Halomethanes shall mean the sum of bromoform, bromomethane (methyl bromide) and chloromethane (methyl chloride).

Parameter	Units	Effluent Limitations ⁹					Performance Goals ¹⁰	Basis
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	Average Monthly	
Hexachloro-benzene ²⁵	µg/L	0.029	--	--	--	--	--	BP↓
Hexachloro-butadiene	µg/L	--	--	--	--	--	5.1	No RP
Hexachloro-ethane	µg/L	--	--	--	--	--	5.1	No RP
Isophorone	µg/L	--	--	--	--	--	5.1	No RP
N-Nitrosodi-methylamine	µg/L	--	--	--	--	--	5.1	No RP
N-Nitrosodi-N-propylamine	µg/L	--	--	--	--	--	--	No RP
N-Nitrosodi-phenylamine	µg/L	--	--	--	--	--	5.1	No RP
PAHs ²⁸	µg/L	4.2	--	--	--	--	--	BP↓
PCBs ^{25,29}	µg/L	0.0026	--	--	--	--	--	BP↓
TCDD Equivalents ³⁰	µg/L	5.3 x 10 ⁻⁷	--	--	--	--	--	RP/ Ocean Plan
	lbs/day	1.1 x 10 ⁻¹⁰	--	--	--	--	--	

²⁸ 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.

²⁹ 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.

³⁰ 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		
2,3,7,8-penta CDD	0.5		
2,3,7,8-hexa CDDs	0.1		
2,3,7,8-hepta CDD	0.01		
octa CDD	0.001		
2,3,7,8-tetra CDF	0.1		
1,2,3,7,8-penta CDF	0.05		
2,3,4,7,8-penta CDF	0.5		
2,3,7,8-hexa CDFs	0.1		
2,3,7,8-hepta CDFs	0.01		
octa CDF	0.001		

Parameter	Units	Effluent Limitations ⁹					Performance Goals ¹⁰	Basis
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	Average Monthly	
1,1,2,2-Tetrachloroethane	µg/L	--	--	--	--	--	1.0	No RP
Tetrachloroethylene	µg/L	--	--	--	--	--	1.0	No RP
Toxaphene ²⁶	µg/L	0.029	--	--	--	--	--	BPJ
Trichloroethylene	µg/L	--	--	--	--	--	1.0	No RP
1,1,2-Trichloroethane	µg/L	--	--	--	--	--	2.5	No RP
2,4,6-Trichlorophenol	µg/L	--	--	--	--	--	5.1	No RP
Vinyl Chloride	µg/L	--	--	--	--	--	1.0	No RP

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E. 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 Ocean Plan objectives are prescribed in this Order. This approach is consistent with the antidegradation policy in that it requires the Discharger to maintain its treatment level and effluent quality, recognizing normal variations in treatment efficiency and sampling and analytical techniques. However, this approach does not address substantial changes in treatment plant operations that could significantly affect the quality of the treated effluent.

While performance goals were previously placed in many permits in the Region, they have not been continued for discharges that are to inland surface waters. For inland surface waters, the California Toxics Rule (CTR: 40 CFR part 131.38) has resulted in effluent limits as stringent as many performance goals. However, the 2009 Ocean Plan allows for significant dilution, and the continued use of performance goals serves to maintain existing treatment levels and effluent quality and supports State and federal antidegradation policies.

The performance goals are based upon carryover from Order No. 00-090 or based on data provided by the actual performance of the SCI WWTP, whichever is more stringent, consistent with 40 CFR 122.44(l)(1) and 40 CFR 122.62(a)(1), 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.

Procedures for the determination of performance goals:

1. For constituents that have been routinely detected in the effluent (at least 50 percent and more than 3 detectable data), performance goals are based on the one-sided, upper 95 percent confidence bound ($UCB_{95/95}$) of the 95th percentile of September 2007 through October 2012 performance data (after complete mixing) using the RPA protocol contained in the 2009 Ocean Plan. The required annual monitoring in the 2000 Order yields usually no more than 6 effluent data for each constituent. Effluent data are assumed lognormally distributed. Performance goals are calculated according to the equation $C_{PG} = Co + Dm(Co - Cs)$ in the Ocean Plan and by setting $Co = UCB_{95/95}$. However, if the maximum detected effluent concentration is less than the calculated performance goal, the maximum detected effluent concentration is used as the performance goal. For example, the performance goal for lead at Discharge Point 002 is calculated as follows:

Copper

$$Co = UCB_{95/95} = 2.3298; Dm = 136; Cs = 2$$

$$C_{PG} = \text{Performance Goal} = 2.3298 + 136(2.3298 - 2) = 47 \mu\text{g/L}$$

Since the maximum detected concentration is 28 $\mu\text{g/L}$ that is less than the calculated PG of 47 $\mu\text{g/L}$, the performance goal for lead is prescribed as 28 $\mu\text{g/L}$.

Determination of radioactivity performance goal: Since the descriptive water quality objective for radioactivity in the 2009 California Ocean Plan fails to establish an applicable narrative or numerical effluent limit for radionuclides, the Regional Water Board staff used BPJ to establish radioactivity limitations for the effluent using the equation $C_e = Co + Dm(Co - Cs)$ calculated similarly as above, except the Co value is taken from the RPA statistical analysis of historic data from September 2007- to October 2012. The Co value is equal to the Normal UCB (upper 95% Confidence Bound for the 95th percentile with the assumption that the water quality objective for radioactivity is equal to 0). However, if the maximum detected effluent concentration is less than the calculated performance goal, the maximum detected effluent concentration is used as the performance goal. For example, the performance goal for gross alpha at discharge point 002 is calculated as follows:

Gross Alpha

$$Co = 0.0999; Dm = 136; Cs = 0$$

$$C_{PG} = \text{Performance Goal} = 13.4 \text{ pCi/L}$$

Since the maximum detected concentration is 4.5 pCi/L that is less than the calculated PG of 13.4 pCi/L, the performance goal for gross alpha is prescribed as 4.5 pCi/L.

2. For constituents where monitoring data have consistently shown ND levels (less than 20 percent detected values), performance goals are set at the lower of the following possibilities: (1) the maximum detected effluent concentration (MDEC), (2) $C_{pg} = Co + Dm(Co - Cs)$ where Co is the monthly water quality objective, or (3) the highest reported laboratory MDL in the dataset provided (applicable analytical techniques: ICPMS, FAA, or CVAA for metals; GCMS, GC, or HPLC for the rest) listed in the 2009 Ocean Plan.
3. For constituents with no effluent limitations, if the performance goal derived from above steps exceeds the respective calculated 2009 Ocean Plan effluent limitation, the calculated effluent limitation is then prescribed as the performance goal for that constituent.
4. For constituents with effluent limitations, if the performance goal derived from above steps exceeds respective effluent limitation, then performance goal is not prescribed for that constituent.
5. The performance goals for Discharge Point 002 are prescribed in this Order. 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 persists in three 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.

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F. Interim Effluent Limitations (Not Applicable)

G. Land Discharge Specifications (Not Applicable)

H. Reclamation Specifications (Not Applicable)

Reclamation specifications will be addressed in a separate Order.

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

Receiving water limitations are derived from the water quality objectives for ocean waters established by the Basin Plan and the Ocean Plan.

B. Groundwater (Not Applicable)

VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

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 MRP, Attachment E of this Order, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this facility.

A. Influent Monitoring

Influent monitoring is required to:

- Determine compliance with NPDES permit conditions.
- Assess treatment plant performance.

Influent monitoring in this Order retains the influent monitoring requirements in the 00-090 Order and contains influent monitoring for Ocean Plan (2009) Table A and B parameters.

B. Effluent Monitoring

The Discharger is required to conduct monitoring of the permitted discharges in order to evaluate compliance with permit conditions. Monitoring requirements are given in the proposed MRP (Attachment E). This provision requires compliance with the MRP, and is based on 40 CFR parts 122.44(i), 122.62, 122.63, and 124.5. The MRP is a standard requirement in almost all NPDES permits (including the proposed Order) issued by the Regional Water Board. In addition to containing definition of terms, it specifies general sampling/analytical protocols and the requirements of reporting spills, violation, and routine monitoring data in accordance with NPDES regulations, the CWC, and Regional Water Board policies. The MRP also defines the sampling stations and frequency, pollutants to be monitored, and additional reporting requirements. Pollutants to be monitored include all pollutants for which effluent limitations are specified. Further, in accordance with Appendix III of the 2009 Ocean Plan, a periodic monitoring is required for all the Table B parameters in the Ocean Plan, for which criteria apply and for which no effluent limitations have been established, to evaluate reasonable potential to cause or contribute to an excursion above a water quality standard.

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

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The effluent monitoring in this 2013 Order is compared to the effluent monitoring requirements in the 2000 Order. The changes are summarized in the following table.

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Table 14 Effluent Monitoring Program Comparison Table

Parameter	Monitoring Frequency (2000 Order)	Monitoring Frequency (2013 Order)
Total waste flow	continuous	continuous
BOD ₅ 20°C	monthly	monthly
Total suspended solids (TSS)	monthly	monthly
pH	monthly	monthly
Oil and grease	monthly	monthly
Temperature	monthly	monthly
Settleable solids	monthly	monthly
Turbidity	monthly	monthly
Total coliform	monthly	monthly
Enterococcus	monthly	monthly
Fecal coliform	monthly	monthly
Ammonia nitrogen	quarterly	semi-annually
Nitrate nitrogen	quarterly	semi-annually
Nitrite nitrogen	none	semi-annually
Organic nitrogen	none	semi-annually
Arsenic	annually	semi-annually
Copper	annually	quarterly
Nickel	annually	semi-annually
Zinc	annually	quarterly
Halomethanes	annually	semi-annually
Antimony	annually	semi-annually
Chlorodibromomethane	annually	semi-annually
Chromium (VI)	annually	semi-annually
Lead	annually	semi-annually
Selenium	annually	semi-annually
Cyanide	annually	semi-annually
HCH ³¹	annually	semi-annually
Chromium (III)	annually	semi-annually
Bis(2-ethylhexyl) phthalate	annually	semi-annually
DDT	annually	quarterly
TCDD equivalents	annually	quarterly
Aldrin ³²	annually	semi-annually
Benzidine ³²	annually	semi-annually
Chlordane ³²	annually	semi-annually
Tributyltin ³²	annually	semi-annually
3,3-Dichlorobenzidine ³²	annually	semi-annually
Dieldrin ³²	annually	semi-annually
Heptachlor ³²	annually	semi-annually
Heptachlor epoxide ³²	annually	semi-annually
Hexachlorobenzene ³²	annually	semi-annually
Toxaphene ³²	annually	semi-annually
Pesticides (PCBs)	annually	semi-annually
Acute toxicity	annually	quarterly
Chronic toxicity	semi-annually	quarterly
Total chlorine residual	monthly	monthly
Remaining pollutants in Table B of the 2009 Ocean Plan	annually	semi-annually
Radioactivity	annually	semi-annually

³¹ Sum of alpha, beta, gamma (lindane) and delta isomers of hexachlorocyclohexane.

³² Frequency shall increase to quarterly if the ML in the Ocean Plan decreases to below the calculated Ce value and/or if monitoring results are not ND.

C. Whole Effluent Toxicity Testing Requirements

Chronic Toxicity. The 2009 Ocean Plan requires the use critical life stage toxicity tests specified in Appendix III of the Ocean Plan to measure chronic toxicity. A minimum of three test species with approved test protocols shall be used to measure compliance with the toxicity objective. If possible, the test species shall include a fish, an invertebrate, and an aquatic plant. After a screening period, monitoring can be reduced to the most sensitive species. Dilution and control water should be laboratory water. The sensitivity of the test organisms to a reference toxicant shall be determined concurrently with each bioassay test and reported with the test results. Chronic toxicity testing requirements defined in section V.A of the MRP (Attachment E) are specified on the basis of these Ocean Plan requirements.

D. Receiving Water Monitoring

1. The receiving water monitoring program is described in detail in the MRP.
2. The conceptual framework for the receiving water program has three components that comprise a range of spatial and temporal scales: (a) core monitoring; (b) regional monitoring; and (c) special studies.
 - a. Core monitoring is local in nature and focused on monitoring trends in quality and effects of the point source discharge. This includes effluent monitoring as well as some aspects of receiving water monitoring. In the monitoring program described in the MRP, these core components are typically referred to as local monitoring.
 - b. Regional monitoring is focused on questions that are best answered by a region-wide approach that incorporates coordinated survey design and sampling techniques. The major objective of regional monitoring is to collect information required to assess how safe it is to swim in the ocean, how safe it is to eat seafood from the ocean, and whether the marine ecosystem is being protected. Key components of regional monitoring include elements to address pollutant mass emission estimations, public health concerns, monitoring f trends in natural resources, assessment of regional impacts from all contaminant sources, and protection of beneficial uses. The final design of regional monitoring programs is developed by means of steering committees and technical committees comprised of participating agencies and organizations, and is not specified in this Order.
 - c. Special studies are focused on refined questions regarding specific effects or development of monitoring techniques and are anticipated to be of short duration and/or small scale, although multiyear studies also may be needed. Questions regarding effluent or receiving water quality, discharge impacts, ocean processes in the area of the discharge, or development of techniques for monitoring the same, arising out of the results of core or regional monitoring, may be pursued through special studies. These studies are by nature ad hoc and cannot be typically anticipated in advance of the five-year permit cycle.

E. Groundwater (Not Applicable)

F. Other Monitoring Requirements

1. Outfall Inspection

The data collected will be used for a periodic assessment of the integrity of the outfall pipes and ballasting system.

2. **Sludge Monitoring and Reporting**

Pursuant to 40 CFR parts 257, 258, 501, and 503, including all applicable monitoring, record keeping, and reporting requirements, the Discharger must comply with the monitoring and reporting requirements in these provisions.

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

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

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

B. Special Provisions

1. Reopener Provisions

This provision is based on 40 CFR part 123. This Order may be reopened and modified, revoked, and reissued or terminated in accordance with the provisions of 40 CFR parts 122, 124, and 125.

2. Special Studies and Additional Monitoring Requirements

a. Toxicity Reduction Requirements

If the discharge consistently exceeds an effluent limitation for toxicity, the Discharger shall conduct TIE/TRE detailed in section V of the MRP (Attachment E). The TRE will help the Discharger identify the possible source(s) of toxicity. Once the source(s) of toxicity is identified, the Discharger shall take all reasonable steps to reduce toxicity to the required level.

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. Constituents of Emerging Concern (CEC) in Effluent

The Discharger shall initiate an investigation of CECs by conducting a special study. Specifically, within 6 months of the effective date of this Order, the Discharger shall develop a CEC special study work plan (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.

d. Evaluation of Minimum Initial Dilution

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Ocean Unit staff applied data from the California Cooperative Oceanic Fisheries Investigations near shore stations surveyed in the summer 2010 and 2011 to evaluate minimum initial dilution for the San Clemente Island outfall (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 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 State Water Board staff recommends the Navy collect salinity and temperature data from near the outfall as described in Attachment E (MRP). This Order includes a reopener clause to allow for re-evaluation of minimum initial dilution based on the data submitted by the Permittee.

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. Refer to spill reporting requirements in section VI.C.6 and Attachment K for additional requirements and information.

~~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. The Discharger shall ensure that the up-to-date SCCP is readily available to the sewage system personnel at all times and that the sewage personnel are familiar with it.~~

- c. **Pollutant Minimization Program**

Pursuant to the Ocean Plan, this Order specifies requirements for the development and implementation of a Pollutant Minimization Program.

4. Construction, Operation, and Maintenance Specifications

These provisions are based on the requirements of 40 CFR part 122.41(e) and the previous Order. These provisions ensure the Discharger at all times to properly operate and maintain all facilities and systems installed or used to achieve compliance with this Order.

5. Compliance Schedules (Not Applicable)

6. Special Provisions for Federal Facilities (FOTWs Only)

a. Sanitary Sewer Overflows (SSOs)

The CWA prohibits the discharge of pollutants from point sources to surface waters of the United States unless authorized under an NPDES permit. (33 United States Code 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 wastewater treatment plant that is subject to this NPDES permit. As such, p~~Pursuant to federal regulations, the Discharger must properly operate and maintain its collection system (40 CFR 122.41 (e)), report any non-compliance (40 CFR 122.41(1)(6) and (7)), and mitigate any discharge from the collection system in violation of this NPDES permit (40 CFR 122.41(d)). As such, the Discharger must comply with all requirements in Attachment K.

The requirements contained in this Order in Attachment K, 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 VI.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(l)(6) and (7)), and mitigate any discharge from the collection system in violation of this Order (40 CFR part 122.41(d)).~~

b. Sludge Disposal Requirements

To implement CWA section 405(d), on February 19, 1993, USEPA promulgated 40 CFR part 503 to regulate the use and disposal of municipal sewage sludge. This regulation was amended on September 3, 1999. The regulation requires that producers of sewage sludge meet certain reporting, handling, and disposal

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requirements. It is the responsibility of the Discharger to comply with said regulations that are enforceable by USEPA, because California has not been delegated the authority to implement this program. The Discharger is also responsible for compliance with, if applicable, WDRs and NPDES permits for the generation, transport and application of biosolids issued by the State Water Board, other Regional Water Boards, Arizona Department of Environmental Quality or USEPA, to whose jurisdiction the Facility's biosolids will be transported and applied.

7. Spill Reporting Requirements

This Order established a reporting protocol for how different types of spills, overflow or bypasses of raw or partially treated sewage from its collection system or treatment plant covered by this Order shall be reported to the Regional Water Board. Coordination and notification to other regulatory agencies is recommended in Attachment K. Refer to spill reporting requirements in section VI.C.6 and Attachment K for additional requirements and information.

~~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. The General 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 (SSMPs) and report all 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 must comply with both the General SSO Order and this Order.~~

VIII. PUBLIC PARTICIPATION

The Regional Water Board is considering the issuance of WDRs that will serve as an NPDES permit for the SCI WWTP. As a step in the WDR adoption process, the Regional Water Board staff has developed WDRs. The Regional Water Board encourages public participation in the WDR adoption process

A. 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. Notification must be provided through the local newspaper.

B. Written Comments

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments must be submitted either in person or by mail to the Executive Office at the Regional Water Board at the address above on the cover page of this Order, or by email submitted to losangeles@waterboards.ca.gov. . Reference the written comments to Compliance File No. CI-6432 to facilitate routing to the appropriate staff and file.

To be fully responded to by staff and considered by the Regional Water Board, written comments must be received at the Regional Water Board offices by 5:00 p.m. on June 11, 2013.

C. Public Hearing

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

Date: July 11, 2013
Time: 9:00 am
Location: Metropolitan Water District of Southern California, Board Room
700 N. Alameda Street
Los Angeles, CA

Interested persons are invited to attend. At the public hearing, the Regional Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and the permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our Web address is <http://www.waterboards.ca.gov/losangeles/> where you can access the current agenda for changes in dates and locations.

D. Nature of Hearing

This will be a formal adjudicative hearing pursuant to section 648 et seq. of title 23 of the California Code of Regulations. Chapter 5 of the California Administrative Procedure Act (commencing with section 11500 of the Government Code) will not apply to this proceeding.

Ex Parte Communications Prohibited: As a quasi-adjudicative proceeding, no board member may discuss the subject of this hearing with any person, except during the public hearing itself. Any communications to the Regional Water Board must be directed to staff.

E. Parties to the Hearing

The following are the parties to this proceeding:

1. The applicant/permittee
2. Regional Water Board staff

Any other persons requesting party status must submit a written or electronic request to staff not later than 20 business days before the hearing. All parties will be notified if other persons are so designated.

F. Public Comments and Submittal of Evidence

Persons wishing to comment upon or object to the tentative waste discharge requirements, or submit evidence for the Regional Water Board to consider, are invited to submit them in writing to the above address. To be evaluated and responded to by staff, included in the Regional Water Board's agenda folder, and fully considered by the Regional Water Board, written comments must be received no later than close of business June 11, 2013. Comments or evidence received after that date will be submitted, ex agenda, to the Regional Water Board for consideration, but only included in administrative record with express approval of the Chair during the hearing. Additionally, if the Regional Water Board receives only supportive comments, the Order may be placed on the Regional Water Board's consent calendar, and approved without an oral testimony.

G. Hearing Procedure

The meeting, in which the hearing will be a part of, will start at 9:00 a.m. Interested persons are invited to attend. Staff will present the matter under consideration, after which oral statements from parties or interested persons will be heard. For accuracy of the record, all important testimony should be in writing. The Regional Water Board will include in the

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administrative record written transcriptions of oral testimony that is actually presented at the hearing. Oral testimony may be limited to 30 minutes maximum or less for each speaker, depending on the number of persons wishing to be heard. Parties or persons with similar concerns or opinions are encouraged to choose one representative to speak. At the conclusion of testimony, the Regional Water Board will deliberate in open or close session, and render a decision.

Parties or persons with special procedural requests should contact staff. Any procedure not specified in this hearing notice will be waived pursuant to section 648(d) of title 23 of the California Code of Regulations. Objections to any procedure to be used during this hearing must be submitted in writing not later than close of [15] business days prior to the date of the hearing. Procedural objections will not be entertained at the hearing.

If there should not be a quorum on the scheduled date of this meeting, all cases will be automatically continued to the next scheduled meeting on September 12, 2013. A continuance will not extend any time set forth herein.

H. Waste Discharge Requirements Petitions

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

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

I. Information and Copying

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

J. Register of Interested Persons

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

K. Additional Information

Requests for additional information or questions regarding this order should be directed to Talitha Crain at (213) 576-6793.

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

I. OPERATIONS AND PERFORMANCE REVIEW

- A. NPDES permit requirements
 - 1. Effluent limitations
 - 2. Special conditions
 - 3. Monitoring data and compliance history
- B. FOTW design criteria
 - 1. Hydraulic loading capacities
 - 2. Pollutant loading capacities
 - 3. Biodegradation kinetics calculations/assumptions
- C. Influent and effluent conventional pollutant data
 - 1. Biochemical oxygen demand (BOD₅)
 - 2. Chemical oxygen demand (COD)
 - 3. Suspended solids (SS)
 - 4. Ammonia
 - 5. Residual chlorine
 - 6. pH
- D. Process control data
 - 1. Primary sedimentation – hydraulic loading capacity and BOD and SS removal
 - 2. Activated sludge – Food-to-microorganism (F/M) ratio, mean cell, residence time (MCRT), mixed liquor suspended solids (MLSS), sludge yield, and BOD and COD removal
 - 3. Secondary clarification – hydraulic and solids loading capacity, sludge volume index and sludge blanket depth
- E. Operations information
 - 1. Operations logs
 - 2. Standard operating procedures
 - 3. Operations and maintenance practices
- F. Process sidestream characterization data
 - 1. Sludge processing sidestreams
 - 2. Tertiary filter backwash
 - 3. Cooling water
- G. Combined sewer overflow (CSO) bypass data
 - 1. Frequency
 - 2. Volume

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H. Chemical coagulant usage for wastewater treatment and sludge processing

1. Polymer
2. Ferric chloride
3. Alum

II. FOTW INFLUENT AND EFFLUENT CHARACTERIZATION DATA

- A. Toxicity
- B. Priority pollutants
- C. Hazardous pollutants
- D. SARA 313 pollutants
- E. Other chemical-specific monitoring results

III. SEWAGE RESIDUALS (RAW, DIGESTED, THICKENED AND DEWATERED SLUDGE AND INCINERATOR ASH) CHARACTERIZATION DATA

- A. EP toxicity
- A. Toxicity Characteristic Leaching Procedure (TCLP)
- B. Chemical analysis

IV. INDUSTRIAL WASTE SURVEY (IWS)

- A. Information on IUs with categorical standards or local limits and other significant non-categorical IUs
- B. Number of IUs
- C. Discharge flow
- D. Standard Industrial Classification (SIC) code
- E. Wastewater flow
 1. Types and concentrations of pollutants in the discharge
 2. Products manufactured
- F. Description of pretreatment facilities and operating practices
- G. Annual pretreatment report
- H. Schematic of sewer collection system
- I. FOTW monitoring data
 1. Discharge characterization data
 2. Spill prevention and control procedures
 3. Hazardous waste generation
- J. IU self-monitoring data
 1. Description of operations
 2. Flow measurements
 3. Discharge characterization data
 4. Notice of sludge loading

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- 5. Compliance schedule (if out of compliance)
 - K. Technically based local limits compliance reports
 - L. Waste hauler monitoring data manifests
 - M. Evidence of FOTW treatment interferences (i.e., biological process inhibition)

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H.
ATTACHMENT H – STORM WATER POLLUTION PREVENTION PLAN REQUIREMENTS (NOT APPLICABLE)

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ATTACHMENT I – BIOSOLIDS/SLUDGE MANAGEMENT

(Note: “Biosolids refers to non-hazardous sewage sludge, as defined at 40 CFR 503.9. Sewage sludge that is hazardous as defined at 40 CFR 261, must be disposed of in accordance with the Resource Conservation and Recovery Act (RCRA).)

I. General Requirements

- a. All biosolids generated by the Discharger at the San Clemente Island Wastewater Treatment Plant (SCI WWTP) shall be used or disposed of in compliance with applicable portions of Clean Water Act and Safe Drinking Water Act, including: 40 CFR 503-for biosolids that are land applied, placed in a surface disposal site (dedicated land disposal site, monofill, or sludge-only parcel at a municipal landfill), or incinerated; 40 CFR 258-for biosolids disposed of in a municipal solid waste landfill (with other materials); and 40 CFR 257-for all biosolids use and disposal practices not covered under 40 CFR 258 or 503.

40 CFR 503, Subpart B (land application), sets forth requirements for biosolids that are applied for the purpose of enhancing plant growth or for land reclamation. 40 CFR 503, Subpart C (surface disposal), sets forth requirements for biosolids that are placed on land for the purpose of disposal.

The Discharger is responsible for assuring that all biosolids produced at SCI WWTP are used or disposed of in accordance with these rules, whether the Discharger uses or disposes of the biosolids itself, or transfers the biosolids to another party for further treatment, use, or disposal. The Discharger is responsible for informing subsequent preparers, applicers, and disposers of the requirements that they must meet under these rules.

- b. Duty to Mitigate: The Discharger shall take all reasonable steps to prevent or minimize any biosolids use or disposal which has a likelihood of adversely affecting human health or the environment.
- c. No biosolids shall be allowed to enter wetlands or other waters of the United States.
- d. Biosolids treatment, storage, use or disposal shall not contaminate groundwater.
- e. Biosolids treatment, storage, use or disposal shall not create nuisances such as objectionable odors or flies.
- f. The Discharger shall assure that haulers transporting biosolids offsite for treatment, storage, use, or disposal take all necessary measures to keep the biosolids contained. Trucks hauling biosolids shall be cleaned as necessary after loading and after unloading, so as to have no biosolids on the exterior of the truck or wheels. Trucks hauling biosolids out of Los Angeles County shall be tarped. All haulers must have spill clean-up procedures. Trucks hauling biosolids shall not be used for hauling food or feed crops after unloading the biosolids unless the Discharger submits a hauling description, to be approved by USEPA, describing how trucks will be thoroughly cleaned prior to adding food or feed.

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- g. If biosolids are stored for over two years from the time they are generated by the Discharger or their contractor, the permittee must ensure compliance with all the requirements for surface disposal under 40 CFR 503 Subpart C, or must submit a written notification to EPA with the information in 503.20 (b), demonstrating the need for longer temporary storage.
- h. Any biosolids treatment, disposal, or storage site shall have facilities adequate to divert surface runoff from adjacent areas, to protect the site boundaries from erosion, and to prevent any conditions that would cause drainage from the materials to escape from the site. Adequate protection is defined as protection from at least a 100-year storm and the highest tidal stage which may occur.
- i. There shall be adequate screening at the plant headworks and/or at the biosolids treatment units to ensure that all pieces of metal, plastic, glass and other inert objects with a diameter greater than 3/8 inches are removed.
- j. Sewage sludge containing more than 50 mg/kg PCBs shall be disposed of in accordance with 40 CFR 761.
- k. 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, or the requirements in individual Waste Discharge Requirements (WDRs) issued by a Regional Water Board for sites receiving the Discharger's biosolids, where the Regional Water Board has named the Discharger as a responsible party. The Discharger shall require biosolids management agents/contractors to comply with the abovementioned requirements for those sites where the biosolids management agent/contractor is the named responsible party pursuant to the general order or individual WDRs.
- l. The Discharger shall comply if named as a party, or require its biosolids management agents/contractors to comply if they are the named party, with WDRs issued by Regional Water Boards to which jurisdiction the biosolids are transported and applied, and with the State of Arizona's biosolids rule for biosolids transported to Arizona for treatment and/or use.

II. Inspection and Entry

The Regional Water Board, Arizona Department of Environmental Quality (ADEQ), USEPA, or an authorized representative thereof, upon the presentation of credentials, shall be allowed by the Discharger, directly or through contractual arrangements with their biosolids management contractors, to:

- a. Enter upon all premises where biosolids produced by the Discharger are treated, stored, used, or disposed of, either by the Discharger or another party to whom the Discharger transfers biosolids for further treatment, storage, use, or disposal.

- b. Have access to and copy any records that must be kept by either the Discharger or another party to whom the Discharger transfers biosolids for further treatment, storage, use, or disposal, under the conditions of this Order or 40 CFR 503.
- c. Inspect any facilities, equipment (including monitoring and control equipment), practices, or operations used in biosolids treatment, storage, use, or disposal by either the Discharger or another party to whom the Discharger transfers biosolids for further treatment, storage, use, or disposal.

III. Monitoring

- a. Biosolids shall be monitored for the following constituents, at the frequency stipulated in Table 1 of 40 CFR 503.16: arsenic, cadmium, chromium, copper, lead, mercury, molybdenum, nickel, selenium, zinc, organic nitrogen, ammonia nitrogen, and total solids. If biosolids are removed for use or disposal on a routine basis, sampling should be scheduled at regular intervals throughout the year. If biosolids are stored for an extended period prior to use or disposal, sampling may occur at regular intervals, or samples of the accumulated stockpile may be collected prior to use or disposal, corresponding to the tons accumulated in the stockpile over that period.

Monitoring shall be conducted using the methods in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846), or as otherwise required under 40 CFR 503.8(b). All results must be reported on a 100% dry weight basis and records of all analyses must state on each page of the analytical results whether the reported results are expressed on an "as-is" or a "100% dry weight" basis.

- b. The Discharger shall sample biosolids twice per year for the pollutants listed under CWA section 307(a) using best practicable detection limits.

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

Biosolids to be land applied shall be tested for Organic-N, ammonium-N, and nitrate-N at the frequencies required above.

- c. Class 1 facilities (facilities with pretreatment programs or others designated as Class 1 by the Regional Administrator) and Federal facilities with >5 million gallons per day (mgd) influent flow shall sample biosolids for pollutants listed under section 307(a) of the Clean Water Act (as required in the pretreatment section of the permit for FOTWs with pretreatment programs.) Class 1 facilities and Federal facilities with >5 mgd influent flow shall test dioxins/dibenzofurans using a method detection limit of <1 pg/g during their next sampling period if they have not done so within the past 5 years and once per 5 years thereafter.
- d. The biosolids shall be tested annually, or more frequently if necessary, to determine hazardousness in accordance with California Law.

IV. Pathogen and Vector Control

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- a. Prior to land application, the Discharger shall demonstrate that the biosolids meet Class A or Class B pathogen reduction levels by one of the methods listed under 40 CFR 503.32.
- b. Prior to disposal in a surface disposal site, the Discharger shall demonstrate that the biosolids meet Class B levels pathogen reduction levels, or ensure that the site is covered at the end of each operating day. If pathogen reduction is demonstrated using a "Process to Further Reduce Pathogens" or one of the "Processes to Significantly Reduce Pathogens", the Discharger shall maintain daily records of the operating parameters used to achieve this reduction. If pathogen reduction is demonstrated by testing for fecal coliform and/or pathogens, samples must be collected at the frequency specified in Table 1 of 40 CFR 503.16. If Class B is demonstrated using fecal coliform, at least seven grab samples must be collected during each monitoring period and a geometric mean calculated from these samples.

The following holding times between sample collection and analysis shall not be exceeded:

- fecal coliform - 6 hours when cooled to <4 degrees C (extended to 24 hours when cooled to <4 degrees C for Class A composted, Class B aerobically digested, and Class B anaerobically digested sample types);
 - Salmonella spp. Bacteria - 24 hours when cooled to <4 degrees C (unless using Method 1682- 6 hours when cooled to <10 degrees C);
 - enteric viruses - 6 hours when cooled to <10 degrees C (extended to 24 hours when cooled to <4 degrees C or 2 weeks when frozen);
 - helminth ova - 6 hours when cooled to <10 degrees C (extended to one month when cooled to <4 degrees C).
- c. For biosolids that are land applied or placed in a surface disposal site, the Discharger shall track and keep records of the operational parameters used to achieve Vector Attraction Reduction requirements in under 40 CFR 503.33 (b).

V. Surface Disposal

If biosolids are placed in a surface disposal site (dedicated land disposal site or monofill), a qualified groundwater scientist shall develop a groundwater monitoring program for the site, or shall certify that the placement of biosolids on the site will not contaminate an aquifer.

VI. Landfill Disposal

Biosolids placed in a municipal landfill shall be tested by the Paint Filter Test (SW-846, Method 9095) at the frequency specified in Table 1 of 40 CFR 503.16, or more often if necessary to demonstrate that there are no free liquids.

VII. Notifications

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

- a. Notification of non-compliance

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The Discharger shall notify USEPA, the State (for both Discharger and use or disposal site), the local Regional Water Board, and the Central Valley Regional Board of any non-compliance within 24 hours, if the non-compliance may seriously endanger health or the environment. For other instances of non-compliance, the Discharger shall notify USEPA and the State of the non-compliance in writing within 5 working days of becoming aware of the non-compliance. The Discharger shall require their biosolids management contractors to notify USEPA and the State of any non-compliance within these same time-frames.

b. Interstate Notification

If biosolids are shipped to another State or Tribal Land, the Discharger shall send 60 days prior notice of the shipment to the permitting authorities in the receiving State or Tribal Land, and the USEPA Regional Office.

c. Land Application Notification

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

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

d. Surface Disposal Notification

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

VIII. Reporting

The Discharger shall furnish this Regional Water Board with a copy of any report submitted to USEPA, State Water Board or other Regional Water Board, with respect to municipal sludge or biosolids. The Discharger shall submit an annual biosolids report to the USEPA Region 9 Biosolids Coordinator and the State by February 19 of each year for the period covering the previous calendar year. The report shall include:

- a. The amount of biosolids generated that year, in dry metric tons, and the amount accumulated from previous years.
- b. Results of all pollutant monitoring required under Monitoring above. Results must be reported on a 100% dry weight basis.

- c. Demonstrations of pathogen and vector attraction reduction methods, as required under 40 CFR 503.17 and 503.27, and certifications.
- d. Names, mailing addresses, and street addresses of persons who received biosolids for storage, further treatment, disposal in a municipal landfill, deep well injection, or other use or disposal method not covered above, and tonnage delivered to each.
- e. The following information must be submitted by the Discharger, unless the Discharger requires its biosolids management contractors to report this information directly to the USEPA Region 9 Biosolids Coordinator.

1. For land application sites

- Locations of land application sites (with field names and numbers) used that calendar year, size of each field applied to, applier, and site owner.
- Volumes applied to each field (in wet tons and dry metric tons), nitrogen applied, and calculated plant available nitrogen.
- Crops planted, dates of planting and harvesting.
- For biosolids exceeding 40 CFR 503.13 Table 3 metals concentrations, the locations of sites where the biosolids were applied and cumulative metals loading at the sites to date.
- Certifications of management practices at 40 CFR 503.14.
- Certifications of site restrictions at 40 CFR 503(b)(5).

2. For surface disposal sites

- Locations of sites, site operator and site owner, size of parcel on which biosolids were disposed.
- Results of any required groundwater monitoring.
- Certifications of management practices at 40 CFR 503.24.

3. For closed sites, the date of site closure and certifications of management practices for three years following site closure.

- f. All Reports shall be submitted to:

Regional Biosolids Coordinator
U.S. Environmental Protection Agency
CWA Compliance Office (WTR-7)
75 Hawthorne Street
San Francisco, CA 94105-3901

Biosolids Program Coordinator
Arizona Department of Environmental Quality
Mail Code: 5415B-1
1110 West Washington Street
Phoenix, AZ 85007

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ATTACHMENT J – REASONABLE POTENTIAL ANALYSIS

ATTACHMENT J

REASONABLE POTENTIAL ANALYSIS FOR OCEAN PLAN TABLE B (2009) POLLUTANTS

Constituent, Unit CTR #	Antimony, µg/L #1	Arsenic, µg/L #2	Be, µg/L #3	Cadmium, µg/L #4	Cr (III), µg/L # 5a	Cr (VI), µg/L # 5b	Cu, µg/L #6	Lead, µg/L #7	Hg, µg/L #8	Nickel, µg/L #9	Ce, µg/L #10	Silver, µg/L #11	Thallium, µg/L #12	Zinc, µg/L #13	Cyanide, µg/L #14
LEC, µg/L	ND<0.5	1.25	ND<0.1	ND<0.2	ND<0.2	ND<0.2	15	ND<0.1	ND<0.1	3.32	ND<0.3	ND<0.2	ND<0.2	48.6	ND<0.01
MEC, µg/L	0.736	3.16	ND<0.5	ND<0.5	0.729	0.729	28.2	0.121	ND<0.5	4.57	0.522	ND<0.5	ND<0.5	87.7	0.0152
Maximum Background, µg/L (Table C 2009 Ocean Plan)	0	3.0	0	0	0	0	2.0	0	0.005	0	0	0.16	0	8.0	0
Numeric BP Objective, µg/L (MCL not applicable since MUN beneficial use is not applicable)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ocean Plan Objective (30-day avg or 6- month median), µg/L	1,200	8.0	0.033	1.0	190,000	2.0	3.0	2.0	0.04	5.0	15	0.7	2.0	20	1.0
Other factors (303d list, BPJ)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Reasonable Potential	N	N	I	I	I	I	N	I	I	N	N	I	I	N	I

LEC= Lowest Effluent concentration; **MEC**= Maximum effluent concentration (based on the last 5 years of data).

BPJ = Best professional judgment – (1) Chlorination occurs during operations and therefore chlorine related parameters are assigned effluent limitations. (2) Calculated performance goal ($C_{pg} = C_o + D_m(C_o - C_s)$, where C_o = effluent limitation, D_m = dilution ratio, C_s = background concentration) is less than the highest reported laboratory method detection limit (MDL) and the Ocean Plan stipulated minimum level (ML). These parameters are assigned effluent limitations.

N/A = Not applicable.

Reasonable Potential: (Y) Either BPJ or the RPCalc statistical results of the reported laboratory data show a reasonable potential to exceed Ocean Plan (2009) water quality objectives. These parameters are assigned effluent limitations.

Reasonable Potential: (I) There is inadequate effluent data and/or the RPCalc statistical results are inconclusive. These parameters are assigned performance goals.

Reasonable Potential: (N) The RPCalc statistical results of the reported laboratory data do not show a reasonable potential to exceed Ocean Plan (2009) water quality objectives. These parameters are assigned performance goals.

Additional details are provided in the Fact Sheet (Attachment F).

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REASONABLE POTENTIAL ANALYSIS FOR OCEAN PLAN TABLE B (2009) POLLUTANTS

Constituent, Unit CTR #	2, 3, 7, 8-TCDD (Dioxin), µg/L # 15	Acrolein, µg/L # 16	Acrylonitrile, µg/L # 17	Benzene, µg/L # 18	Bromoform, µg/L # 19	Carbon Tetrachloride, µg/L # 20	Chlorobenzene (Monochloro-benzene), µg/L # 21	Chlorodibromo- methane, µg/L # 22	Chloroform, µg/L # 23	Dichlorobromo- methane, µg/L # 24
LEC, µg/L	0.0000000233	ND<2	ND<2	ND<1	ND<1	ND<1	ND<1	7.2	24	17
MEC, µg/L	0.000000467	ND<3	ND<3	ND<1	3.8	ND<1	ND<1	29	47	43
Maximum Background, µg/L (Table C 2009 Ocean Plan)	0	0	0	0	0	0	0	0	0	0
Numeric BP Objective, µg/L (MCL not applicable since MUN beneficial use is not applicable)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ocean Plan Objective (30-day avg or 6-month median), µg/L	3.9 x 10 ⁻⁹	220	0.10	5.9	130	0.90	570	8.6	130	6.2
Other factors (303d list, BPJ)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Reasonable Potential	Y	I	I	I	I	I	I	N	N	N

Constituent, Unit CTR #	1,2-Dichloro- ethane, µg/L # 25	1,1-Dichloro- ethylene, µg/L # 26	1,3-Dichloro- propene, µg/L # 27	Ethylbenzene, µg/L # 28	Methyl Bromide (Bromomethane), µg/L # 29	Methyl Chloride (Chloromethane), µg/L # 30	Methylene Chloride (dichloromethane), µg/L # 31	1,1,2,2-Tetra- chloroethane, µg/L # 32	Tetrachloro- ethylene, µg/L # 33
LEC, µg/L	ND<1	ND<1	ND<1	ND<1	ND<2	ND<2	ND<1	ND<1	ND<1
MEC, µg/L	ND<1	ND<1	ND<1	ND<1	ND<2	ND<2	ND<1	ND<1	ND<1
Maximum Background, µg/L (Table C 2009 Ocean Plan)	0	0	0	0	0	0	0	0	0
Numeric BP Objective, µg/L (MCL not applicable since MUN beneficial use is not applicable)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ocean Plan Objective (30-day avg or 6-month median), µg/L	28	0.9	8.9	4,100	130	130	450	2.3	2.0
Other factors (303d list, BPJ)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Reasonable Potential	I	I	I	I	I	I	I	I	I

LEC= Lowest Effluent concentration; MEC= Maximum effluent concentration (based on the last 5 years of data).

BPJ = Best professional judgment – (1) Chlorination occurs during operations and therefore chlorine related parameters are assigned effluent limitations; (2) Calculated performance goal ($C_{pg} = Co + Dm(Co - Cs)$, where Co = effluent limitation, Dm = dilution ratio, Cs = background concentration) is less than the highest reported laboratory method detection limit (MDL) and the Ocean Plan stipulated minimum level (ML). These parameters are assigned effluent limitations.

N/A = Not applicable.

Reasonable Potential: (Y) Either BPJ or the RPCalc statistical results of the reported laboratory data show a reasonable potential to exceed Ocean Plan (2009) water quality objectives. These parameters are assigned effluent limitations.

Reasonable Potential: (I) There is inadequate effluent data and/or the RPCalc statistical results are inconclusive. These parameters are assigned performance goals.

Reasonable Potential: (N) The RPCalc statistical results of the reported laboratory data do not show a reasonable potential to exceed Ocean Plan (2009) water quality objectives. These parameters are assigned performance goals.

Additional details are provided in the Fact Sheet (Attachment F).

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REASONABLE POTENTIAL ANALYSIS FOR OCEAN PLAN TABLE B (2009) POLLUTANTS

Constituent, Unit	Toluene, µg/L # 34	1,1,1 -Trichloro-ethane, µg/L # 35	1,1,2-Trichloro-ethane, µg/L # 36	Trichloro- ethylene, µg/L # 37	Vinyl Chloride, µg/L # 38	2-Chloro- phenol, µg/L # 39	2, 4 Dichlorophenol, µg/L # 40	2,4-Dimethyl – phenol, µg/L # 41	2-Methyl 4,6-Di-nitrophenol, µg/L # 42	2,4-Dinitrophenol, µg/L # 43
LEC, µg/L	ND<1	ND<1	ND<1	ND<1	ND<1	ND<4.7	ND<4.7	ND<4.7	ND<4.7	ND<4.7
MEC, µg/L	ND<1	ND<2.5	ND<1	ND<1	ND<1	ND<5.1	ND<5.1	ND<5.1	ND<5.1	ND<5.1
Maximum Background, µg/L (Table C 2009 Ocean Plan)	0	0	0	0	0	0	0	0	0	0
Numeric BP Objective, µg/L (MCL not applicable since MUN beneficial use is not applicable)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ocean Plan Objective (30–day avg or 6-month median), µg/L	85,000	540,000	9.4	27	36	1.0	1.0	30	30	30
Other factors (303d list, BPJ)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Reasonable Potential	I	I	I	I	I	I	I	I	I	I

Constituent, Unit	2-Nitrophenol, µg/L # 44	4-Nitro–phenol, µg/L # 45	4-chloro-3-methyl phenol, µg/L # 46	Pentachloro-phenol, µg/L # 47	Phenol, µg/L # 48	2, 4, 6 Trichloro-phenol, µg/L # 49	Acenaphthylene (PAH), µg/L # 50	Anthracene (PAH), µg/L # 51	Benzidine, µg/L # 52	Benzo(a) anthracene (PAH), µg/L # 53
LEC, µg/L	ND<4.7	ND<4.7	ND<4.7	ND<4.7	ND<4.7	ND<4.7	ND<4.7	ND<4.7	ND<20	ND<4.7
MEC, µg/L	ND<5.1	ND<5.1	ND<5.1	ND<5.1	ND<5.1	ND<5.1	ND<5.1	ND<5.1	ND<25	ND<5.1
Maximum Background, µg/L (Table C 2009 Ocean Plan)	0	0	0	0	0	0	0	0	0	0
Numeric BP Objective, µg/L (MCL not applicable since MUN beneficial use is not applicable)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ocean Plan Objective (30–day avg or 6-month median), µg/L	30	30	1.0	1.0	30	1.0	0.0088	0.0088	6.9 x 10 ⁻⁵	0.0088
Other factors (303d list, BPJ)	N/A	N/A	N/A	N/A	N/A	N/A	N/A BPJ	N/A BPJ	N/A BPJ	N/A BPJ
Reasonable Potential	I	I	I	I	I	I	I	I	I	I

LEC= Lowest Effluent concentration; MEC= Maximum effluent concentration (based on the last 5 years of data).

BPJ = Best professional judgment – (1) Chlorination occurs during operations and therefore chlorine related parameters are assigned effluent limitations; (2) Calculated performance goal ($C_{pg} = \frac{Co + Dm(Co - Cs)}{Co}$, where Co = effluent limitation, Dm = dilution ratio, Cs = background concentration) is less than the highest reported laboratory method detection limit (MDL) and the Ocean Plan stipulated minimum level (ML). These parameters are assigned effluent limitations.

N/A = Not applicable.

Reasonable Potential: (Y) Either BPJ or the RPCalc statistical results of the reported laboratory data show a reasonable potential to exceed Ocean Plan (2009) water quality objectives. These parameters are assigned effluent limitations.

Reasonable Potential: (I) There is inadequate effluent data and/or the RPCalc statistical results are inconclusive. These parameters are assigned performance goals.

Reasonable Potential: (N) The RPCalc statistical results of the reported laboratory data do not show a reasonable potential to exceed Ocean Plan (2009) water quality objectives. These parameters are assigned performance goals.

Additional details are provided in the Fact Sheet (Attachment F).

REASONABLE POTENTIAL ANALYSIS FOR OCEAN PLAN TABLE B (2009) POLLUTANTS

Constituent, Unit	Benzo(a) Pyrene (PAH), µg/L # 54	Benzo(b) fluoranthene (PAH), µg/L # 55	Benzo(ghi) perylene (PAH), µg/L # 56	Benzo(k) fluoranthene (PAH), µg/L # 57	Bis (2-Chloro- ethoxy) Methane, µg/L # 58	Bis (2-Chloroethoxy) Ether, µg/L # 59	Bis (2-Chloroisopropyl) Ether, µg/L # 60	Bis (2-Ethylhexyl) Phthalate, µg/L # 61
LEC, µg/L	ND<4.7	ND<4.7	ND<4.7	ND<4.7	ND<4.7	ND<4.7	ND<4.7	<4.9
MEC, µg/L	ND<5.1	ND<5.1	ND<5.1	ND<5.1	ND<5.1	ND<5.1	ND<5.1	12
Maximum Background, µg/L (Table C 2009 Ocean Plan)	0	0	0	0	0	0	0	0
Numeric BP Objective, µg/L (MCL not applicable since MUN beneficial use is not applicable)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ocean Plan Objective (30-day avg or 6-month median), µg/L	0.0088	0.0088	0.0088	0.0088	4.4	0.045	1,200	3.5
Other factors (303d list, BPJ)	N/A BPJ	N/A BPJ	N/A BPJ	N/A BPJ	N/A	N/A	N/A	N/A
Reasonable Potential	Y	Y	Y	Y	I	I	I	N

Constituent, Unit	Chrysene (PAH), µg/L # 62	Dibenzo (ah) anthracene (PAH), µg/L # 63	1,2 Dichloro- benzene, µg/L # 64	1, 3 Dichloro- benzene, µg/L # 65	1, 4 Dichloro- benzene, µg/L # 66	3,3-Dichloro- benzidine, µg/L # 67	Diethyl Phthalate, µg/L # 68	Dimethyl Phthalate, µg/L # 69	Di-n-Butyl Phthalate, µg/L # 70
LEC, µg/L	ND<4.7	ND<4.7	ND<4.7	ND<4.7	ND<4.7	ND<4.7	ND<4.7	ND<4.7	ND<4.7
MEC, µg/L	ND<5.1	ND<5.1	ND<5.1	ND<5.1	ND<5.1	ND<5.1	ND<5.1	ND<5.1	ND<5.1
Maximum Background, µg/L (Table C 2009 Ocean Plan)	0	0	0	0	0	0	0	0	0
Numeric BP Objective, µg/L (MCL not applicable since MUN beneficial use is not applicable)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ocean Plan Objective (30-day avg or 6-month median), µg/L	0.0088	0.0088	5,100	5,100	18	0.0081	33,000	820,000	3,500
Other factors (303d li, BPJ)	N/A BPJ	N/A BPJ	N/A	N/A	N/A	N/A BPJ	N/A	N/A	N/A
Reasonable Potential	Y	Y	I	I	N	Y	I	I	I

LEC= Lowest Effluent concentration; MEC= Maximum effluent concentration (based on the last 5 years of data).

BPJ = Best professional judgment – (1) Chlorination occurs during operations and therefore chlorine related parameters are assigned effluent limitations; (2) Calculated performance goal ($C_{pg} = C_e + D_m(C_e - C_s)$, where C_e = effluent limitation, D_m = dilution ratio, C_s = background concentration) is less than the highest reported laboratory method detection limit (MDL) and the Ocean Plan stipulated minimum level (ML). These parameters are assigned effluent limitations.

N/A = Not applicable.

Reasonable Potential: (Y) Either BPJ or the RPCalc statistical results of the reported laboratory data show a reasonable potential to exceed Ocean Plan (2009) water quality objectives. These parameters are assigned effluent limitations.

Reasonable Potential: (I) There is inadequate effluent data and/or the RPCalc statistical results are inconclusive. These parameters are assigned performance goals.

Reasonable Potential: (N) The RPCalc statistical results of the reported laboratory data do not show a reasonable potential to exceed Ocean Plan (2009) water quality objectives. These parameters are assigned performance goals.

Additional details are provided in the Fact Sheet (Attachment F).

REASONABLE POTENTIAL ANALYSIS FOR OCEAN PLAN TABLE B (2009) POLLUTANTS

Constituent, Unit	2,4-Dinitro-toluene, µg/L # 71	1,2-Diphenyl – hydrazine, µg/L # 72	Fluoranthene, µg/L # 73	Fluorene (PAH), µg/L # 74	Hexachloro- benzene, µg/L # 75	Hexachloro – butadiene, µg/L # 76	Hexachloro – cyclopentadiene, µg/L # 77	Hexachloro– ethane, µg/L # 78	Indeno (1,2,3-cd) pyrene (PAH), µg/L # 79
LEC, µg/L	ND<4.7	ND<4.7	ND<4.7	ND<4.7	ND<4.7	ND<4.7	ND<4.7	ND<4.7	ND<4.7
MEC, µg/L	ND<5.1	ND<5.1	ND<5.1	ND<5.1	ND<5.1	ND<5.1	ND<5.1	ND<5.1	ND<5.1
Maximum Background, µg/L (Table C 2009 Ocean Plan)	0	0	0	0	0	0	0	0	0
Numeric BP Objective, µg/L (MCL not applicable since MUN beneficial use is not applicable)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ocean Plan Objective (30–day avg or 6-month median), µg/L	2.6	0.16	15	0.0088	0.00021	14	58	2.5	0.0088
Other factors (303d list...)	N/A	N/A	N/A	N/A BPJ	N/A BPJ	N/A	N/A	N/A	N/A BPJ
Reasonable Potential	I	I	I	I	I	I	I	I	I

Constituent, Unit	Isophorone, µg/L # 80	Nitrobenzene, µg/L # 81	N-Nitrosodimethyl-amine, µg/L # 82	Total Chlorine Residual, µg/L # 83	N-Nitrosodiphenyl-amine, µg/L # 84	Phenanthrene (PAH), µg/L # 85	Pyrene (PAH), µg/L # 86	Aldrin, µg/L # 87
LEC, µg/L	ND<4.7	ND<4.7	ND<4.7	ND<0.01	ND<4.7	ND<4.7	ND<4.7	ND<0.0096
MEC, µg/L	ND<5.1	ND<5.1	ND<5.1	6.3	ND<5.1	ND<5.1	ND<5.1	ND<0.022
Maximum Background, µg/L (Table C 2009 Ocean Plan)	0	0	0	0	0	0	0	0
Numeric BP Objective, µg/L (MCL not applicable since MUN beneficial use is not applicable)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ocean Plan Objective (30–day avg or 6-month median), µg/L	730	4.9	7.3	2.0	2.5	0.0088	0.0088	0.000022
Other factors (303d list, BPJ)	N/A	N/A	N/A	BPJ	N/A	N/A BPJ	N/A BPJ	N/A BPJ
Reasonable Potential	I	I	I	Y	I	I	I	I

LEC= Lowest Effluent concentration; MEC= Maximum effluent concentration (based on the last 5 years of data).

BPJ = Best professional judgment – (1) Chlorination occurs during operations and therefore chlorine related parameters are assigned effluent limitations; (2) Calculated performance goal ($C_{pg} = C_e + D_m(C_e - C_s)$, where C_e = effluent limitation, D_m = dilution ratio, C_s = background concentration) is less than the highest reported laboratory method detection limit (MDL) and the Ocean Plan stipulated minimum level (ML). These parameters are assigned effluent limitations.

N/A = Not applicable.

Reasonable Potential: (Y) Either BPJ or the RPCalc statistical results of the reported laboratory data show a reasonable potential to exceed Ocean Plan (2009) water quality objectives. These parameters are assigned effluent limitations.

Reasonable Potential: (I) There is inadequate effluent data and/or the RPCalc statistical results are inconclusive. These parameters are assigned performance goals.

Reasonable Potential: (N) The RPCalc statistical results of the reported laboratory data do not show a reasonable potential to exceed Ocean Plan (2009) water quality objectives. These parameters are assigned performance goals.

Additional details are provided in the Fact Sheet (Attachment F).

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ATTACHMENT J

REASONABLE POTENTIAL ANALYSIS FOR OCEAN PLAN TABLE B (2009) POLLUTANTS

UNITED STATES NAVY
ORDER NO. R4-2013-XXX
NPDES NO. CA0110175

Constituent, Unit	α-BHC, µg/L # 88	β-BHC, µg/L # 89	γ-BHC (Lindane), µg/L # 90	δ-BHC, µg/L # 91	Chlordane, µg/L # 92	4,4' DDT, µg/L # 93	4, 4'-DDE, µg/L # 94	4,4'-DDD, µg/L # 95	Dieldrin, µg/L # 96	alpha-Endo-sulfan, µg/L # 97
LEC, µg/L	ND<0.0096	ND<0.0096	ND<0.0096	ND<0.0096	ND<0.0096	ND<0.0096	ND<0.096	ND<0.096	ND<0.0096	ND<0.0096
MEC, µg/L	ND<0.022	ND<0.022	ND<0.022	ND<0.022	ND<0.022	0.06	ND<0.019	ND<0.019	ND<0.022	ND<0.022
Maximum Background, µg/L (Table C 2009 Ocean Plan)	0	0	0	0	0	0	0	0	0	0
Numeric BP Objective, µg/L (MCL not applicable since MUN beneficial use is not applicable)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ocean Plan Objective (30-day avg or 6-month median), µg/L	0.004	0.004	0.004	0.004	2.3 x 10 ⁻⁵	0.00017	0.00017	0.00017	0.00004	0.009
Other factors (303d list, BPJ)	N/A	N/A	N/A	N/A	N/A BPJ	N/A	N/A	N/A	N/A BPJ	N/A
Reasonable Potential	I	I	I	I	IY	Y	Y	Y	IY	I

Constituent, Unit	beta-Endo-sulfan, µg/L # 98	Endosulfan Sulfate, µg/L # 99	Endrin, µg/L # 100	Heptachlor, µg/L # 101	Heptachlor Epoxide, µg/L # 102	PCBs, µg/L # 103-109	Toxaphene, µg/L # 110	Tributyltin, µg/L # 111	Ammonia as N, µg/L # 112	TCDD Equivalents µg/L # 113
LEC, µg/L	No Data	No Data	ND<0.0096	ND<0.0096	ND<0.0096	ND<0.48	ND<0.48	ND<0.005	ND<0.1	2.33 x 10 ⁻⁹
MEC, µg/L	N/A	N/A	ND<0.022	ND<0.022	ND<0.022	ND<0.54	ND<1.1	ND<3	0.373	4.67 x 10 ⁻⁷
Maximum Background, µg/L (Table C 2009 Ocean Plan)	0	0	0	0	0	0	0	0	0	0
Numeric BP Objective, µg/L (MCL not applicable since MUN beneficial use is not applicable)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ocean Plan Objective (30-day avg or 6-month median), µg/L	0.009	0.009	0.002	5. x 10 ⁻⁵	2 x 10 ⁻⁵	1.9 x 10 ⁻⁵	0.00021	0.0014	600	3.9 x 10 ⁻⁹
Other factors (303d list, BPJ)	N/A	N/A	N/A	N/A BPJ	N/A BPJ	N/A BPJ	N/A BPJ	N/A BPJ	N/A	N/A
Reasonable Potential	I	I	I	IY	IY	IY	IY	IY	N	Y

LEC= Lowest Effluent concentration; MEC= Maximum effluent concentration (based on the last 5 years of data).

BPJ = Best professional judgment – (1) Chlorination occurs during operations and therefore chlorine related parameters are assigned effluent limitations; (2) Calculated performance goal (Cpg = $\frac{Co + Dm(Co - Cs)}{Co}$), where Co = effluent limitation, Dm = dilution ratio, Cs = background concentration) is less than the highest reported laboratory method detection limit (MDL) and the Ocean Plan stipulated minimum level (ML). These parameters are assigned effluent limitations.

N/A = Not applicable.

Reasonable Potential: (Y) Either BPJ or the RPCalc statistical results of the reported laboratory data show a reasonable potential to exceed Ocean Plan (2009) water quality objectives. These parameters are assigned effluent limitations.

Reasonable Potential: (I) There is inadequate effluent data and/or the RPCalc statistical results are inconclusive. These parameters are assigned performance goals.

Reasonable Potential: (N) The RPCalc statistical results of the reported laboratory data do not show a reasonable potential to Ocean Plan (2009) exceed water quality objectives. These parameters are assigned performance goals.

Additional details are provided in the Fact Sheet (Attachment F).

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ATTACHMENT K – SEWER SYSTEM REPORTING REQUIREMENTS

ATTACHMENT K

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

For purposes of these requirements, a SS outflow includes any spill, release, discharge or diversion of untreated or partially treated sewage or combined sewage and stormwater from the sewer collection system. SS outflows include:

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

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

A. General Reporting Requirements

1. The Discharger must request a Sanitary Sewer System (SSO) Database account by registering through the California Integrated Water Quality System (CIWQS) (CWC section 13193). This account will allow controlled and secure entry into the SSO Database. Additionally, within 30 days of receiving an account and prior to recording SS outflows into the SSO Database, the Discharger must complete the “Collection System Questionnaire”, which collects pertinent information regarding an Enrollee’s collection system. The “Collection System Questionnaire” must be updated at least every 12 months.
2. Pursuant to Health and Safety Code section 5411.5, any person who, without regard to intent or negligence, causes or permits any untreated wastewater or other waste (e.g., combined wastewater and stormwater) to be discharged in or on any waters of the State, or discharged in or deposited where it is, or probably will be, discharged in or on any surface waters of the State, as soon as that person has knowledge of the discharge, shall immediately notify the Los Angeles Regional Water Board (Regional Water Board). It is also recommended that the Navy notify the local health officer of the discharge. Discharges of untreated or partially treated wastewater to separate storm drains and

drainage channels, whether man-made or natural or concrete-lined, shall be reported as required above.

3. Any SS outflow greater than 1,000 gallons discharged in or on any waters of the State, or discharged in or deposited where it is, or probably will be, discharged in or on any surface waters of the State shall also be reported to the Regional Water Board. It is recommended that the Navy also report this information to the California Emergency Management Agency (CALEMA) pursuant to California Water Code section 13271.
4. If the Discharger becomes aware that it failed to submit any relevant facts in any report required herein, the Discharger shall promptly submit such facts or information by formally amending the report in the Online SSO Database.

B. Notification Requirements

1. For any SS outflow that results in a discharge to a drainage channel or a surface water, the Discharger shall, as soon as possible, but not later than two (2) hours after becoming aware of the discharge, notify the Regional Water Board. It is recommended that the Navy also notify CALEMA, the local health officer or directors of environmental health with jurisdiction over affected water bodies.
2. It is recommended that as soon as possible, but no later than twenty-four (24) hours after becoming aware of a SS outflow that results in a discharge to a drainage channel or a surface water, the Discharger provide to the appropriate Regional Water Board a certification that CALEMA and the local health officer or directors of environmental health with jurisdiction over the affected water bodies have been notified of the discharge.

C. SS Outflow Categories

1. Category 1 - All discharges of sewage or combined sewage and stormwater resulting from a failure in the Discharger's combined sewer system that:
 - a. Equal or exceed 1,000 gallons, or
 - b. Result in a discharge to a drainage channel and/or surface water; or
 - c. Discharge to a separate storm drainpipe that was not fully captured and returned to the SS.
2. Category 2 - All other discharges of sewage or combined sewage and stormwater resulting from a failure in the Discharger's SS.

D. SS Outflow Reporting Timeframes

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

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

2. Category 2 SS Outflows - All CSS Outflows that meet the above criteria for Category 2 SS outflows must be reported to the Online SSO Database within 30 days after the end of the calendar month in which the CSS outflow occurs (e.g., all SS outflows occurring in the month of January must be reported to the Regional Water Board by March 1st).
3. If there are no SS Outflows during the calendar month, the Discharger will provide, within 30 days after the end of each calendar month, a statement through the Online SSO Database certifying that there were no SS Outflows for the designated month.
4. In the event that the Online SSO Database is not available, the Discharger must fax all required information along with the CI Number 6432 to the Regional Water Board office (213-576-6660) in accordance with the time schedules identified above. In such event, the Discharger must also enter all required information into the Online SSO Database as soon as practical.

E. Mandatory Information to be included in SS Outflow Reporting

1. Category 2 SS Outflows:
 - a. Location of the SS outflow, including latitude and longitude coordinates, street address, city, state, zip code;
 - b. Applicable Regional Water Board, i.e. identify the region in which the SS outflow occurred along with CI Number 6432;
 - c. County where SS outflow occurred;
 - d. Whether or not the SS outflow entered a drainage channel and/or surface water;
 - e. Whether or not the SS outflow was discharged to a separate storm drain pipe that was not fully captured and returned to the SS;
 - f. Estimated SS outflow volume in gallons;
 - g. SS outflow source (e.g. manhole, cleanout, surcharge, flooding, etc.);

- h. SS outflow cause (e.g. mainline blockage, roots, etc.);
- i. Time of SS outflow notification or discovery;
- j. Estimated operator arrival time;
- k. SS outflow destination;
- l. Estimated SS outflow end date/time; and
- m. Certification. Upon Certification, the SSO Database will issue a Final SSO Identification (ID) Number.

2. Category 1 SS Outflows:

- a. All information listed for Category 2 SS outflows, as well as;
- b. Estimated SS outflow volume that reached surface water, drainage channel, or not recovered from a separate storm drain;
- c. Estimated SS outflow amount recovered;
- d. Response and corrective action taken;
- e. If samples were taken, identify which regulatory agencies received sample results (if applicable). If no samples were taken, NA must be selected.;
- f. Parameters that samples were analyzed for (if applicable);
- g. Identification of whether or not health warnings were posted;
- h. Beaches impacted (if applicable). If no beach was impacted, NA must be selected;
- i. Whether or not there is an ongoing investigation;
- j. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the SS outflow and a schedule of major milestones for those steps;
- k. OES control number (if applicable);
- l. Date OES was called (if applicable);
- m. Time OES was called (if applicable);
- n. Identification of whether or not County Health Officers were called;
- o. Date County Health Officer was called (if applicable); and
- p. Time County Health Officer was called (if applicable).

F. Reporting to Other Regulatory Agencies

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

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

CALEMA

Phone (800) 852-7550

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

G. Record Keeping

1. Individual SS outflow records shall be maintained by the Discharger for a minimum of 5 years from the date of the SS outflow. This period may be extended when requested by the Regional Water Board Executive Officer.
2. All records shall be made available for review upon State or Regional Water Board staff's request.
3. All monitoring instruments and devices that are used by the Discharger to fulfill the prescribed monitoring and reporting program shall be properly maintained and calibrated as necessary to ensure their continued accuracy;
4. The Discharger shall retain records of all SS outflows, such as, but not limited to and when applicable:
 - a. Record of Certified report, as submitted to the Online SSO Database;
 - b. All original recordings for continuous monitoring instrumentation;
 - c. Service call records and complaint logs of calls received by the Discharger;
 - d. SS outflow calls;
 - e. SS outflow records;
 - f. Steps that have been and will be taken to prevent the SS outflow from recurring and a schedule to implement those steps;
 - g. Work orders, work completed, and any other maintenance records from the previous 5 years which are associated with responses and investigations of system problems related to SS outflows;
 - h. A list and description of complaints from customers or others from the previous 5 years; and
 - i. Documentation of performance and implementation measures for the previous 5 years.
5. If water quality samples are required by an environmental or health regulatory agency or State law, or if voluntary monitoring is conducted by the Discharger or its agent(s), as a result of any SS outflow, records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurements;
 - b. The individual(s) who performed the sampling or measurements;
 - c. The date(s) analyses were performed;
 - d. The individual(s) who performed the analyses;
 - e. The analytical technique or method used; and,
 - f. The results of such analyses.

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H. Certification

1. All final reports must be certified by a person designated, for a municipality, state, federal or other public agency, as either a principal executive officer or ranking elected official, or by a duly authorized representative of that person. (For purposes of electronic reporting, an electronic signature and accompanying certification, which is in compliance with the Online SSO Database procedures, meet this certification requirement.)
2. Registration of authorized individuals, who may certify reports, will be in accordance with the California Integrated Water Quality System's (CIWQS') protocols for reporting.

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