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ORDER NO. R4-2010-XXXX
NPDES NO. CA0109991

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

The following Discharger is subject to State waste discharge requirements and federal NPDES permit requirements, as set forth in this Order/Permit:

Table 1. Discharger Information

Discharger	City of Los Angeles
Name of Facility (and POTW)	Hyperion Treatment Plant
Facility (and POTW) Address	12000 Vista del Mar Boulevard Playa del Rey, CA 90293 Los Angeles County
The U.S. Environmental Protection Agency and the Los Angeles Regional Water Quality Control Board have classified this discharge as a major discharge.	

The discharge by the City of Los Angeles from the discharge points identified below is subject to State waste discharge requirements and federal NPDES permit requirements, as set forth in this Order/Permit:

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	Secondary treated wastewater	33º, 55', 06" N	118º, 26', 51" W	Pacific Ocean
002 (Y-shaped diffuser)	Secondary treated wastewater	33º, 54', 43" N 33º, 54', 02" N	118º, 31', 17" W 118º, 31', 38" W	Pacific Ocean

Table 3. Administrative Information for State Order

This Order was adopted by the Los Angeles Regional Water Quality Control Board on:	~~September 2~~November 4, 2010
This Order shall become effective on:	~~October 22~~December 24, 2010
This Order shall expire on:	~~September 10~~December 23~~October 10~~, 2015
The Discharger shall file a Report of Waste Discharge in accordance with title 23, California Code of Regulations, as application for issuance of new waste discharge requirements no later than:	180 days prior to the Order expiration date (Title 40, Code of Federal Regulations, part 122.21(d))

I, Samuel Unger, ~~Interim~~ Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on ~~September 2~~November 4, 2010.

_____

Samuel Unger, ~~Interim~~ Executive Officer

Table ~~4~~ 1. Administrative Information for Federal Permit

This Permit was issued by the U.S. Environmental Protection Agency, Region IX on:	~~<Issuance Date>~~
This Permit shall become effective on:	~~<Effective Date>~~
This Permit shall expire on:	~~<Expiration Date>~~
The Discharger shall submit, in accordance with 40 CFR 122.21(d), a new application at least 180 days before:	180 days prior to the Order expiration date (Title 40, Code of Federal Regulations, part 122.21(d))

I, Alexis Strauss, do hereby certify that this Permit with all attachments is a full, true, and correct copy of an NPDES permit issued by the U.S. Environmental Protection Agency, Region IX, on ~~<Issuance Date>~~ _____.

_____

Alexis Strauss, Water Division Director

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I. FACILITY INFORMATION

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

Table 5. Facility Information

Discharger	City of Los Angeles
Name of Facility	Hyperion Treatment Plant
Facility Address	12000 Vista del Mar Boulevard
	Playa del Rey, CA 90293
	Los Angeles County
Facility Contact, Title, and Phone	Steven Fan, Sanitation Wastewater Manager III, (310) 648-5168
Mailing Address	Same as the Facility Address
Type of Facility	Publicly Owned Treatment Works
Facility Design Flow	450 Million Gallons per Day (MGD)~~,~~ 30-day (monthly) average daily dry weather design capacity for secondary treatment ~~maximum dry weather design flow~~ and 850 MGD~~,~~ ~~of maximum~~ wet weather peak hydraulic capacity~~design flow~~

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II. FINDINGS

The California Regional Water Quality Control Board, Los Angeles Region (hereinafter Regional Water Board) and U.S. Environmental Protection Agency, Region IX (hereinafter USEPA), find:

A. Consent Decree and Legal Issues

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

   a. Amended Consent Decree entered on February 19, 1987, in United States and State of California v. City of Los Angeles, No. CV 77-3047-HP (C.D. Cal.);

   b. Settlement Agreement, Los Angeles Superior Court Case No. C 665238, dated January 29, 1990, in State of California v. City of Los Angeles; and

   c. Regional Water Board Cease and Desist Order 98-073 adopted on September 14, 1998, amended by Order No. 00-128 adopted on August 31, 2000.

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

   a. Eliminate the discharge of sewage sludge into the Pacific Ocean from Hyperion Treatment Plant by December 31, 1987 (status: completed);

   b. Comply with interim effluent limits (status: interim limits are not applicable as of January 1, 1999);

   c. Complete construction and begin operation of the Hyperion Energy Recovery System by June 30, 1989 (status: completed, but determined to be a technological failure and abandoned);

   d. Achieve and thereafter maintain compliance with full secondary treatment at Hyperion Treatment Plant by December 31, 1998 (status: completed and achieved compliance before the deadline);

   e. Prepare a storm water pollution reduction study and implement the recommended measures thereof (status: completed).

3. On June 7, 1991, the United States and the State of California filed a supplemental complaint under the existing Consent Decree CV 77-3047-HP (C.D. Cal.) for alleged pretreatment violations against the City. Settlement of the complaint had been concluded and modification to the Consent Decree was

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entered into court records on August 7, 2000. The settlement requires the City to implement the Westside Water Recycling Extension Project and the Santa Monica Bay Storm Drain Low-Flow Diversion Project. The Santa Monica Urban Runoff Recycling Facility (SMURRF), completed in 2000, is owned and operated by the City of Santa Monica. As the first full-scale, dry-weather runoff recycling facility in the U.S., SMURRF reclaims dry-weather run-off from storm drains and treats the water for reuse in landscape irrigation and toilet flushing. Since the City of Los Angeles contributes about half of the runoff treated at SMURRF, the City of Los Angeles pays for half of the capital and operations and maintenance costs of SMURRF, pursuant to an agreement with the City of Santa Monica.

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

5. Sanitary sewer overflows (SSO) have been a recurring problem in certain areas of the City; in particular, in the South Central area, where sewers do not have adequate capacity to absorb inflow and infiltration that occurs during wet weather. ~~-~~For the entire City, between the wet weather period of February 3, 1998~~,~~ through May 14, 1998, there were 99 separate sanitary overflows resulting in 44 million gallons of raw sewage released. On September 14, 1998, the Regional Water Board issued Cease and Desist Order (CDO) No. 98-073 to the City, amended by CDO No. 00-128 adopted on August 31, 2000. The CDO requires the City to

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provide adequate capacity to its wastewater collection system by constructing additional sewer alignments and/or upgrading the existing sewer system over a seven-year period (1998 to 2005). Additionally, on August 5, 2004, the United States, the State of California, Santa Monica Baykeeper, a coalition of community groups and the City of Los Angeles lodged a settlement that would resolve the parties'' Clean Water Act and Porter-Cologne Act litigation regarding the City of Los Angeles'' SSOs and sewage odors. This settlement underwent public review and comment. The Settlement Agreement and Final Order was filed on October 28, 2004 and entered by the District Court on October 29, 2004, and is now being implemented. The Settlement Agreement and Final Order ~~establishes~~establish a ten-year program designed to reduce SSOs and sewage odors to the maximum extent feasible.

B. Background. The City of Los Angeles (hereinafter Discharger) is currently discharging pursuant to Order No. 2005-0020 and National Pollutant Discharge Elimination System (NPDES) Permit (CA0109991), which was adopted on April 7, 2005. The Discharger submitted a Report of Waste Discharge, dated October 27, 2009**,** and applied for an NPDES permit renewal to discharge up to 450 MGD of disinfected (Discharge Point 001) and undisinfected (Discharge Point 002) secondary-treated municipal wastewater from Hyperion Treatment Plant (hereinafter, HTP or Facility and its appurtenances), to the Pacific Ocean within Santa Monica Bay, a water of the United States. The application for the NPDES permit renewal and Report of Waste Discharge was deemed complete on December 23, 2009.

For the purposes of this Order/Permit, references to the "discharger" or "permittee" in applicable federal and State laws, regulations, plans, or polic~~y~~ies are held to be equivalent to references to the Discharger herein.

C. Facility Description. The Discharger owns and operates its regional collection system and treatment facilities, the Hyperion Treatment Plant, and outfalls. The HTP is a publicly owned treatment works (POTW). In 2009, the HTP treated an average inflow of 312 MGD and discharged an average effluent flow of 275 MGD. Approximately 37 MGD of the secondary effluent was sent to West Basin Water Recycling Facility for advanced treatment and reuse.

The treatment system consists of primary and secondary treatments. Preliminary and primary wastewater treatments consist of screening, grit removal, and primary sedimentation with coagulation and flocculation. In secondary treatment, the primary effluent is biologically treated in a high purity oxygen-activated sludge process comprised of a cryogenic oxygen plant, nine secondary reactor modules and 36 secondary clarifiers. Each secondary reactor module is designed to handle 50 MGD of flow, which results in a total treatment capacity of 450 MGD producing secondary effluent. After clarification, ~~undisinfected~~ secondary effluent is discharged into Santa Monica Bay. Discharge up to 325 MGD flows by gravity to the outfall, or is pumped at the Effluent Pumping Plant when flows exceed 325 MGD.

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Solid fractions recovered from wastewater treatment processes include grit, primary screenings, primary sludge and skimmings, thickened waste activated sludge, digested sludge screenings and digester cleaning solids. The fine solids (grit, primary screenings, digested sludge screenings, digester cleaning solids) that consist of primary inorganic materials are hauled away to landfills. The remaining solid fractions (primary sludge and skimmings, thickened waste activated sludge) are anaerobically digested onsite. The digested solids are screened and dewatered using centrifuges. Since January 1, 2003, the Hyperion Treatment Plant has implemented full thermophilic digestion to generate Class A "EQ" biosolids. The biosolids (treated sewage sludge) are beneficially reused offsite for land application and composting projects. The digester gas is cleaned and a major part of the gas is currently exported to the Los Angeles Department of Water and Power's Scattergood Steam Generating Plant, located immediately adjacent to the Hyperion Treatment Plant. The exported digester gas is used as fuel in the generation of electricity. In return, the generating plant provides steam for digester heating for the Hyperion Treatment Plant. During interruption in the export of steam from the Scattergood Steam Generation Plant, digester gas can be used as fuel for in-plant boilers that provide steam to heat the anaerobic digesters. Any remaining non-exported digester gas may be flared, if necessary, and is regulated under a flare operation permit from the South Coast Air Quality Management District (AQMD). Attachment B provides a map of the area around the facility.

A schematic of the Hyperion Treatment Plant's wastewater flow is presented in Attachment C-1.

The HTP is part of a joint outfall system commonly known as the Hyperion Treatment System, which consists of the wastewater collection system, the Hyperion Treatment Plant and three upstream wastewater treatment plants: Donald C. Tillman Water Reclamation Plant (Tillman WRP), Los Angeles-Glendale Water Reclamation Plant (LAGWRP), and Burbank Water Reclamation Plant (Burbank WRP) (owned and operated by a contract city), and outfalls. The Hyperion Treatment System collects, treats, and disposes of sewage from the entire City (except the Wilmington-San Pedro Area, the strip north of San Pedro, and Watts) and from a number of cities and agencies (see Contract Cities and Agencies) under contractual agreements. The Contract Cities and Agencies operate their respective collection systems that are tributary to the City's main trunk lines. Some Contract Cities and Agencies also perform nondomestic source control activities. Approximately, 85% of the sewage and commercial/industrial wastewater comes from the City of Los Angeles. The remaining 15% comes from the Contract Cities and Agencies. The Hyperion Treatment System Service Area includes 6,138 miles of public sewers, 24 pump stations, 18 miles of force mains, 141,357 maintenance holes and serves a population of 3,954,000 in the City of Los Angeles and other Contract Agencies (see Attachment C-2, Map of Hyperion Treatment System Service Area).

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Contract Cities and Agencies~~ONTRACT CITIES AND AGENCIES~~

a. ~~—~~Aneta Street Tax Zone
b. Army Reserve Center
c. Army Reserve Training
d. Barrington Post Office
e. City of Beverly Hills
f. City of Burbank
g. California National Guard (Federal Avenue Armory)
h. L.A. County Sanitation District #4 (W. Hollywood)
i. L.A. County Sanitation District #5 (Inglewood)
~~j. L.A. County Sanitation District #9 (Terminal Island)~~
jk. L.A. County Sanitation District #16 (Alhambra, Pasadena, S. Pasadena)
kl. L.A. County Sanitation District 27 (Sunset Mesa)
lm. City of Culver City
mn. City of El Segundo
no. Federal Office Building
op. City of Glendale
pq. Karl Holton Camp
qr. Las Virgenes Municipal Water District
rs. Marina Del Rey
~~t. City of Long Beach~~
su. City of San Fernando
tv. City of Santa Monica
u. Terminal Island Treatment Service Area
vw. Triunfo County Sanitation District
wx~~,~~. Universal City
xy. Veterans Memorial Park
yz. Veterans Administration - Sawtelle
~~aa.~~z. West Los Angeles Community College

Sludge from the City's two upstream plants (i.e., Tillman WRP and LAGWRP) is returned to the wastewater collection system and flows to the Hyperion Treatment Plant for treatment. Discharges from Tillman WRP and LAGWRP are regulated by Order No. R4-2010-0060 (NPDES ~~Permit~~ No. CA0056227) and Order No. R4-2010-0059 (NPDES ~~Permit~~ No. CA0053953), respectively. In addition, sludge generated from the Burbank WRP is returned to the City of Burbank sewer system for treatment at the Hyperion Treatment Plant. The influent to the Burbank WRP can be diverted/bypassed to the Hyperion Treatment Plant during periods of emergency. Discharges from the Burbank WRP are regulated under Order No. R4-2010-0058 (NPDES No. CA0055531).

Currently, the HTP accepts dry weather urban runoff that is diverted from storm drains into the City's collection system year-round via the ~~L~~low ~~F~~flow ~~D~~diversion (LFD) facilities except for storm events that generate greater than 0.1 inch of storm runoff and three days following the storm event, during which time LFD facilities are turned off. The City is currently upgrading the eight LFD ~~F~~facilities to equip the facilities with the necessary back up electrical, mechanical, telemetry, and the required pumping capacity to minimize down-time. The LFD facilities' operation are in accordance with the six-year schedule for bacteria concentration during winter dry weather, contained in the Santa Monica Bay Beaches Dry-weather Bacteria TMDL (Resolution No. 02-004 and Resolution No. 2002-022) adopted by the Regional Water Board.

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Water Reclamation. A small fraction (approximately 37 MGD in 2009) of the HTP's secondary effluent is sent to West Basin Water Recycling Facility (West Basin Facility) for advanced treatment and reuse. The West Basin Municipal Water District (West Basin) operates the West Basin Facility in El Segundo. West Basin is contractually entitled to receive up to 70 MGD of secondary effluent from HTP. West Basin Facility provides tertiary treatment and/or advanced treatments such as microfiltration and reverse osmosis (RO) to the Hyperion secondary effluent to produce Title 22 and high purity recycled water. Title 22 recycled water is used for beneficial irrigiation, industrial applications including cooling water and boiler feed water, and other purposes. The RO-treated recycled water is primarily injected into the West Coast Basin Barrier Project to control seawater intrusion.

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

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

Description of Outfalls. The Hyperion Treatment Plan has three ocean outfalls. However, only two outfall points (i.e., 001 and 002) are authorized discharge points for treated wastes to the Pacific Ocean. The three ocean outfalls are described as follows:

Discharge Point 001. This is commonly referred to as the "one-mile outfall". It is a 12-foot diameter outfall terminating approximately 5,364 feet (1.6 kilometers (km)) west-southwest of the treatment plant at a depth of approximately 50 feet (15 meters (m)) below the ocean surface (Latitude 33° 55.06'95, Longitude 118° 26.51'). This outfall is permitted for emergency discharge of chlorinated secondary treated effluent during extremely high flows, and preventative maintenance, such as routine opening and closing the outfall gate valve(s) for exercising and lubrication. However, during intense storms or storms associated with plant power outages, direct discharge of undisinfected storm water overflow from the HTP is also permitted at this outfall. This Order/Permit requires the City to notify the Regional Water Board and USEPA in advance of any planned preventative maintenance that results in discharges through Discharge Point 001.

Discharge Point 002. This is commonly referred to as the "five-mile outfall". It is a 12-foot diameter outfall terminating approximately 26,525 feet (8.1 km) west-southwest of the treatment plant at a depth of approximately 187 feet (57 m) below the ocean surface. This outfall is located north of Discharge Point 001 and ends in a "Y" shaped diffuser consisting of two 3,840-foot legs (Latitude 33° 54.72'18, Longitude: 118° 31.29'87) (North terminus of wye structure – Latitude 33°

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5~~45~~.43'~~160~~, Longitude 118° 31.17'~~709~~; South terminus of wye structure – Latitude 33° 54.02'~~39~~, Longitude 118° 31.38'~~636~~). This is the only outfall permitted for the routine discharge of undisinfected secondary treated effluent.

Outfall No. 003. ~~–~~ This is a 20-inch diameter outfall terminating approximately 35,572 feet (10.8 km) west of the treatment plant, at the head of a submarine canyon at a depth of approximately 300 feet (91m) below the ocean surface (Latitude 33° 55.62' N~~2~~, Longitude 118° 33.18' W~~3~~). This outfall had been used to discharge sludge. Under the 1987 amended Consent Decree No. CV77-3047-HP, this outfall was deactivated in November 1987 when sludge discharge to the ocean was terminated. Near the head of this outfall, a spool piece was removed and the discharge pipe was blind-flanged to prevent any possible discharge of sewage or sludge into the Pacific Ocean. This outfall has not been maintained since it was taken out of service. Any discharge from this outfall is prohibited.

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

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

F. ~~**E.**~~ **California Environmental Quality Act (CEQA).** Under California Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of the CEQA, Public Resources Code sections 21100-21177.

G. ~~**F.**~~ **Technology-based Effluent Limitations.** Section 301(b) of the CWA and implementing regulations at part 125.3, title 40 of the Code of Federal Regulations[1] (hereinafter 40 CFR), require that NPDES permits include limitations which meet applicable technology-based requirements, at minimum. The discharge authorized by this Order/Permit must meet minimum federal technology-based requirements for

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[1] All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated and will be abbreviated as "40 CFR ~~-~~part number~~"~~."

POTWs at 40 CFR 133. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet (Attachment F).

H. Water Quality-Based Effluent Limitations. Section 301(b) of the CWA and 40 CFR part 122.44(d) require that permits include limitations more stringent than applicable technology-based requirements where necessary to achieve water quality standards and State requirements. 40 CFR part 122.44(d)(1)(i) requires that permits include water quality-based effluent limitations (WQBELs) for all pollutants, which are or may be discharged at levels having the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives or criteria within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric objective or criterion for the pollutants, 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 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 122.

I. ~~H.~~ Los Angeles Water Quality Control Plan. On June 13, 1994, the Regional Water Board adopted a water quality control plan for the Los Angeles Region (hereinafter Basin Plan), as amended, that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for the Pacific Ocean. 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. Basin Plan beneficial uses applicable to the Pacific Ocean are shown in Table 6:

Table 6. Basin Plan Beneficial Uses

Discharge Point	Receiving Water	Beneficial Use(s)
001	Dockweiler Beach (Hydrologic Unit 405.12)	Existing: Industrial service supply (IND), navigation (NAV), water contact recreation (REC-1), non-contact water recreation (REC-2), commercial and sport fishing (COMM), marine habitat (MAR), and wildlife habitat (WILD). Potential: Spawning, reproduction, and/or early development (SPWN)*.
	Pacific Ocean Nearshore** Zone	Existing: IND, NAV, REC-1, REC-2, COMM, MAR, WILD, preservation of biological habitats** (BIOL), RARE**, migration of aquatic organisms** (MIGR), SPWN**, and SHELL. Potential: None.

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Discharge Point	Receiving Water	Beneficial Use(s)
001, 002	Pacific Ocean Offshore Zone	Existing: IND, NAV, REC-1, REC-2, COMM, MAR, WILD, RARE**, MIGR**, SPWN**, and SHELL. Potential: None.

Requirements of this Order/Permit implement the Basin Plan.

~~On June 28, 2007, USEPA approved California's 2006 section 303(d) List of Water Quality Limited Segments. The list (hereinafter referred to as the 303(d) list) identifies waterbodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations by point sources (water quality-limited waterbodies).~~

~~Santa Monica Bay (Offshore and Nearshore) is on the 303(d) list for the following pollutants/stressors, from point and non-point sources: DDT (dichlorodiphenyltrichloroethane) (tissue & sediment), debris, fish consumption advisory, PCBs (polychlorinated biphenyls) (tissue & sediment), and sediment toxicity. This Order/Permit prescribes WQBELS for chlordane, DDT, PAHs, and PCBs, as described in Finding 54.~~

J. 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. The list (hereinafter referred to as the 303(d) list) identifies water bodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations by point sources (water quality-limited water bodies).

Santa Monica Bay (Offshore and Nearshore) is on the 303(d) list for the following pollutants/stressors, from point and non-point sources: DDT (dichlorodiphenyltrichloroethane) (tissue & sediment), debris, fish consumption advisory, PCBs (polychlorinated biphenyls) (tissue & sediment), and sediment toxicity. This Order/Permit continues to prescribe WQBELS for DDT and PCBs, as described in Finding 54 of the 2005 Order/Permit.

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

L. ~~J.~~ California Ocean Plan. In 1972, the State Water Board adopted the *Water Quality Control Plan for Ocean Waters** of California, California Ocean Plan* (hereinafter Ocean Plan), as amended. The latest amendment became effective on February 14, 2006. The Ocean Plan is applicable, in its entirety, to point source

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discharges to the ocean waters of the State. Ocean Plan beneficial uses applicable to ocean waters of the State are shown in Table 7.

Table 7. Ocean Plan Beneficial Uses

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

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

M. ~~K.~~ Santa Monica Bay Restoration Plan. The Hyperion Treatment Plant discharges to Santa Monica Bay, one of the most heavily used recreational areas in California. Recognizing the importance of the Bay as a national resource, the State of California and USEPA nominated and Congress included Santa Monica Bay in the National Estuary Program. This led to the formation of the Santa Monica Bay Restoration Project (currently named Santa Monica Bay Restoration Commission) that developed the Bay Restoration Plan (BRP), which serves as a blueprint for restoring and enhancing the Bay. The Regional Water Board plays a lead role in the implementation of the BRP. Three of the proposed priorities of the BRP are reduction of pollutants of concern at the source (including municipal wastewater treatment plants), attainment of full secondary treatment at the City of Los Angeles' Hyperion Treatment Plant and the County Sanitation Districts of Los Angeles County's Joint Water Pollution Control Plant, and implementation of the mass emission approach for discharges of pollutants to the Bay.

N. ~~L.~~ Alaska Rule. USEPA has 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 Fed. Reg. 24641 (April 27, 2000)). Under the revised regulation (hereinafter Alaska R~~r~~ule), 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.~~O. Stringency of Requirements for Individual Pollutants. This Order/Permit contains restrictions on individual pollutants that are no more stringent than required by the federal CWA. Individual pollutant restrictions consist of technology-based effluent limitations and water quality-based effluent limitations. The technology-based effluent limitations consist of restrictions on biochemical oxygen demand (5-day) (BOD_5), total suspended solids (TSS), and pH, and percent removal of BOD_5 and TSS, which implement the minimum, applicable federal technology-based requirements for POTWs. Also, effluent limitations consisting of restrictions on oil

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and grease, settleable solids, and turbidity more stringent than federal technology-based requirements are necessary to implement State treatment standards in Table A of the Ocean Plan. Water quality-based effluent limitations consisting of ~~restricts~~restrictions on copper, ~~total~~ chlorine residual, ammonia (~~expressed~~ as nitrogen), acute toxicity, chronic toxicity, ~~radioactivity,~~ beryllium~~nzidine~~, chlordane~~hexachlorobenzene~~, DDT, PAHs, PCBs, and TCDD equivalents~~and toxaphene~~ have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. Collectively, restrictions on individual pollutants in this Order/Permit are no more stringent than required by the CWA.

~~N.~~P. **Antidegradation Policy.** 40 CFR part 131.12 requires that the State water quality standards include an antidegradation policy consistent with the federal antidegradation policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. This resolution incorporates the federal antidegradation policy, where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. As discussed in detail in the Fact Sheet (Attachment F), the permitted discharge is consistent with the antidegradation provisions of 40 CFR part 131.12 and State Water Board Resolution No. 68-16.

~~O.~~Q. **Anti-Backsliding Requirements.** CWA sections 402(o)/303(d) and 40 CFR part 122.44(l) prohibit backsliding and require effluent limitations, permit conditions, and standards in a reissued NPDES permit to be as stringent as those in the previous permit, with some exceptions where limitations and conditions may be relaxed. Some effluent limitations in this Order/Permit are less stringent that those in the previous Order/Permit. As discussed in detail in the Fact Sheet (Attachment F), this relaxation of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations.

This Order/Permit is consistent with State and federal antidegradation policies in that it does not authorize a change 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 1994 permit of 420 ~~mgd~~MGD. Although the design flow rate of the treatment plant has increased to 450 ~~mgd~~MGD, this increase has been accompanied by a significant improvement in the level of treatment necessary to achieve full secondary treatment. As a result, both the quantity of discharged pollutants and quality of the discharge are expected to remain relatively constant or improve during this permit term, consistent with antidegradation policies. In conformance with reasonable potential analysis procedures identified in State Water Board and USEPA documents, effluent limitations for some constituents are not carried forward in this Order/Permit because there is not presently reasonable potential for the constituents to cause or contribute to an exceedance of water

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quality standards. Without reasonable potential, there is no longer a need to maintain prior WQBELs under NPDES regulations, antibacksliding provisions, and antidegradation policies. The accompanying monitoring and reporting program requires continued data collection and if monitoring data show reasonable potential for a constituent to cause or contribute to an exceedance of water quality standards, the Order/Permit will be reopened to incorporate WQBELs. Such an approach ensures that the discharge will adequately protect water quality standards for designated beneficial uses and conform with antidegradation policies and antibacksliding provisions.

~~P.~~R. **Endangered Species Act.** This Order/Permit does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the federal Endangered Species Act (16 U.S.C. sections 1531 to 1544). This Order/Permit 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 Endangered Species Act.

~~Q.~~S. **Monitoring and Reporting.** 40 CFR part 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. California Water Code sections 13267 and 13383 authorizes the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (Attachment E) establishes monitoring and reporting requirements to implement federal and State requirements.

~~R.~~T. **Standard and Special Conditions.** Standard Provisions that apply to all NPDES permits, in accordance with 40 CFR part 122.41, and additional provisions, which apply to POTWs, in accordance with 40 CFR part 122.42, are provided in Attachment D. The Regional Water Board and USEPA have also included in this Order/Permit special provisions applicable to the Discharger. The rationale for the special provisions contained in this Order/Permit is provided in the Fact Sheet (Attachment F).

~~S.~~U. **Sanitary Sewer Overflows.** The State Water Board issued General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order No. 2006-0003-DWQ (General Order) on May 2, 2006, as amended. 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 Order. The General Order requires agencies to develop sanitary sewer management plans and report all sanitary sewer overflows (SSOs), among other requirements and prohibitions. Furthermore, the General 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 POTW that is subject to this Order/Permit. The Discharger must comply with both the General Order and this Order/Permit.

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

W. Pretreatment. In compliance with 40 CFR 403, the City developed a Pretreatment Program for POTWs owned and operated by the City. The City's Pretreatment Program was approved by USEPA on June 30, 1983. In 1989, USEPA delegated the authority to administer pretreatment programs in California to the State and Regional Water Boards. Thus, this Regional Water Board became the approval authority for pretreatment programs in Los Angeles and Ventura Counties.

This Order/Permit includes the City's approved Pretreatment Program and requires the City to continue implementation and control of the Program throughout the Hyperion Treatment Plant's service area, including contributing jurisdictions. The POTW, as Control Authority, may exercise its authority over the entire service area directly, as provided by state law, or may elect to enter into contracts or other multi-jurisdictional agreements with the contributing jurisdictions. In case the POTW elects to enter into inter-jurisdictional agreements, the POTW must ensure that discharges received from entities outside of its political boundaries are regulated to the same extent, as are the discharges from within its political boundaries.

~~V.~~The City applies one set of local limits to all discharges from the Hyperion Treatment Plant, Tillman WRP, and LAG WRP to the Hyperion Treatment System. Burbank WRP is also part of the Hyperion Treatment System.

~~U.~~X. **Federal Permit Renewal Contingency.** The Discharger's federal permit renewal is contingent upon determination by the U.S. Fish and Wildlife Service and NOAA National Marine Fisheries Service that the proposed discharge is consistent with the: (1) federal Endangered Species Act; (2) Magnuson-Stevens Fishery Conservation and Management Act (MSA); and (3) the Regional Water Board's certification/concurrence that the discharge will comply with applicable State water quality standards.

USEPA's reissuance of NPDES permit No. CA0109991 to the City of Los Angeles for Hyperion Treatment Plant is subject to requirements of MSA and ESA. In May 2010, USEPA requested updated information related to: (1) essential fish habitat and managed and associated species, and (2) threatened and endangered species and their designated critical habitats, in the vicinity of the Hyperion outfalls from the National Marine Fisheries Service and the U.S. Fish and Wildlife Service (collectively, the Services). Based on this and other relevant information, USEPA is currently evaluating whether there are effects on essential fish habitat and managed and associated species protected under the MSA, or on threatened and endangered species and their designated critical habitats protected under the ESA. Based on

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the outcome of this analysis, USEPA may engage in consultation with the Services during, and subsequent to, this permit reissuance. USEPA may decide that changes to this permit are warranted based on the results of the completed consultation, and a reopen~~en~~er provision to this effect has been included in the Order/Permit.

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

~~V.~~Y. Performance Goals. Chapter III, section F.2, of the 2005 Ocean Plan allows the Regional Water Board to establish more restrictive water quality objectives and effluent limitations than those set forth in the Ocean Plan as necessary for the protection of the beneficial uses of ocean waters.

Pursuant to this provision and to implement the recommendation of the Water Quality Advisory Task Force (*Working Together for an Affordable Clean Water Environment, A final report presented to the California Water Quality Control Board, Los Angeles Region by Water Quality Advisory Task Force, September 30, 1993)* that was adopted by the Regional Water Board on November 1, 1993, performance goals that are more stringent than those based on Ocean Plan objectives are prescribed in this Order/Permit. This approach is consistent with the 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 HTP 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 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).

~~X.~~Z. Mass Emission Benchmarks. To address the uncertainty due to potential increases in toxic pollutant loadings from the Hyperion Treatment Plant discharge to the marine environment during the five-year permit term, and to establish a framework for evaluating the need for an antidegradation analysis to determine compliance with State and federal antidegradation requirements at the time of permit reissuance, 12-month average mass emission benchmarks have been established

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for effluent discharged through the 5-mile outfall (Discharge Point 002). These mass emission benchmarks are not enforceable water quality based effluent limitations. They may be re-evaluated and revised during the five-year permit term. The mass emission benchmarks (in metric tons per year; MT/yr) for the Hyperion Treatment Plant discharge were determined using January 1999 through June 2004 effluent concentrations and the Discharger's projected end-of-permit flow of 400 MGD. If only one effluent data point was detected or if all effluent data points were nondetect, the pollutant concentration associated with the maximum method detection limit from January 2003 to June 2004 was used to calculate the mass emission benchmark. If two or more effluent data points were detected, the pollutant concentration associated with the 95th percentile (calculated in accordance with Regional Water Board procedures) was used to calculate the mass emission benchmark. Exceptions to this are mass emission benchmarks for copper, lead, silver and zinc which are based directly on Mass Emission Caps for these pollutants of concern in Santa Monica Bay, established by the Regional Water Board. The methodology for calculating mass emission benchmarks is described in the Fact Sheet (Attachment F).

~~"**Pretreatment.** In compliance with 40 CFR 403, the City developed a Pretreatment Program for POTWs owned and operated by the City. The City's Pretreatment Program was approved by USEPA on June 30, 1983. In 1989, USEPA delegated the authority to administer pretreatment programs in California to the State and Regional Water Boards. Thus, this Regional Water Board became the approval authority for pretreatment programs in Los Angeles and Ventura Counties.~~

~~This Order/Permit includes the City's approved Pretreatment Program and requires the City to continue implementation and control of the Program throughout the Hyperion Treatment Plant's service area, including contributing jurisdictions. The POTW, as Control Authority, may exercise its authority over the entire service area directly, as provided by state law, or may elect to enter into contracts or other multi-jurisdictional agreements with the contributing jurisdictions. In case the POTW elects to enter into inter-jurisdictional agreements, the POTW must ensure that discharges received from entities outside of its political boundaries are regulated to the same extent, as are the discharges from within its political boundaries.~~

~~The City applies one set of local limits to all discharges from the Hyperion Treatment Plant, Tillman WRP, and LAG WRP to the Hyperion Treatment System. Burbank WRP is also part of the Hyperion Treatment System."~~

~~X.~~AA. **Notification of Interested Parties.** The Regional Water Board and USEPA have notified the Discharger and interested agencies and persons of their intent to jointly issue State Waste Discharge Requirements and a federal NPDES permit for the discharge and have provided an opportunity to submit their written comments and recommendations by the close of the Regional Water Board/USEPA joint public hearing during the regularly scheduled Board meeting on July 8th and 9th, 2010. Also, the Regional Water Board and USEPA have provided an opportunity to submit oral comments and recommendations, at this joint public hearing. Details of these

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notifications are provided in the Fact Sheet and the joint public notice for this Order/Permit.

~~Y.~~BB. **Consideration of Public Comment.** The Regional Water Board and USEPA heard and considered all written and oral comments pertaining to the discharge.

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THEREFORE, IT IS HEREBY ORDERED that this Order/Permit supersedes Order No. R4-2005-0020, 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 thereunder, and the provisions of the federal Clean Water Act and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order/Permit.

III. DISCHARGE PROHIBITIONS

A. Ocean Plan Discharge Prohibitions

1. Discharge of any radiological, chemical or biological warfare agent or high-level radioactive waste* into the ocean* is prohibited.

2. Waste* shall not be discharged to designated Areas* of Special Biological Significance.

3. Pipeline discharge of sludge to the ocean* is prohibited by federal law; the discharge of municipal and industrial waste* sludge directly to the ocean*, or into waste* stream that discharges to the ocean is prohibited by the Ocean Plan. Discharge of sludge digester supernatant directly to the ocean, or to a waste stream that discharges to the ocean* without further treatment, is prohibited. 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.

~~4.~~The bypassing of untreated wastes containing concentrations of pollutants in excess of those of Table A or Table B of the Ocean Plan to the ocean is prohibited.

4.

~~**B.**Discharge of wastes at any point other than specifically described in this Order/Permit is prohibited, and constitutes a violation thereof.~~

~~**C.**~~**B.** The bypassing of untreated or partially treated wastes to the ocean is prohibited.

~~**D.**Discharge of municipal and industrial waste sludge directly to the ocean, or into a waste stream that discharges to the ocean, is prohibited.~~

~~**E.**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.~~

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

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IV. EFFLUENT LIMITATIONS, PERFORMANCE GOALS, AND DISCHARGE SPECIFICATIONS

~~Effluent limitations and performance goals for Discharge Points 001 and 002 are specified below. The discharge of an effluent with constituents in excess of effluent limitations is prohibited. The listed effluent performance goals are not enforceable effluent limitations or standards.~~

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

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

P~~The p~~erformance goals for Discharge Point~~s 001 and~~ 002 are prescribed below~~in this Order/Permit~~. The listed performance goals are not enforceable effluent limitations or standards. 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 and USEPA on the nature of the exceedance, the results of the investigation as to the cause of the exceedance, and the corrective actions taken or proposed corrective measures with timetable for implementation, if necessary.

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

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

Table 8. Effluent Limitations and Performance Goals for Discharge Point 002
(Footnotes are specified on pages 28~~31~~ and 29~~32~~ of this Order/Permit.)

Parameter	Units	Effluent Limitations[1,~~3~~]					Performance Goals[2]
		Average Monthly	Average Weekly	Maximum Daily[~~3,~~ 43**]	Instan-~~-~~taneous Minimum**	Instan-taneous Maximum[54**]	Average Monthly
Major Wastewater Constituents							
Biochemical Oxygen Demand 5-day @ 20°C[~~65~~]	mg/L	30	45	--	--	--	--
	lbs/day	113,000	169,000	--	--	--	--
Total Suspended Solids[~~65~~]	mg/L	30	45	--	--	--	--
	lbs/day	113,000	169,000	--	--	--	--
pH[~~4, 5, 6,~~ 7]	standard units	--	--	--	6.0	9.0	--
Oil and Grease[~~76~~]	mg/L	25	40	--	--	75	--

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Parameter	Units	Effluent Limitations[1,3]					Performance Goals[2]
		Average Monthly	Average Weekly	Maximum Daily[3, 43**]	Instantaneous Minimum[**]	Instantaneous Maximum[54**]	Average Monthly
	lbs/day	93,800	150,000	--	--	--	--
Settleable Solids[76]	ml/L	1.0	1.5	--	--	3.0	--
Turbidity[76]	NTU	75	100	225	--	225	--
Marine Aquatic Life Toxicants[78]							
Arsenic[9,10]	µg/L	--	--	--	--	--	3.5
Cadmium[9,10]	µg/L	--	--	--	--	--	2.0
Chromium (VI)[9,10]	µg/L	--	--	--	--	--	0.50
Copper[9,10]	µg/L	--	--	--	--	--	25
Lead[9,10]	µg/L	--	--	--	--	--	10
Mercury[9,10]	µg/L	--	--	--	--	--	0.02
Nickel[9,10]	µg/L	--	--	--	--	--	3
Selenium[9,10]	µg/L	--	--	--	--	--	1.6
Silver[9,10]	µg/L	--	--	--	--	--	2.2
Zinc[9,10]	µg/L	--	--	--	--	--	31
Cyanide[10]	µg/L	--	--	--	--	--	5
Chlorine Residual[10]	µg/L	--	--	--	--	--	--
Ammonia as N[10]	mg/L	--	--	--	--	--	4
Phenolic compounds (non-chlorinated)[10]	µg/L	--	--	--	--	--	2
Phenolic compounds (chlorinated)[10]	µg/L	--	--	--	--	--	2
Endosulfan[10]	µg/L	--	--	--	--	--	0.04
HCH[10]	µg/L	--	--	--	--	--	0.015
Endrin[10]	µg/L	--	--	--	--	--	0.025
Acute toxicity	TUa	--	--	2.8	--	--	--
Chronic toxicity	TUc	--	--	84	--	--	--
Radioactivity							
Gross alpha	pCi/L	--	--	15	--	--	9.72
Gross beta	pCi/L	--	--	50	--	--	27.5
Combined Radium-226 & Radium-228	pCi/L	--	--	5.0	--	--	--
Tritium	pCi/L	--	--	20,000	--	--	--
Strontium-90	pCi/L	--	--	8.0	--	--	--
Uranium	pCi/L	--	--	20	--	--	--
Human Health Toxicants – Non Carcinogens[78]							
Acrolein[10]	µg/L	--	--	--	--	--	20
Antimony[9,10]	µg/L	--	--	--	--	--	1.5

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Parameter	Units	Effluent Limitations[1,3]					Performance Goals[2]
		Average Monthly	Average Weekly	Maximum Daily[3, 43**]	Instantaneous Minimum**	Instantaneous Maximum[54**]	Average Monthly
Bis(2-chloroethoxy) methane[10]	µg/L	--	--	--	--	--	0.5
Bis(2-chloroisopropyl) ether[10]	µg/L	--	--	--	--	--	0.5
Chlorobenzene[10]	µg/L	--	--	--	--	--	0.6
Chromium (III)[10]	µg/L	--	--	--	--	--	1
Di-n-butyl-phthalate[10]	µg/L	--	--	--	--	--	5
Dichlorobenzenes[10]	µg/L	--	--	--	--	--	0.6
Diethyl phthalate[10]	µg/L	--	--	--	--	--	0.6
Dimethyl phthalate[10]	µg/L	--	--	--	--	--	2.7
2-Methyl-4,6-dinitrophenol[10]	µg/L	--	--	--	--	--	4
2,4-Dinitrophenol[10]	µg/L	--	--	--	--	--	2.1
Ethyl benzene[10]	µg/L	--	--	--	--	--	0.8
Fluoranthene[10]	µg/L	--	--	--	--	--	0.2
Hexachlorocyclopentadiene[10]	µg/L	--	--	--	--	--	29
Nitrobenzene[10]	µg/L	--	--	--	--	--	0.5
Thallium[9,10]	µg/L	--	--	--	--	--	0.1
Toluene[10]	µg/L	--	--	--	--	--	0.6
Tributyltin[10]	nµg/L	--	--	--	--	--	9.60.12
1,1,1-Trichloroethane[10]	µg/L	--	--	--	--	--	0.5
Human Health Toxicants – Carcinogens[78]							
Acrylonitrile[10]	µg/L	--	--	--	--	--	0.4
Aldrin[10]	µg/L	--	--	--	--	--	0.0019
Benzene[10]	µg/L	--	--	--	--	--	0.35
Benzidine[10]	µg/L	--	--	--	--	--	0.0059
Beryllium[10]	µg/L	--	--	--	--	--	1
Bis(2-chloroethyl) ether[10]	µg/L	--	--	--	--	--	0.45
	lbs/day	--	--	--	--	--	1.6
Bis(2-ethylhexyl) phthalate[10]	µg/L	--	--	--	--	--	5
Carbon tetrachloride[10]	µg/L	--	--	--	--	--	0.45
Chlordane[7]	µg/L	0.0019	--	--	--	--	--
	lbs/day	0.0067	--	--	--	--	
Chlorodibromomethane[10]	µg/L	--	--	--	--	--	0.25
Chloroform[10]	µg/L	--	--	--	--	--	8.7
DDT[7]	µg/L	0.014	--	--	--	--	--
	lbs/day	0.049	--	--	--	--	--
1,4-Dichlorobenzene[10]	µg/L	--	--	--	--	--	2.0

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Parameter	Units	Effluent Limitations[1,-3]					Performance Goals[2]
		Average Monthly	Average Weekly	Maximum Daily[3, 43**]	Instan-taneous Minimum[**]	Instan-taneous Maximum[54**]	Average Monthly
3,3'-Dichlorobenzidine[10]	µg/L	--	--	--	--	--	0.55
1,2-Dichloroethane[10]	µg/L	--	--	--	--	--	0.5
1,1-Dichloroethylene[10]	µg/L	--	--	--	--	--	0.6
Bromodichloromethane[10]	µg/L	--	--	--	--	--	0.3
Dichloromethane[-10]	µg/L	--	--	--	--	--	6.5
1,3-Dichloropropene[10]	µg/L	--	--	--	--	--	0.45
Dieldrin[10]	µg/L	--	--	--	--	--	0.0034
2,4-Dinitrotoluene[10]	µg/L	--	--	--	--	--	0.4
1,2-Diphenylhydrazine[10]	µg/L	--	--	--	--	--	0.3
Halomethanes[3-10]	µg/L	--	--	--	--	--	1.05
Heptachlor[10]	µg/L	--	--	--	--	--	0.0043
~~Heptachlor epoxide[10]~~	~~µg/L~~ ~~lbs/day~~		~~--~~ ~~--~~	~~--~~ ~~--~~	~~--~~ ~~--~~	~~--~~ ~~--~~	~~0.0017~~ ~~0.0060~~
Heptachlor epoxide[10]	µg/L	--	--	--	--	--	0.0017
Hexachlorobenzene[10]	µg/L	--	--	--	--	--	0.018
Hexachlorobutadiene[10]	µg/L	--	--	--	--	--	0.35
Hexachloroethane[10]	µg/L	--	--	--	--	--	0.35
Isophorone[10]	µg/L	--	--	--	--	--	0.35
N-Nitrosodimethylamine[10]	µg/L	--	--	--	--	--	0.85
N-Nitrosodi-N-propylamine[10]	µg/L	--	--	--	--	--	0.65
N-Nitrosodiphenylamine[10]	µg/L	--	--	--	--	--	0.45
PAHs[3-10]	µg/L	--	--	--	--	--	0.70
PCBs-[3, 7]	µg/L	0.0020	--	--	--	--	--
	lbs/day	0.0070	--	--	--	--	--
TCDD equivalents-[3, 7]	pµg/L	0.33~~xE-6~~	--	--	--	--	--
	lbs/day	1.2x E-6	--	--	--	--	--
1,1,2,2-Tetrachloroethane[10]	µg/L	--	--	--	--	--	0.55
Tetrachloroethylene[10]	µg/L	--	--	--	--	--	0.5
Toxaphene[10]	µg/L	--	--	--	--	--	0.018
Trichloroethylene[10]	µg/L	--	--	--	--	--	0.4
1,1,2-Trichloroethane[10]	µg/L	--	--	--	--	--	0.25
2,4,6-Trichlorophenol[10]	µg/L	--	--	--	--	--	0.45
Vinyl chloride[10]	µg/L	--	--	--	--	--	0.35

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2. Final Effluent Limitations ~~and Performance Goals~~ – Discharge Point 001

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

Table 9. Effluent Limitations ~~and Performance Goals~~ for Discharge Point 001
(Footnotes are specified on pages 28~~31~~ and 29~~32~~ of this Order/Permit.)

Parameter	Units	Effluent Limitations[1,~~3~~]					Performance Goals[2]
		Average Monthly	Average Weekly	Maximum Daily~~[3,4]~~	Instantaneous Minimum	Instantaneous Maximum[5]	Average Monthly
Major Wastewater Constituents							
Biochemical Oxygen Demand 5-day @ 20°C[6]	mg/L	30	45	--	--	--	--
	lbs/day	113,000	169,000	--	--	--	--
Total Suspended Solids[6]	mg/L	30	45	--	--	--	--
	lbs/day	113,000	169,000	--	--	--	--
pH[5,6,7]	standard units	--	--	--	6.0	9.0	--
Oil and Grease[7]	mg/L	25	40	--	--	75	--
	lbs/day	93,800	150,000	--	--	--	--
Settleable Solids[7]	ml/L	1.0	1.5	--	--	3.0	--
Turbidity[7]	NTU	75	100	~~225~~	--	225~~225~~	--
Marine Aquatic Life Toxicants~~[7,8]~~							
Arsenic[9,10]	µg/L	--	--	--	--	--	~~3.5~~
	lbs/day	--	--	--	--	--	~~12~~
Cadmium[9,10]	µg/L	--	--	--	--	--	~~2.0~~
	lbs/day	--	--	--	--	--	~~7.0~~
Chromium (VI)[9,10]	µg/L	--	--	--	--	--	~~0.50~~
	lbs/day	--	--	--	--	--	~~1.8~~
Copper[9,10]	µg/L	16	--	140	--	160	--
	lbs/day	56	--	490	--	560	--
Lead[9,10]	µg/L	--	--	--	--	--	~~10~~
	lbs/day	--	--	--	--	--	~~35~~
Mercury[9,10]	µg/L	--	--	--	--	--	~~0.02~~
	lbs/day	--	--	--	--	--	~~0.070~~
Nickel[9,10]	µg/L	--	--	--	--	--	~~3~~
	lbs/day	--	--	--	--	--	~~11~~
Selenium[9,10]	µg/L	--	--	--	--	--	~~1.6~~
	lbs/day	--	--	--	--	--	~~5.4~~
Silver[9,10]	µg/L	--	--	--	--	--	~~2.2~~
	lbs/day	--	--	--	--	--	~~6.9~~
Zinc[9,10]	µg/L	--	--	--	--	--	~~20~~

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Parameter	Units	Effluent Limitations[1,3]					Performance Goals[2]
		Average Monthly	Average Weekly	Maximum Daily[3,4]	Instantaneous Minimum	Instantaneous Maximum[5]	Average Monthly
	lbs/day	--	--	--	--	--	--70
Cyanide[10]	µg/L	--	--	--	--	--	--0.005
	lbs/day	--	--	--	--	--	--0.018
Chlorine Residual	µg/L	28	--	11292	--	840	--300
	lbs/day	98	--	320	--	2900	--1100
Ammonia as N	mg/L	8.4	--	34	--	84	--42
	lbs/day	29,000	--	120,000	--	290,000	--150,000
Phenolic compounds (non-chlorinated)[3,10]	µg/L	--	--	--	--	--	--2
	lbs/day	--	--	--	--	--	--7.0
Phenolic compounds (chlorinated)[3,10]	µg/L	--	--	--	--	--	--2
	lbs/day	--	--	--	--	--	--7.0
Endosulfan[3,10]	µg/L	--	--	--	--	--	--0.04
	lbs/day	--	--	--	--	--	--0.14
HCH[3,10]	µg/L	--	--	--	--	--	--0.015
	lbs/day	--	--	--	--	--	--0.053
Endrin[10]	µg/L	--	--	--	--	--	--0.025
	lbs/day	--	--	--	--	--	--0.088
Acute toxicity	TUa	--	--	--	--	--	--
Chronic toxicity	TUc	--	--	13	--	--	--
Radioactivity							
Gross alpha	pCi/L	--	--	--15	--	--	--
Gross beta	pCi/L	--	--	--50	--	--	--
Combined Radium-226 & Radium-228	pCi/L	--	--	--5.0	--	--	--
Tritium	pCi/L	--	--	--20,000	--	--	--
Strontium-90	pCi/L	--	--	--8.0	--	--	--
Uranium	pCi/L	--	--	--20	--	--	--
Human Health Toxicants – Non Carcinogens[7,8]							
Acrolein[1,9]	µg/L	--	--	--	--	--	--20
	lbs/day	--	--	--	--	--	--69
Antimony[9,10]	µg/L	--	--	--	--	--	--1.5
	lbs/day	--	--	--	--	--	--5.4
Bis(2-chloroethoxy) methane[10]	µg/L	--	--	--	--	--	--0.5
	lbs/day	--	--	--	--	--	--1.8
Bis(2-chloroisopropyl) ether[10]	µg/L	--	--	--	--	--	--0.5
	lbs/day	--	--	--	--	--	--1.8
Chlorobenzene[10]	µg/L	--	--	--	--	--	--0.6
	lbs/day	--	--	--	--	--	--2.1
Chromium (III)[10]	µg/L	--	--	--	--	--	--1
	lbs/day	--	--	--	--	--	--3.5

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Parameter	Units	Effluent Limitations[1,3]					Performance Goals[2]
		Average Monthly	Average Weekly	Maximum Daily[3,4]	Instantaneous Minimum	Instantaneous Maximum[5]	Average Monthly
Di-n-butyl-phthalate[10]	µg/L	--	--	--	--	--	--5
	lbs/day	--	--	--	--	--	--18
Dichlorobenzenes[3,10]	µg/L	--	--	--	--	--	--0.6
	lbs/day	--	--	--	--	--	--2.1
Diethyl phthalate[10]	µg/L	--	--	--	--	--	--0.6
	lbs/day	--	--	--	--	--	--2.1
Dimethyl phthalate[10]	µg/L	--	--	--	--	--	--2.7
	lbs/day	--	--	--	--	--	--9.5
2-Methyl-4,6-dinitrophenol[10]	µg/L	--	--	--	--	--	--4
	lbs/day	--	--	--	--	--	--14
2,4-Dinitrophenol[10]	µg/L	--	--	--	--	--	--2.1
	lbs/day	--	--	--	--	--	--7.4
Ethyl benzene[10]	µg/L	--	--	--	--	--	--0.8
	lbs/day	--	--	--	--	--	--2.8
Fluoranthene[10]	µg/L	--	--	--	--	--	--0.2
	lbs/day	--	--	--	--	--	--0.70
Hexachlorocyclopentadiene[10]	µg/L	--	--	--	--	--	--29
	lbs/day	--	--	--	--	--	--100
Nitrobenzene[10]	µg/L	--	--	--	--	--	--0.5
	lbs/day	--	--	--	--	--	--1.8
Thallium[9,10]	µg/L	--	--	--	--	--	--0.1
	lbs/day	--	--	--	--	--	--0.35
Toluene[10]	µg/L	--	--	--	--	--	--0.6
	lbs/day	--	--	--	--	--	--2.1
Tributyltin[10]	nµg/L	--	--	--	--	--	--0.020
	lbs/day	--	--	--	--	--	--0.07
1,1,1-Trichloroethane[10]	µg/L	--	--	--	--	--	--0.5
	lbs/day	--	--	--	--	--	--1.8
Human Health Toxicants – Carcinogens[7,8]							
Acrylonitrile[10]	µg/L	--	--	--	--	--	--0.4
	lbs/day	--	--	--	--	--	--1.4
Aldrin[10]	µg/L	--	--	--	--	--	--0.00031
	lbs/day	--	--	--	--	--	--0.0011
Benzene[10]	µg/L	--	--	--	--	--	--0.35
	lbs/day	--	--	--	--	--	--1.2
Benzidine[10]	µg/L	--	--	--	--	--	--0.00097
	lbs/day	--	--	--	--	--	--0.0034
Beryllium	µg/L	0.46	--	--	--	--	--
	lbs/day	1.6	--	--	--	--	--
Bis(2-chloroethyl)	µg/L	--	--	--	--	--	--0.45

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Parameter	Units	Effluent Limitations[1,3]					Performance Goals[2]
		Average Monthly	Average Weekly	Maximum Daily[3,4]	Instantaneous Minimum	Instantaneous Maximum[5]	Average Monthly
ether[10]	lbs/day	--	--	--	--	--	--1.6
Bis(2-ethylhexyl) phthalate[10]	µg/L	--	--	--	--	--	--5
	lbs/day	--	--	--	--	--	--18
Carbon tetrachloride[10]	µg/L	--	--	--	--	--	--0.45
	lbs/day	--	--	--	--	--	--1.6
Chlordane[7]	µg/L	0.0003	--	--	--	--	--
	lbs/day	0.0011	--	--	--	--	--
Chlorodibromomethane[10]	µg/L	--	--	--	--	--	--0.25
	lbs/day	--	--	--	--	--	--0.88
Chloroform[10]	µg/L	--	--	--	--	--	--8.7
	lbs/day	--	--	--	--	--	--30
DDT[3,7]	µg/L	0.0024	--	--	--	--	--
	lbs/day	0.0084	--	--	--	--	--
1,4-Dichlorobenzene[10]	µg/L	--	--	--	--	--	--2.0
	lbs/day	--	--	--	--	--	--7.2
3,3'-Dichlorobenzidine[10]	µg/L	--	--	--	--	--	--0.11
	lbs/day	--	--	--	--	--	--0.40
1,2-Dichloroethane[10]	µg/L	--	--	--	--	--	--0.5
	lbs/day	--	--	--	--	--	--1.8
1,1-Dichloroethylene[10]	µg/L	--	--	--	--	--	--0.6
	lbs/day	--	--	--	--	--	--2.1
Bromodichloromethane[10]	µg/L	--	--	--	--	--	--0.3
	lbs/day	--	--	--	--	--	--1.1
Dichloromethane[10]	µg/L	--	--	--	--	--	--6.5
	lbs/day	--	--	--	--	--	--23
1,3-Dichloropropene[10]	µg/L	--	--	--	--	--	--0.45
	lbs/day	--	--	--	--	--	--1.6
Dieldrin[10]	µg/L	--	--	--	--	--	--0.00056
	lbs/day	--	--	--	--	--	--0.0020
2,4-Dinitrotoluene[10]	µg/L	--	--	--	--	--	--0.4
	lbs/day	--	--	--	--	--	--1.4
1,2-Diphenylhydrazine[10]	µg/L	--	--	--	--	--	--0.3
	lbs/day	--	--	--	--	--	--1.1
Halomethanes[3,10]	µg/L	--	--	--	--	--	--1.05
	lbs/day	--	--	--	--	--	--3.7
Heptachlor[10]	µg/L	--	--	--	--	--	--0.0007
	lbs/day	--	--	--	--	--	--0.0025
Heptachlor epoxide[10]	µg/L	--	--	--	--	--	--0.00028
	lbs/day	--	--	--	--	--	--0.00098
Hexachlorobenzene[10]	µg/L	--	--	--	--	--	--0.0029
	lbs/day	--	--	--	--	--	--0.010

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Parameter	Units	Effluent Limitations[1,3]					Performance Goals[2]
		Average Monthly	Average Weekly	Maximum Daily[3,4]	Instantaneous Minimum	Instantaneous Maximum[5]	Average Monthly
Hexachlorobutadiene[10]	µg/L	--	--	--	--	--	--0.35
	lbs/day	--	--	--	--	--	--1.2
Hexachloroethane[10]	µg/L	--	--	--	--	--	--0.35
	lbs/day	--	--	--	--	--	--1.2
Isophorone[10]	µg/L	--	--	--	--	--	--0.35
	lbs/day	--	--	--	--	--	--1.2
N-Nitrosodimethylamine[10]	µg/L	--	--	--	--	--	--0.85
	lbs/day	--	--	--	--	--	--3.0
N-Nitrosodi-N-propylamine[10]	µg/L	--	--	--	--	--	--0.65
	lbs/day	--	--	--	--	--	--2.3
N-Nitrosodiphenylamine[10]	µg/L	--	--	--	--	--	--0.45
	lbs/day	--	--	--	--	--	--1.6
PAHs[3,7]	µg/L	0.12	--	--	--	--	--
	lbs/day	0.43	--	--	--	--	--
PCBs[3,7]	µg/L	0.00030	--	--	--	--	--
	lbs/day	0.0084	--	--	--	--	--
TCDD equivalents[3,7]	pµg/L	0.055xE-6	--	--	--	--	--
	lbs/day	1.93xE-7	--	--	--	--	--
1,1,2,2-Tetrachloroethane[10]	µg/L	--	--	--	--	--	--0.55
	lbs/day	--	--	--	--	--	--1.9
Tetrachloroethylene[10]	µg/L	--	--	--	--	--	--0.5
	lbs/day	--	--	--	--	--	--1.8
Toxaphene[10]	µg/L	--	--	--	--	--	--0.0029
	lbs/day	--	--	--	--	--	--0.010
Trichloroethylene[10]	µg/L	--	--	--	--	--	--0.4
	lbs/day	--	--	--	--	--	--1.4
1,1,2-Trichloroethane[10]	µg/L	--	--	--	--	--	--0.25
	lbs/day	--	--	--	--	--	--0.88
2,4,6-Trichlorophenol[10]	µg/L	--	--	--	--	--	--0.45
	lbs/day	--	--	--	--	--	--1,6
Vinyl chloride[10]	µg/L	--	--	--	--	--	--0.35
	lbs/day	--	--	--	--	--	--1.2

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Footnotes:

[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 84:1 (i.e., 84 parts seawater to one part effluent) and 13:1 for Discharge Points 002 and 001, respectively. Effluent limitations for radioactivity are not dependent on minimum ratios. The calculations of mass emission rates are shown in the accompanying Fact Sheet.

The mass emission rates are based on the average design flow rate (420 MGD) of the Hyperion Treatment Plant in the 1994 permit: lbs/day = 0.00834 x Ce (effluent concentration in ug/L) x Q (flow rate in MGD). During storm events when flow exceeds the dry weather design capacity, the mass emission rate limitations shall not apply.

[2] The performance goals are based upon the actual performance data of Hyperion Treatment Plant and are specified only as an indication of the treatment efficiency of the plant. They are not considered effluent limitations or standards for the treatment plant. Hyperion Treatment Plant shall make best efforts to maintain, if not improve, the effluent quality at the level of these performance goals. The Executive Officer and USEPA may modify any of the performance goals if the City requests and has demonstrated that the change is warranted.

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

[4] 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.

[5] The instantaneous maximum effluent limitations shall apply to grab sample results.

[6] The effluent limitations are based on secondary treatment standards, 40 CFR 133.102.

[7] Based on Ocean Plan Table A effluent limitations.

[8] Effluent limitations for these constituents are based on Ocean Plan Table B objectives using initial dilution ratios of 84 and 13 parts of seawater to 1 part effluent for Discharge Points 002 and 001, respectively.

[9] Represents total recoverable metal value.

[10] These constituents did not show reasonable potential to exceed Ocean Plan Table B objectives; therefore, no numerical water quality-based effluent limits are prescribed.

3. Percent Removal: For $BOD_5$20°C and total suspended solids, the arithemeatic mean values, by weight, for effluent samples collected in a period of 30 consecutive calendar days shall not exceed 15 percent of the arithmetic mean of values, by weight, for influent samples collected at approximately the same time during the same period.

4. The temperature of wastes discharged shall not exceed 100°F.

5. Radioactivity: Not to exceed limits specified in Title 17, Division 1, Chapter 5, Subchapter 4, Group 3, Article 3, Section 30253 of the California Code of Regulations. Reference to section 30253 is prospective, including future changes to any incorporated provisions of federal law, as the changes take effect.

6. The Discharger shall ensure that bacterial concentrations in the effluent discharged from Discharge Points 001 and 002 do not result in an exceedance of the Hyperion Treatment Plant's waste load allocation of zero (0) days exceedance of single sample numeric limits or geometric mean limits (based on Basin Plan bacteria objectives for marine waters designated REC-1, see

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Section VI.A.1.b.) at shoreline compliance points, as specified in Regional Water Board Resolution Nos. 2002-004 and 2002-022.

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

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

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

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

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

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

8. Interim Effluent Limitations – Not Applicable

B. Land Discharge Specifications – Not Applicable

C. Reclamation Specifications – Not Applicable

V. MASS EMISSION CAPS

A comprehensive plan of action for the protection and management of Santa Monica Bay, known as the Santa Monica Bay Restoration Plan (SMBRP), was approved by Governor Pete Wilson in December 1994 and by USEPA Administrator Carol Browner in 1995. Since that time, mMass emission caps have beenare applied to four pollutants of concern identified by the SMBRP (copper, lead, silver, and zinc) that are causing or could cause deterioration of designated beneficial uses in Santa Monica Bay. Caps are set at 1995 allowable mass emission rates. The Discharger should make best efforts to discharge these pollutants of concern below cap values. The Executive Officer and USEPA may modify any of the mass emission cap values, if the City requests and demonstrates that the change is warranted.

The mass emission caps are based on an average flow rate of 347 MGD and the average concentration of the pollutant of concern in 1995. If performance data showed nondetectable levels, one half of the detection limit was used to calculate an average concentration. Mass emission caps calculations are shown in the Fact Sheet.

Parameter	Mass Emission Cap (lbs/year)
Copper	41,100
Lead	2,700

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Silver	5,500
Zinc	59,100

VI. RECEIVING WATER LIMITATIONS

The Discharger shall not cause a violation of the following water quality objectives. Compliance with these water quality objectives shall be determined by samples collected at stations representative of the area within the waste field where initial dilution is completed.

A. Surface Water Limitations

1. Bacterial Characteristics

a. USEPA Primary Recreation Criteria in Federal Waters

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

30-day Geometric Mean (per 100 ml): 35.

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

b. State/Regional Water Boards Water Contact Standards

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

~~–~~30-day Geometric Mean Limits

a. Total coliform density shall not exceed 1,000/100 ml.

b. Fecal coliform density shall not exceed 200/100 ml.

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c. *Enterococcus* density shall not exceed 35/100 ml.

Single Sample Maximum Limits (SSM)

a. Total coliform density shall not exceed 10,000/100 ml.

b. Fecal coliform density shall not exceed 400/100 ml.

c. *Enterococcus* density shall not exceed 104/100 ml.

d. Total coliform density shall not exceed 1,000/100 ml, when the fecal coliform/total coliform ratio exceeds 0.1.

If any of the single sample limits are exceeded, the Regional Water Board may require repeat sampling on a daily basis until the sample falls below the single sample limit in order to determine the persistence of the exceedance. When repeat sampling is required because of an exceedance of any single sample limit, values from all samples collected during that 30-day period will be used to calculate the geometric mean.

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

d. California Department of Public Health[2] (CDPH) Standards

California Department of Public Health (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 California Code of Regulations, title 17, section 7958, and they are identical to the objectives contained in subsection b, above. When a public beach or public water-contact sports area fails to meet these standards, 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, CDPH imposes the same standards as contained in title 17 and requires weekly sampling but allows~~

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[2] Formerly, California Department of Health Services.

~~the county health officer more discretion in making posting and closure decisions.~~

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 title 17, California Code of Regulations, and requires weekly sampling but allows the county health officer more discretion in making posting and closure decisions.

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

2. Physical Characteristics

The waste discharged shall not:

a. Cause floating particulates and oil and grease to be visible;

b. Cause aesthetically undesirable discoloration of the ocean surface;

c. Significantly reduce the transmittance of natural light at any point outside the initial dilution zone ~~as a result of the discharge of waste~~; and~~,~~

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

3. Chemical Characteristics

The waste discharged shall not:

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

b. Change the pH of the receiving waters at any time more than 0.2 units from that which occurs naturally as a result of the discharge pH;

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

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d. Cause the concentration of substances set forth in Chapter II, Table B of the Ocean Plan, in marine sediments to be increased to levels that would degrade indigenous biota;

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

~~f.Contain nutrients at levels that will cause objectionable aquatic growths or degrade indigenous biota; and,~~

~~g.~~f. Contain nutrients at levels that will cause objectionable aquatic growths or degrade indigenous biota.

4. Biological Characteristics

The waste discharged shall not:

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

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

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

5. Radioactivity

Discharge of radioactive waste shall not degrade marine life.

VII. PROVISIONS

A. Standard Provisions

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

2. The Discharger shall comply with the following Regional Water Board provisions:

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

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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 and USEPA.

f. The provisions of this Order/Permit 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/Permit shall be construed to preclude the institution of any legal action or relieve the Discharger from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation under authority preserved by section 510 of the CWA.

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

i. 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/Permit 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 Federal 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

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which may be applicable; they do not legalize this waste disposal facility, and they leave unaffected any further restraints on the disposal of wastes at this site which may be contained in other statutes or required by other agencies.

m. Oil or oily material, chemicals, refuse, or other pollutionable 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 a report of waste discharge at least 120 days before making any material change or 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 and USEPA of such change and shall notify the succeeding owner or operator of the existence of this Order/Permit by letter, copy of which shall be forwarded to the Regional Water Board and USEPA.

r. The California Water Code (CWC) provides that any person who violates a waste discharge requirement or a provision of the CWC is subject to civil penalties of up to $5,000 per day, $10,000 per day, or $25,000 per day of violation, or when the violation involves the discharge of pollutants, is subject to civil penalties of up to $10 per gallon per day or $25 per gallon per day of violation; or some combination thereof, depending on the violation, or upon the combination of violations.

Violation of any of the provisions of the NPDES program or of any of the provisions of this Order/Permit may subject the violator to any of the penalties described herein, or any combination thereof, at the discretion of the prosecuting authority; except that only one kind of penalty may be for each kind of violation.

s. Under CWC section 13387, 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

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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 more than $25,000 or imprisonment of not more than two years, or both. For a second conviction, such a person shall be punished by a fine of not more than $25,000 per day of violation, or by imprisonment of not more than four years, or by both.

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

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

1. Name and general composition of the chemical,

2. Frequency of use,

3. Quantities to be used,

4. Proposed discharge concentrations, and

5. USEPA registration number, if applicable.

3. The Discharger shall comply with the following USEPA Region 9 Standard Provisions:

a. The following condition has been established to enforce applicable requirements of the Resource Conservation and Recovery Act. POTWs may not receive hazardous waste by truck, rail, or dedicated pipe except as provided under 40 CFR 270. Hazardous wastes are defined at 40 CFR 261 and include any mixture containing any waste listed under 40 CFR 261.31 through 261.33. The Domestic Sewage Exclusion (40 CFR 261.4) applies only to wastes mixed with domestic sewage in a sewer leading to a POTW and not to mixtures of hazardous wastes and sewage or septage delivered to the treatment plant by truck.

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

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

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

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

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

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

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

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

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

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

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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/Permit.

2. Reports required to be submitted to the Regional Water Board and USEPA shall be sent to:

California Regional Water Quality Control Board
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90013
Attention: Information Technology Unit

U.S. EPA, Region 9
ATTN: NPDES Data Team (WTR-1)
75 Hawthorne Street
San Francisco, CA 94105-3901

Notifications and report required to be provided to the Regional Water Board shall be made to:

Telephone – (213) 576-6616
Facsimile – (213) 576-6660

Notifications and report required to be provided to USEPA shall be made to:

Telephone – (415) 972-3577
Facsimile – (415) 947-3545

3. After notification by the State or Regional Water Board, or USEPA, the Discharger may be required to electronically submit self-monitoring reports. Until such time as electronic submissions of self-monitoring reports is required, the Discharger shall submit discharge monitoring reports (DMRs) in accordance with the requirements described in this Order/Permit.

DMRs must be signed and certified as required by the Standard Provisions of this Order/Permit (Attachment D). The Discharger shall submit the original DMR and one copy of the DMR to:

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, 15th Floor Sacramento, CA 95814

The Discharger shall submit one copy of the DMR to:

U.S. EPA, Region 9
ATTN: NPDES Data Team (WTR-1)
75 Hawthorne Street
San Francisco, CA 94105-3901

All discharge monitoring results should be reported on the official USEPA pre-printed DMR forms (USEPA Form 3320-1). Forms that are self-generated must be approved by USEPA.

C. Special Provisions

1. Reopener Provisions

   a. This Order/Permit may be reopened and modified, to incorporate new limits based on future reasonable potential analyses to be conducted based on on-going monitoring data collected by the Discharger and evaluated by the Regional Water Board and USEPA.

   b. This Order/Permit may be reopened and modified, to incorporate new mass emission rates based on the current Hyperion Treatment Plant's design capacity of 450 ~~mgd~~MGD provided that the Discharger requests and conducts an antidegradation analysis to demonstrate that the change is warranted.

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

   d. This Order/Permit may be modified, in accordance with the provisions set

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forth in 40 CFR 122 and 124, to include new MLs.

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

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

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

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

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

j. The Regional Water Board may reopen this Order to consider making conforming changes to Order No. R4-2010-XXXX in the event the USEPA issues a version of NPDES Permit No. CA0109991 that contains revisions based on its consideration of comments which are timely submitted.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

a. Treatment Plant Capacity

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The Discharger shall submit a written report to the Regional Water Board Executive Officer and USEPA~~Water Division~~ Director within 90 days after the "30-day (monthly) average" daily dry-weather ~~influent~~ flow ~~rate~~ equals or exceeds 75 percent of the ~~secondary~~ 30-day (monthly) average daily dry weather design capacity (i.e., 450 MGD) of waste treatment and/or disposal facilities subject to this Order/Permit~~the POTW~~. The Discharger's senior administrative officer shall sign a letter, which transmits the report and certifies that the Discharger's policy-making body is adequately informed of the report contents. The report shall include the following:

1. Daily average ~~influent~~ flow for the calendar month, the date on which the maximum daily flow (peak flow) occurred, and the rate of that maximum flow.

2. The Discharger's best estimate of when the monthly average daily dry-weather flow~~daily average influent flow for a calendar month~~ will equal or exceed the design capacity of the POTW.

3. The Discharger's ~~intended schedule for studies, design, and other steps needed~~ plans to provide additional capacity for waste treatment and/or disposal facilities before the waste flow exceeds the capacity of the POTW. This requirement can be satisfied by referencing and attaching to the report relevant portions of the wastewater planning documents developed in response to this requirement that provide a roadmap for infrastructure and program upgrades and strategies to meet projected increases in the Discharger's wastewater treatment capacity.

~~b. Constituents of Emerging Concern (CEC) Special Study – The requirements of the CEC Special Study are included under Attachment E (MRP, section VII.A).~~

3. Best Management Practices and Pollution Prevention

a. Storm Water Pollution Prevention Plan (SWPPP) – The HTP is regulated under the State Water Board Water Quality Order No. 97-03-DWQ, NPDES General Permit No. CAS000001 (General Permit), WDRs for Discharge of Storm Water Associated with Industrial Activities Excluding Construction Activities.

b. Spill Clean-Up Contingency Plan (SCCP)

The Discharger shall maintain a SCCP for Hyperion Treatment Plant and its sanitary sewage collection system in an up-to-date condition and shall amend the SCCP whenever there is a change (e.g., in the design, construction, operation, or maintenance of the sewage system or sewage facilities) which materially affects the potential for spills. The Discharger shall review and amend the SCCP as appropriate after each spill from

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Hyperion Treatment Plant or in the service area of the Facility. Upon request of the Regional Water Board or USEPA, the Discharge shall submit the SCCP and any amendments to the Regional Water Board and USEPA. 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 system personnel are familiar with it.

~~Within ninety days of the adoption of this Order/Permit, the Discharger is required to submit an interim SCCP, which describes current activities and protocols, to address cleanup of spills, overflows, and bypasses of untreated or partially treated wastewater caused by a failure in the publicly owned portion of a sanitary sewer system, that reach water bodies, including dry channels and beach sands. This interim SCCP shall be developed in consultation with Regional Water Board and USEPA staff, the City of Los Angeles, the County Health Department and the Environmental Community.~~

~~Within six months of the adoption of this Order/Permit, the Discharger is required to convene a multi-agency workgroup to review the interim SCCP and make their recommendations to the group for the most applicable containment, cleanup and monitoring of sewer spills or overflows that reach water bodies, including dry channels and beach sands. The multi-agency workgroup shall be developed with statewide participants (to the extent practicable) with a goal of achieving a plan that could be implemented on a statewide basis. However, if a statewide consensus cannot be achieved, the plan at a minimum must address the Discharger's SCCP. The interim SCCP shall include at a minimum sections on spill, cleanup, and containment measures, public notification, and receiving water monitoring.~~

Within ~~two years~~six months of the adoption of this Order/Permit, the Discharger shall submit a ~~final~~ SCCP, which provides the most applicable containment, cleanup and monitoring of sewer spills or overflows that reach water bodies, including dry channels and beach sands, that considers the information developed by the Sanitation Districts of Los Angeles County's efforts to develop a statewide approach, to the Regional Water Board Executive Officer and USEPA.

c. Pollutant Minimization Program

Reporting protocols in the Monitoring and Reporting Program, Attachment E, describe sample results that are to be reported as Detected but Not Quantified (DNQ) or Not Detected (ND). Definitions for a reported Minimum Level (ML) and Method Detection Limit (MDL) are provided in the Ocean Plan. These reporting protocols and definitions are used in determining the need to conduct a Pollution Minimization Program, as follows:

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

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

2. The concentration of the pollutant is reported as ND and the effluent limitation is less than the MDL.

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, if required pursuant to California Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

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

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

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

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

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

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

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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/Permit shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to Chapter 3, Subchapter 14, Title 23 of the California Code of Regulations (section 13625 of the California Water Code).

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

c. Emergency Power Facilities

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

5. Special Provisions for Municipal Facilities (POTWs Only)

a. Sludge (Biosolids) Requirements – Refer to Attachment H.

b. Pretreatment Program Requirements – Refer to Attachment I.

c. Spill Reporting Requirements for POTWs

1. 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

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spills, overflows, and bypasses from its POTW, the Discharger shall make notifications as required below:

a. In accordance with the requirements of Health and Safety Code section 5411.5, the Discharger shall provide notification to the local health officer or the director of environmental health with jurisdiction over the affected water body of any unauthorized release of sewage or other waste that causes, or probably will cause, a discharge to any waters of the State as soon as possible, but not later than two (2) hours after becoming aware of the release.

b. In accordance with the requirements of Water Code section 13271, the Discharger shall provide notification to the California Emergency Management Agency (Cal EMA) of the release of reportable amounts of hazardous substances or sewage that causes, or probably will cause, a discharge to any waters of the State as soon as possible, but not later than two (2) hours after becoming aware of the release. The California Code of Regulations, 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.

c. The Discharger shall notify the Regional Water Board of any unauthorized release of sewage from its POTW that causes, or probably will cause, a discharge to any waters of the State as soon as possible, but not later than ***two (2)*** 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. 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 waters of the State 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.

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4. If ongoing, the estimated flow rate of the release at the time of the notification.

5. The name, organization, phone number, and email address of the reporting representative.

2. Monitoring

For spills, overflows, and bypasses reported under section ~~VI.C.6.A~~VII.C.5.c.1, the Discharger shall monitor as required below:

To define the geographical extent of the impact, the Discharger shall obtain grab samples (if feasible, accessible, and safe): (1) for all spills, overflows, or bypasses of any volume that reach any waters of the State; and (2) for all spills, overflows, or bypasses of 1,000 gallons or more. The Discharger shall analyze the samples for total and fecal coliforms or *E. coli*, ~~*e*~~*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 Public Health authorizes cessation of monitoring.

3. Twenty-four (24) Hour Reporting

The Regional Water Board initial notification required under section ~~VI.C.6.A~~VII.C.5.c.1, above, shall be followed by:

a. As soon as possible, but not later than **twenty-four (24) hours** after becoming aware of an unauthorized discharge of sewage or other waste from its POTW 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~~r~~ and the USEPA by telephone at (415) 972-3577 or facsimile at (415) 947-3545. If the discharge is 1,000 gallons or more, this report shall certify that the Cal EMA has been notified of the discharge in accordance with Water Code section 13271 and section ~~VI.C.6.A~~VII.C.5.c.1. 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.6.A~~VII.C.5.c.1. This report shall also include at a minimum the following information:

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~~(i)~~ Agency, NPDES No., Order No., and MRP CI No., if applicable.

(i)

~~(ii)~~

(ii) ~~(ii)~~ The location, date and time of the discharge.

(iii) The waters of the State that received the discharge.

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

(v) An initial estimate of the amount of sewage or other waste released and the amount that reached waters of the State.

(vi) The Cal EMA control number and the date and time that notification of the incident was provided to the Cal EMA.

(vii) 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).

b. A preliminary written report is due five (5) working days after disclosure of the incident reported under section ~~VI.6.C.1~~VII.C.5.c.3.a (submission to the Regional Water Board and USEPA of the log number of the SSO Database entry shall satisfy this requirement for a preliminary written report). Within 30 days after submitting this preliminary written report, the Discharger shall submit the final written report to the Regional Water Board and USEPA. The final written report shall document the information required in section ~~VI.C.6.D~~VII.C.5.c.4, below, and in the Standard Provisions of this Order/Permit. The Executive Officer for just cause can grant an extension for submittal of the final written report to the Regional Water Board.

c. The Discharger shall include a certification in the annual summary report (due according to the schedule in the Monitoring and Reporting Program) stating that the sewer system emergency equipment, including alarm systems, backup pumps, standby power generators, and other critical emergency pump station components are maintained and tested in accordance with the Discharger's Preventative Maintenance Plan (PMP). Any deviations from or modifications to the PMP shall be discussed.

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4. Records

The Discharger shall develop and maintain a record of all spills~~spill~~, overflows, or bypasses of raw or partially treated sewage from its POTW. This record shall be made available to the Regional Water Board and USEPA upon request and a summary shall be included in the annual summary report. The records shall contain:

a. The date and time of each spill, overflow, or bypass;

b. The location of each spill, overflow, or bypass (including latitude and longitude);

c. The estimated volume of each spill, overflow, or bypass including gross volume, amount recovered and not recovered, and monitoring results required by section ~~VI.C.6.B~~VII.C.5.c.2;

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

e. Whether each spill, overflow, or bypass entered a waters of the State and, if so, the name of the water body and whether it entered via a storm drain or other man-made conveyance;

f. Mitigation measures implemented;

g. Corrective measures implemented or proposed to be implemented to prevent/minimize future occurrences; and

h. 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.

5. Activities Coordination

In addition, the Regional Water Board and USEPA expect that the POTW will coordinate its compliance activities for consistency and efficiency with other entities that have responsibilities under: this NPDES permit, including the Pretreatment Program; an MS4 NPDES permit that may contain spill prevention, sewer maintenance and reporting requirements; or the SSO WDR.

6. Consistency with Statewide General Waste Discharge Requirements For Sanitary Sewer Systems (SSO WDR)

The Clean Water Act prohibits the discharge of pollutants from a point source to waters of the United States unless authorized under a

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NPDES permit. (33 U.S.C. §§1311, 1342.). The State Water Board adopted Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, (Order No. 2006-0003-DWQ) 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 develop and implement sewer system management plans and report all SSOs to the State Water Board's online SSO Database.

The requirements contained in this Order/Permit in Sections VII.C.3.b (Spill Clean-Up Contingency Plan), VII.C.4 (Construction, Operation and Maintenance Specifications), and VI.C.~~6~~5.c (Spill Reporting Requirements for POTWs) are intended to be consistent with the requirements of the SSO WDR and as outlined in the State Water Board letter dated September 9, 2008 (Modification to Monitoring and Reporting Program). The Regional Water Board recognizes that there may be some overlap between the provisions of this Order/Permit and SSO WDR requirements. The requirements of the SSO WDR are considered the minimum thresholds (see Finding 11 of Order No. 2006-0003-DWQ). The Regional Water Board will accept the documentation prepared by the Discharger under the SSO WDR for compliance purposes, as satisfying the requirements in sections VII.C.3.b, VII.C.4, and VII.C.~~6~~5.c provided that any additional or more stringent provisions enumerated in this Order/Permit are addressed.

Regardless of the coverage obtained under the SSO WDR, the Discharger's collection system is part of the Publicly Owned Treatment Works that is subject to this Order/Permit. As such, pursuant to federal regulations, the Discharger must properly operate and maintain its collection system (40 CFR 122.41(e)), report any non-compliance (40 CFR 122.41(l)(6) and (7), and mitigate any discharge from the collection system in violation of this Order/Permit (40 CFR 122.41(d)).

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6. Other Special Provisions – Not Applicable~~.~~

7. Compliance Schedules – Not Applicable~~.~~

VIII. COMPLIANCE DETERMINATION

Compliance with effluent limitations for reportable pollutants shall be determined using sample reporting protocols defined in the MRP.

A. General

~~A..~~

Compliance with effluent limitations for reportable pollutants shall be determined using sample reporting protocols defined in the MRP.

1. Compliance with Effluent Limitations expressed as Single Constituents~~.~~

   ~~—~~Dischargers are out of compliance with the effluent limitation if the concentration of the pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported Minimum Level.

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

   ~~—~~Dischargers are out of compliance with an effluent limitation which applies to the sum of a group of chemicals (e.g., PCB's) if the sum of the individual pollutant concentrations is greater than the effluent limitation. Individual pollutants of the group will be considered to have a concentration of zero if the constituent is reported as "Not Detected" (ND) or "Detected, but Not Quantified" (DNQ).

3. Multiple Sample Data Reduction~~.~~

   The concentration of the pollutant in the effluent may be estimated from the result of a single sample analysis or by a measure of central tendency (arithmetic mean, geometric mean, median, etc.) of multiple sample analyses when all sample results are quantifiable (i.e., greater than or equal to the reported Minimum Level). When one or more sample results are reported as ND or DNQ, the central tendency concentration of the pollutant shall be the median (middle) value of the multiple samples, where DNQ is lower than a quantified value and ND is lower than DNQ. If, in an even number of samples, one or both of the middle values is ND or DNQ, the median will be the lower of the two middle values.

4. 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 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 Section VIII—Compliance Determination.

5. Average Monthly Effluent Limitation (AMEL)~~.~~

   If the average (or when applicable, the median determined by subsection 3 above for multiple sample data reduction) of daily discharges over a calendar month exceeds the AMEL for a given parameter, an alleged violation will be flagged and the Discharger ~~–~~will be considered out of compliance for each day

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of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). However, an alleged violation of the AMEL will be considered one violation for the purpose of assessing mandatory minimum penalties. The average of daily discharges over a calendar month that exceeds the AMEL for a parameter will be considered out of compliance for that month only. If only a single sample (daily discharge) is taken ~~–~~over a calendar month and the analytical result for that sample exceeds the AMEL, the Discharger will be considered out of compliance for that month. If no sample (daily discharge) is taken over a calendar month, no compliance determination can be made for that month with respect to effluent violation determination, but compliance determination can be made for that month with respect to reporting violation determination.

6. Average Weekly Effluent Limitation (AWEL)~~.~~

If the average of daily discharges over a calendar week exceeds the AWEL for a given parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for each day of that week for that parameter (e.g., resulting in seven days of non-compliance). However, an alleged violation of the AWEL will be considered one violation for the purpose of assessing mandatory minimum penalties. The average of daily discharges over a calendar week that exceeds the AWEL for a parameter will be considered out of compliance for that week only. If only a single sample (daily discharge) is taken over a calendar week and the analytical result for that sample exceeds the AWEL, the Discharger will be considered out of compliance for that week. If no sample (daily discharge) is taken over a calendar week, no compliance determination can be made for that week with respect to effluent violation determination, but compliance determination can be made for that week with respect to reporting violation determination.

A calendar week will begin on Sunday and end on Saturday. ~~Partial calendar weeks consisting of four or more days at the end of the calendar month will include the remaining days of the week which occur in the next month in order to calculate a consecutive seven-day average value. This value will be reported as a weekly average or seven-day average for the month containing the partial week of four or more days.~~ Partial calendar weeks ~~consisting of less than four days~~ 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.

7. Maximum Daily Effluent Limitation (MDEL)~~.~~

If a daily discharge on a calendar day 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

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compliance determination can be made for that day with respect to reporting violation determination.

8. Instantaneous Minimum Effluent Limitation.

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

9. Instantaneous Maximum Effluent Limitation.

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

10. Percent Removal.

A percentage expression of the removal efficiency across a treatment plant for a given pollutant parameter, as determined from the 30-day average values of the raw wastewater influent pollutant concentrations to the facility and the 30-day average values of the effluent pollutant concentrations for a given time period.

Daily discharge percent removal is calculated using the following equation: Percent Removal (%) = $[1 - (C_{Effluent} \div C_{Influent})] \times 100\%$

11. Mass and Concentration Limitations.

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

12. Mass Emission Rate.

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The daily discharge mass emission rate for any calendar day is calculated using the following equations:

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

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

in which "N" is the number of samples taken over any calendar day. If grab samples are taken, "Ci" is the constituent concentration (mg/L) and "Qi" is the flow rate (MGD) associated with each "N" grab sample. If composite samples are taken, "Ci" is the constituent concentration (mg/L) in each composite sample and "Qi" is the average flow rate (MGD) during the period over which sample compositing occurs.

The daily discharge concentration of a constituent shall be determined from the flow-weighted average of the same constituent in the combined waste stream using the following equations:

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

in which "N" is the number of component waste streams. "Ci" is the constituent concentration (mg/L) and "Qi" is the flow rate (MGD) associated with each "N" component waste stream. "Qt" is the total flow rate of the combined waste stream.

13. Bacterial Standards and Analyses

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

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

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.

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 ~~e~~*Enterococcus*). The detection method used for each analysis shall be reported with the results of the analysis.

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Detection methods used for coliforms (total and fecal) and ~~e~~*E*nterococcus shall be those presented in Table 1A of 40 CFR 136 (revised revised July 1, 2009), unless alternate methods have been approved by USEPA pursuant to 40 CFR 136, or improved methods have been determined by the Executive Officer and/or USEPA.

14. Single Operational Upset~~.~~

A single operational upset (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:

A single operational upset 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.

A Discharger may assert SOU to limit liability only for those violations which the Discharger submitted notice of the upset as required in Attachment D – Standard Provisions.

For purpose outside of CWC section 13385(h) and (i), determination of compliance and civil liability (including any more specific definition of SOU, the requirements for Dischargers to assert the SOU limitation of liability, and the manner of counting violations) shall be in accordance with USEPA Memorandum "Issuance of Guidance Interpreting Single Operational Upset" (September 27, 1989).

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

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ATTACHMENT A – DEFINITIONS

Acute Toxicity:

a. Acute Toxicity (TUa)

Expressed in Toxic Units Acute (TUa)

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

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, Chapter II. 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): are 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) means 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. (40 CFR 122.2.)

Average Weekly Effluent Limitation (AWEL) means 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. (40 CFR 122.2.)

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

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.

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

Composite sample, for other than flow rate measurements, means:

a. No fewer than eight individual sample portions taken at equal time intervals for 24 hours, or the duration of the discharge, whichever is shorter. The volume of each individual sample portion shall be directly proportional to the discharge flow rate at the time of sampling; or,

b. No fewer than eight individual sample portions taken of equal time volume taken over a 24 hour period. The time interval between each individual sample portion shall vary such that the volume of the discharge between each individual sample portion remains constant.

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

For a composite sample, if the duration of the discharge is less than 24 hours but greater than 8 hours, at least eight flow-weighted individual sample portions shall be taken during the duration of the discharge and composited. For a discharge duration of 8 hours or less, eight individual ""grab samples"" may be substituted and composited.

The composite sample result shall be reported for the calendar day during which composite sampling ends.

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Daily Discharge means the "discharge of a pollutant" measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day. (40 CFR 122.2.)

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) means sample results 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 shall mean 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 are indentations along the coast, which 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 shall mean 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

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of the California Water Code, Suisun Bay, Carquinez Strait downstream to Carquinez Bridge, and appropriate areas of the Smith, Klamath, Mad, Eel, Noyo, and Russian Rivers.

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

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

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

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.

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 effluent 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 effluent 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.

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

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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) means the highest allowable "daily discharge". (40 CFR Part 122.2.)

MDL (Method Detection Limit) is the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero, as defined in 40 CFR part 136, Appendix B.

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

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

Not Detected (ND) means those sample results less than the laboratory's MDL.

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

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

PCBs (polychlorinated biphenyls) 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.

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Pollutant Minimization Program (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 a pollutant through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, in order 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, if required pursuant to California Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements in Ocean Plan section III.C.9.

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

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

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

Significant Difference is 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.

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

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

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

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.

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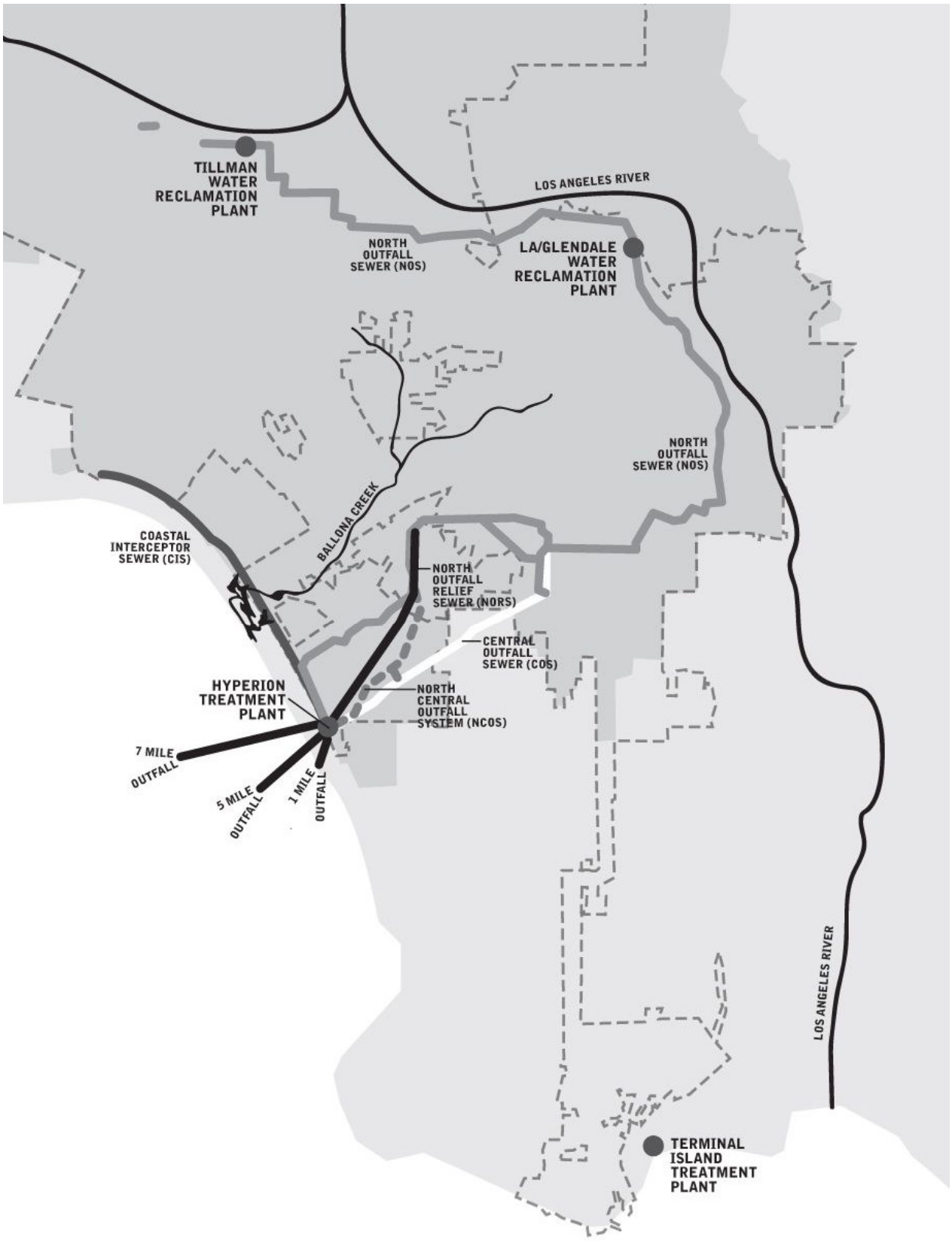
ATTACHMENT B – MAP



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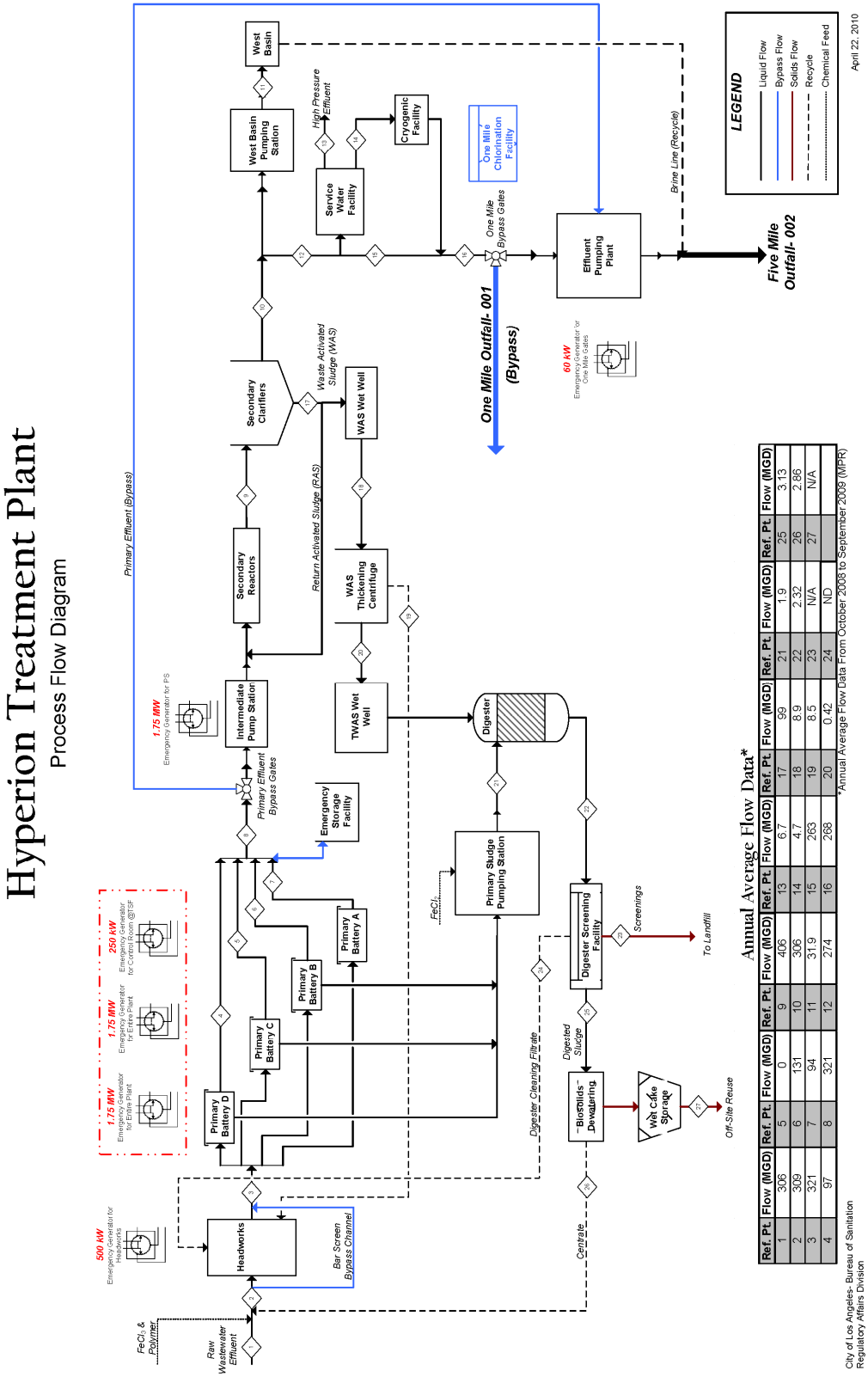
ATTACHMENT C-1 – FLOW SCHEMATIC



Ref. Pt.	Flow (MGD)
1	306
2	309
3	321
4	97
5	0
6	131
7	94
8	321
9	406
10	306
11	31.9
12	274
13	6.7
14	4.7
15	263
16	268
17	99
18	8.9
19	8.5
20	0.42
21	1.9
22	2.32
23	N/A
24	ND
25	3.13
26	2.96
27	N/A

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Attachment C-2 – MAP OF HYPERION SERVICE AREA

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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/Permit. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (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/Permit 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/Permit. (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/Permit 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/Permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order/Permit. (40 CFR part 122.41(e))

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E. Property Rights

1. This Order/Permit 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/Permit does not authorize any injury to persons or property or invasion of other private rights, or any infringement of State or local law or regulations. (40 CFR 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); California Water Code (CWC) § 13383):

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order/Permit (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/Permit (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/Permit (40 CFR part 122.41(i)(3)); and

4. Sample or monitor at reasonable times for the purposes of assuring Order/Permit compliance or as otherwise authorized by the CWA or the CWC, any substances or parameters at any location. (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))

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2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also 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. (40 CFR part 122.41(m)(2))

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

5. Notice

   a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit 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 (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 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

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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 technology based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 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/Permit 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/Permit condition. (40 CFR part 122.41(f))

B. Duty to Reapply

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

C. Transfers

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

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 40 CFR part 136 or, in the case of sludge use or disposal, approved under 40 CFR part 136 unless otherwise specified in 40 CFR part 503 unless other test procedures have been specified in the Order/Permit. (40 CFR part 122.41(j)(4))

IV. STANDARD PROVISIONS – RECORDS

A. Except for records of monitoring information required by this Order/Permit 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 40 CFR 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/Permit, and records of all data used to complete the application for this Order/Permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer or USEPA Water Division Director at any time. (40 CFR part 122.41(j)(2).) It is recommended that the Discharger maintain the results of all analyses indefinitely.

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));

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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, permits and effluent data. (40 CFR part 122.7(b)(2))

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

The Discharger shall furnish to the Regional Water Board, State Water Board, or USEPA, within a reasonable time, any information which the Regional Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order/Permit or to determine compliance with this Order/Permit. The Discharger shall also furnish to the Regional Water Board, State Water Board, or USEPA, upon request, copies of records required to be kept by this Order/Permit. (40 CFR part 122.41(h); CWC § 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. See 40 CFR § 122.22.

2. All permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this section, 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/Permit and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2, or by a duly

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authorized representative of that person. A person is a duly authorized representative only if (40 CFR §122.22(b):

a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 (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, State Water Board, and USEPA. (40 CFR part 122.22(b)(3))

4. If an authorization under Standard Provisions – Reporting V.B.3 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 must be submitted to the Regional Water Board, State Water Board, and USEPA prior to or together with any reports, information, or applications to be signed by an authorized representative. (40 CFR 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 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 elsewhere in this Order/Permit. (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, State Water

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Board, or USEPA 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/Permit using test procedures approved under 40 CFR part 136 or, in the case of sludge use or disposal, approved under 40 CFR part 136 unless otherwise specified in 40 CFR part 503, or as specified in this Order/Permit, 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 or USEPA. (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/Permit. (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/Permit, 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 to the Regional Water Board within 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 § 122.41(l)(6)(i))

2. The following shall be included as information that must be reported within 24 hours under this paragraph (See 40 CFR § 122.41(g)) (40 CFR part 122.41(l)(6)(ii)):

   a. Any unanticipated bypass that exceeds any effluent limitation in the Order/Permit (See 40 CFR part 122.41(g))

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

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c. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the Order/Permit to be reported within 24 hours (See 40 CFR 122.44(g).) (40 CFR 122.41(6)(ii)(C).)

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

The Discharger shall give notice to the Regional Water Board and USEPA as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required 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 40 CFR part 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 the Order/Permit, nor to notification requirements under 40 CFR § 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 Order/Permit conditions that are different from or absent in the Order/Permit, including notification of additional use or disposal sites not reported during the Order/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 and USEPA of any planned changes in the permitted facility or activity that may result in noncompliance with General Order/Permit 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, 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))

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I. Other Information

When the Discharger becomes aware that it failed to submit any relevant facts in an Order/Permit application, or submitted incorrect information in an Order/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))

VI. STANDARD PROVISIONS – ENFORCEMENT

A. The Regional Water Board is authorized to enforce the terms of this Order/Permit under provisions of the California Water Code 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 Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed $25,000 per day for each violation. The CWA provides that any person who *negligently* violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of $2,500 to $25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than $50,000 per day of violation, or by imprisonment of not more than 2 years, or both. Any person who *knowingly* violates such conditions or limitations is subject to criminal penalties of $5,000 to $50,000 per day of violation, or imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than 6 years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, 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)).

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

D. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than 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 permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both. (40 CFR 122.41(k)(2)).

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VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Publicly-Owned Treatment Works (POTWs)

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

1. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to section 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 POTW by a source introducing pollutants into the POTW at the time of adoption of the Order/Permit. (40 CFR part 122.42(b)(2))

3. For the purposes of this paragraph, adequate notice shall include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW. (40 CFR part 122.42(b)(3))

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

The Code of Federal Regulations[1] (CFR) at 40 CFR 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 federal and California regulations.

I. GENERAL MONITORING PROVISIONS

A. 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.

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

C. In July 2000, the Santa Monica Bay Restoration Project (SMBRP) published "An Assessment of the Compliance Monitoring System in Santa Monica Bay" to set forth recommendations and priorities for compliance monitoring in Santa Monica Bay. This report reasoned that a reduced level of receiving water monitoring is justified for large POTWs discharging to Santa Monica Bay due to improvements in effluent quality and associated decreases in receiving water impacts. Like the Model Monitoring Plan developed by SCCWRP, SMBRP recommendations are focused on

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[1] All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated and will be abbreviated as "40 CFR -part number".

providing answers to management questions and allowing a reduction in POTW receiving water monitoring where discharge effects are well understood. The monitoring plan set forth here has been guided by SMBRP recommendations.

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

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

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

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

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

   The Discharger, the Regional Water Board and USEPA shall consult annually to determine the need for special studies. Each year, the Discharger shall

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submit proposals for any proposed special studies to the Regional Water Board and USEPA by ~~November 1~~December 31, for the following year's monitoring effort (July through June). The following year, detailed scopes of work for proposals, including reporting schedules, shall be presented by the Discharger at a Spring Regional Water Board meeting, to obtain the Regional Water Board approval and to inform the public. Upon approval by the Regional Water Board and USEPA, the Discharger shall implement its special study or studies.

E. Bight Regional Monitoring. Regular regional monitoring for the Southern California Bight has been established, occurring at five-year intervals, and is coordinated through SCCWRP with discharger agencies and numerous other entities. The fourth regional monitoring program (Bight '08) occurred primarily during summer 2008. The next (fifth) regional monitoring program (Bight '13) is expected to take place during 2013. While participation in regional monitoring programs is required under this Order/Permit, revisions to the Discharger's monitoring program at the direction of the Regional Water Board and USEPA may be necessary to accomplish the goals of regional monitoring or to allow the performance of special studies to investigate regional or site-specific water issues of concern. These revisions may include a reduction or increase in the number of parameters to be monitored, the frequency of monitoring, or the number and size of samples to be collected. Such changes may be authorized by the Regional Water Board Executive Officer and USEPA Director upon written notification to the Discharger.

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

~~E.~~F. Bay Comprehensive Monitoring Program. The Santa Monica Bay Restoration Commission adopted a new comprehensive monitoring program for Santa Monica Bay in April 2007. This new monitoring program, developed by the Commission's Technical Advisory Committee, culminates efforts that began in the mid 1990s with the identification of key management questions and monitoring priorities. It lays out new monitoring designs for five major habitats within the Bay:~~The conceptual framework for the SMBRP Comprehensive Monitoring Program was designed to be implemented in part through modifications to existing receiving water monitoring programs for major NPDES dischargers into coastal ocean waters. Some elements of this monitoring program already have been implemented, for example through establishment of periodic Bight-wide regional monitoring surveys (Southern California Bight Pilot Project '94, Bight '98, Bight '03, and Bight '08) and annual kelp bed monitoring. However, other elements of the program have yet to be developed, including:~~

- Pelagic Ecosystem
- Soft Bottom Ecosystem

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- Hard Bottom Ecosystem
- Rocky and Sandy Intertidal
- and Wetlands.
~~-rocky intertidal monitoring~~
~~-resident fish monitoring~~
~~-pelagic ecosystem monitoring~~
~~-wetlands monitoring~~
~~-bird and mammal monitoring~~
~~-commercial shellfish monitoring~~
~~-stormwater mass emission loading and plume tracking monitoring.~~

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

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

SMBRC, ~~Under the terms of this Order/Permit,~~ ~~The Santa Monica Bay Restoration Commission's Technical Advisory Committee has agreed to develop a detailed workplan outlining the monitoring surveys required to complete implementation of the Comprehensive Monitoring Program framework developed in 1993. This workplan should include formulation of management goals and objectives, identification of suitable monitoring indicators, detailed sampling designs, and cost estimates for each monitoring component. Upon completion of this workplan,~~ USEPA, the Regional Water Board, the Discharger, affected NPDES permit holders, and other interested agencies and stakeholders will develop ~~implementation~~ plans to collaboratively fund these elements of the program~~s~~ and determine each party's level of participation. It is anticipated that funding for the~~se~~ program~~s~~ from the City of Los Angeles will be supplied through a combination of modifications to the Hyperion Treatment Plant's Monitoring and Reporting Program, including redirection of existing effort and new monitoring efforts relevant to the Hyperion Treatment Plant's discharge. Redirection of existing monitoring requirements and/or the imposition of additional monitoring efforts conducted under the terms of this Order/Permit are subject to a public hearing before the Regional Water Board and public notice by USEPA. This Order/Permit may be reopened and modified by the Regional Water Board and USEPA to incorporate conforming monitoring requirements and schedule dates for implementation of the Comprehensive

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Monitoring Program for Santa Monica Bay (Santa Monica Bay Restoration Commission, January 2007).

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

G. ~~In attempt to bridge the foregoing gap in information, t~~This monitoring program for Hyperion Treatment Plant is comprised of requirements to demonstrate compliance with the conditions of the NPDES permit, ensure compliance with State water quality standards, and mandate participation in regional monitoring and/or area-wide studies.

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

~~1.Future Southern California Bight regional surveys, including benthic infauna, sediment chemistry, fish communities and fish predator risk;~~

~~2.Santa Monica Bay Restoration Commission's Seafood Safety Survey – The Local Seafood Safety Survey stipulated in this Order/Permit is a contribution to the Santa Monica Bay Restoration Commission's Seafood Safety Survey. The level of participation shall be similar to that provided for the 2008 Regional Bioaccumulation Survey.~~

~~3.Central Kelp Monitoring Program – coordinated by the Regional Water Board; and,~~

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~~4.Central Bight Water Quality Cooperative Program – coordinated monitoring conducted by Orange County Sanitation District, County Sanitation Districts of Los Angeles County, City of Los Angeles and City of Oxnard through appropriate agencies for water quality monitoring.~~

~~**H.**Regular regional monitoring for the Southern California Bight has been established, occurring at five-year intervals, and coordinated through SCCWRP with discharger agencies and numerous other entities. The fourth regional monitoring program (Bight '08) occurred primarily during summer 2008. The next (fifth) regional monitoring program (Bight '13) is expected to take place during 2013. While participation in regional programs is required under this Order/Permit, revisions to the Discharger's monitoring program at the direction of the Regional Water Board and USEPA may be necessary to accomplish the goals of regional monitoring or to~~

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~~monitoring or to allow the performance of special studies to investigate regional or site-specific water issues of concern. These revisions may include a reduction or increase in the number of parameters to be monitored, the frequency of monitoring, or the number and size of samples to be collected. Such changes may be authorized by the Regional Water Board Executive Officer and USEPA Director upon written notification to the Discharger.~~

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~~I.~~The Regional Water Board has helped to establish the Central Region Kelp Survey Consortium to conduct regional kelp bed monitoring. This program is designed to require ocean dischargers in the Regional Water Board's jurisdiction to undertake a collaborative program (which may include participation by Orange County ocean dischargers) to monitor kelp beds in the Southern California Bight, patterned after the successful program implemented by the San Diego Regional Water Board since

~~implemented by the San Diego Regional Water Board since 1985. Data collected in this regional survey will be used to assess status and trends in kelp bed health and spatial extent. The regional nature of the survey will allow the status of beds local to specific dischargers to be compared to regional trends. The regional kelp monitoring survey was initiated during 2003.~~

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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/Permit:

Table 1. Monitoring Station Locations

Influent and Effluent Monitoring Stations		
Discharge Point Name	**Monitoring Location Name**	**Monitoring Location Description**
Influent Monitoring Station		
--	**INF-001**	North Outfall Relief Sewer - Sampling stations shall be established at each point of inflow to the sewage treatment plant and shall be located upstream of any in-plant return flows and where representative samples of the influent can be obtained. (33.93061°N, 118.43317°W)
--	**INF-002**	North Central Outfall Sewer - Sampling stations shall be established at each point of inflow to the sewage treatment plant and shall be located upstream of any in-plant return flows and where representative samples of the influent can be obtained. (33.9306°N, 118.43326°W)
--	**INF-003**	Central Outfall Sewer - Sampling stations shall be established at each point of inflow to the sewage treatment plant and shall be located upstream of any in-plant return flows and where representative samples of the influent can be obtained. (33.93033°N, 118.43353°W)
--	**INF-004**	North Outfall Sewer - Sampling stations shall be established at each point of inflow to the sewage treatment plant and shall be located upstream of any in-plant return flows and where representative samples of the influent can be obtained. (33.92782°N, 118.43331°W)
--	**INF-005**	Coastal Interceptor Sewer - Sampling stations shall be established at each point of inflow to the sewage treatment plant and shall be located upstream of any in-plant return flows and where representative samples of the influent can be obtained. (33.92746°N, 118.44318°W)

Effluent Monitoring Station		
001	**EFF-001**	Sampling station shall be located downstream of any in-plant return flows but before entering the discharge tunnel where representative samples of the effluent discharged through Discharge Point 001 can be obtained. (33.92417°N, 118.4314°W)
002	**EFF-002**	Sampling station shall be located downstream of any in-plant return flows but before entering the discharge tunnel where representative samples of the effluent discharged through Discharge Point 002 can be obtained. (33.92527°N, 118.43195°W)

Receiving Water Monitoring Stations

Inshore Water Quality Monitoring Stations

Station	Latitude*	Longitude*	Station	Latitude*	Longitude*
RW-IS-001	33 59.833	118 48.067	RW-IS-007	33 58.550	118 -28.317
RW-IS-002	34 00.950	118 46.967	RW-IS-008	33 57.567	118 27.583
RW-IS-003	34 01.717	118 44.117	RW-IS-009	33 56.900	118 27.133
RW-IS-004	34 01.833	118 40.383	RW-IS-10	33 56.283	118 26.817
RW-IS-005	34 02.050	118 34.833	RW-IS-11	33 50.000	118 23.850
RW-IS-006	34 00.201	118 29.923			

Note: IS-01 to IS-11 shall be sampled at a distance of 100 ft from the shoreline or at the 30-ft depth contour, whichever is further from shore (except that station IS-11 is located at King Harbor in Redondo Beach).

* Given in decimal minutes.

Offshore Water Quality Monitoring Stations

Station	Latitude*	Longitude*	Station	Latitude*	Longitude*

REVISED TENTATIVE

RW-OS-3201	33	51.250	118	24.367	RW-OS-3604**	33	56.416	118	30.586
RW-OS-3202	33	50.917	118	25.067	RW-OS-3605**	33	55.666	118	32.133
RW-OS-3203	33	50.717	118	25.583	RW-OS-3606**	33	55.000	118	33.500
RW-OS-3204**	33	50.217	118	26.433	RW-OS-3701	33	59.166	118	29.166
RW-OS-3205**	33	49.433	118	27.817	RW-OS-3702	33	58.800	118	30.000
RW-OS-3206	33	49.4666	118	29.567	RW-OS-3703	33	58.450	118	30.600
RW-OS-3301	33	53.583	118	25.633	RW-OS-3704**	33	58.000	118	31.533
RW-OS-3302	33	53.350	118	26.183	RW-OS-3705**	33	57.216	118	33.216
RW-OS-3303	33	53.133	118	26.800	RW-OS-3706**	33	56.550	118	34.500
RW-OS-3304**	33	52.767	118	27.417	RW-OS-3801	34	2.000	118	35.000
RW-OS-3305**	33	52.100	118	29.600	RW-OS-3802	34	1.550	118	35.250
RW-OS-3306**	33	51.067	118	31.633	RW-OS-3803	34	0.350	118	35.833
RW-OS-3401	33	54.150	118	25.950	RW-OS-3804**	33	59.600	118	36.250
RW-OS-3402	33	54.000	118	26.833	RW-OS-3805**	33	58.333	118	36.850
RW-OS-3403	33	54.066	118	27.600	RW-OS-3806	33	57.366	118	37.416
RW-OS-3404**	33	53.816	118	28.116	RW-OS-3901	34	1.650	118	43.000
RW-OS-3405**	33	53.233	118	30.383	RW-OS-3902	34	1.166	118	43.000
RW-OS-3406**	33	52.750	118	32.133	RW-OS-3903	34	0.666	118	43.000
RW-OS-3501	33	55.883	118	26.883	RW-OS-3904**	33	59.850	118	43.000
RW-OS-3502	33	55.666	118	27.616	RW-OS-3905	33	57.616	118	43.000
RW-OS-3503	33	55.433	118	28.350	RW-OS-3906	33	56.566	118	43.000
RW-OS-3504**	33	55.000	118	29.650	RW-OS-4001	33	59.716	118	48.316
RW-OS-3505**	33	54.550	118	31.516	RW-OS-4002	33	59.300	118	48.316
RW-OS-3506**	33	54.000	118	32.983	RW-OS-4003**	33	58.833	118	48.316
RW-OS-3601	33	57.584	118	27.975	RW-OS-4004	33	57.500	118	48.316
RW-OS-3602	33	57.333	118	28.666	RW-OS-4005	33	55.683	118	48.316
RW-OS-3603	33	56.966	118	29.416	RW-OS-4006	33	54.750	118	48.316

* Given in decimal minutes.

** Discrete stations of the Central Bight Cooperative Water Quality Survey.

Benthic and Trawl Monitoring Stations

Station	Latitude*	Longitude*	Station	Latitude*	Longitude*

REVISED TENTATIVE

FIXED GRID STATIONS

RW-A-1 (T)	33	59.183	118	30.117
RW-A-2	33	55.117	118	26.883
RW-A-3 (T)	33	52.050	118	25.000
RW-B-1	34	00.417	118	42.933
RW-B-3	34	00.350	118	35.833
RW-B-5	33	57.983	118	31.533
RW-B-6	33	56.467	118	30.567
RW-B-7	33	55.283	118	29.500
RW-B-8	33	53.800	118	28.450
RW-B-10	33	50.483	118	24.940
RW-C-1 (T)	33	59.833	118	43.050
RW-C-3 (T)	33	59.383	118	36.033
RW-C-5	33	57.167	118	33.233
RW-C-6 (T)	33	55.683	118	32.083
RW-C-7	33	53.583	118	32.250
RW-C-8	33	52.750	118	31.417
~~RW-C-9A (T)~~	~~33~~	~~51.283~~	~~118~~	~~26.283~~
RW-D-1 (Benthic)	33	54.700	118	33.000
RW-D-1T (T)**	33	54.805	118	32.215
RW-E-1	33	59.057	118	42.867
RW-E-3	33	58.317	118	36.867
RW-E-6	33	55.700	118	33.417
RW-E-10	33	49.405	118	27.880
RW-Z-1	33	54.883	118	31.500
RW-Z-2 (T)	33	54.450	118	31.467
RW-Z-3 (T)**	33	54.005	118	30.395
RW-Z-4 (T)**	335~~57~~.~~20~~82		118	30.579

YEAR 1 RANDOM STATIONS

RW-NA-1	33	53.396	118	31.190
RW-NA-2	33	54.054	118	30.907
RW-NA-3	33	54.199	118	32.025
RW-NA-4	33	55.061	118	30.380
RW-NA-5	33	55.167	118	31.114
RW-NA-6	33	56.041	118	31.636
RW-FA-7	33	52.397	118	29.837
RW-FA-8	33	52.675	118	32.650
RW-FA-9	33	52.981	118	29.263
RW-FA-10	33	53.132	118	30.983
RW-FA-11	33	53.594	118	30.105
RW-FA-12	33	53.870	118	29.438
RW-FA-13	33	54.398	118	34.130
RW-FA-14	33	54.874	118	28.602
RW-FA-15	33	55.073	118	33.387
RW-FA-16	33	55.966	118	30.050
RW-FA-17	33	56.086	118	33.208
RW-FA-18	33	56.612	118	29.351
RW-FA-19	33	56.671	118	32.167
RW-FA-20	33	57.157	118	31.470
RW-Random1A (T)**	33	54.874	118	28.602
RW-Random2A (T)**	33	52.397	118	29.837
RW-Random3A (T)**	33	51.451	118	28.185

YEAR 2 RANDOM STATIONS

RW-NB-1	33	54.325	118	33.022
RW-NB-2	33	54.490	118	30.105
RW-NB-3	33	54.883	118	32.057
RW-NB-4	33	54.905	118	30.594
RW-NB-5	33	55.261	118	32.981
RW-NB-6	33	55.620	118	29.888
RW-NB-7	33	55.670	118	31.887
RW-NB-8	33	56.212	118	30.826
RW-FB-9	33	52.493	118	31.105
RW-FB-10	33	53.017	118	29.854
RW-FB-11	33	53.087	118	33.191
RW-FB-12	33	53.249	118	30.759
RW-FB-13	33	53.282	118	29.015
RW-FB-14	33	53.616	118	33.900
RW-FB-15	33	54.194	118	28.841
RW-FB-16	33	55.102	118	29.375
RW-FB-17	33	56.220	118	33.825
RW-FB-18	33	56.407	118	29.231
RW-FB-19	33	56.690	118	31.871
RW-FB-20	33	56.858	118	30.287
RW-Random1B (T)**	33	56.220	118	33.825
RW-Random2B (T)**	33	56.407	118	29.231
RW-Random3B (T)**	33	53.017	118	29.854

* Given in decimal minutes.
** Trawl site only.
(T) Trawl stations.

REVISED TENTATIVE

~~CORE MONITORING~~

III. INFLUENT MONITORING REQUIREMENTS

(For footnotes, see pages~~,~~ E-17 and E-18.)

Influent monitoring is required to:

- Determine compliance with NPDES permit conditions.
- Assess treatment plant performance.
- Assess effectiveness of the Pretreatment Program.

A. Monitoring Location INF-001

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

Table 2. Influent Monitoring

Influent Monitoring Program				
Parameter	**Units**	**Sample Type[1]**	**Minimum Sampling Frequency[2]**	**Required Analytical Test Method**
Flow	MGD	Recorder/totalizer	Continuous[3]	[4]
$BOD_5 20^0C$	mg/L	24-hr composite	Daily	[4]
Suspended solids	mg/L	24-hr composite	Daily	[4]
pH	pH units	Grab	Weekly	[4]
Oil and grease	mg/L	Grab[5]	Weekly	[4]
TOC (total organic carbon)	mg/L	24-hr composite	Monthly	[4]
Cyanide	µg/L	Grab	Monthly	[4]
Organic nitrogen	mg/L	24-hr composite	Quarterly	[4]
Radioactivity (including gross alpha, gross, beta, combined radium-226 & radium-228, tritium, strontium-90 and uranium)[6]	pCi/L	24-hr composite	Monthly	[4]
Total phosphorus (as P)	mg/L	24-hr composite	Quarterly	[4]
Tributyltin	ng/L	24-hr composite	Quarterly	[4]
Aldrin	µg/L	24-hr composite	Quarterly	[4]
Chlordane and related compounds[7]	µg/L	24-hr composite	Quarterly	[4]
DDT[7]	µg/L	24-hr composite	Quarterly	[4]
Dieldrin	µg/L	24-hr composite	Quarterly	[4]
Endosulfan[7]	µg/L	24-hr composite	Quarterly	[4]
Endrin	µg/L	24-hr composite	Quarterly	[4]
HCH[7]	µg/L	24-hr composite	Quarterly	[4]
Heptachlor	µg/L	24-hr composite	Quarterly	[4]
Heptachlor epoxide	µg/L	24-hr composite	Quarterly	[4]

REVISED TENTATIVE

Influent Monitoring Program				
Parameter	**Units**	**Sample Type[1]**	**Minimum Sampling Frequency[2]**	**Required Analytical Test Method**
PCBs[7]	µg/L	24-hr composite	Quarterly	[4]
Toxaphene	µg/L	24-hr composite	Quarterly	[4]
2,4-Dinitrophenol	µg/L	24-hr composite	Quarterly	[4]
2,4,6-Trichlorophenol	µg/L	24-hr composite	Quarterly	[4]
4,6-Dinitro-2-methylphenol	µg/L	24-hr composite	Quarterly	[4]
Phenolic compounds (chlorinated)[7]	µg/L	24-hr composite	Quarterly	[4]
Phenolic compounds (non-chlorinated)[7]	µg/L	24-hr composite	Quarterly	[4]
Bis(2-chloro-ethoxy) methane	µg/L	24-hr composite	Quarterly	[4]
Bis(2-chloro-isopropyl) ether	µg/L	24-hr composite	Quarterly	[4]
Di-n-butylphthalate	µg/L	24-hr composite	Quarterly	[4]
Dichlorobenzenes[7]	µg/L	24-hr composite	Quarterly	[4]
Diethylphthalate	µg/L	24-hr composite	Quarterly	[4]
Dimethylphthalate	µg/L	24-hr composite	Quarterly	[4]
Fluoranthene	µg/L	24-hr composite	Quarterly	[4]
Hexachlorocyclopentadiene	µg/L	24-hr composite	Quarterly	[4]
Isophorone	µg/L	24-hr composite	Quarterly	[4]
Nitrobenzene	µg/L	24-hr composite	Quarterly	[4]
Benzidine	µg/L	24-hr composite	Quarterly	[4]
Bis(2-chloroethyl) ether	µg/L	24-hr composite	Quarterly	[4]
Bis(2-ethylhexyl) phthalate	µg/L	24-hr composite	Quarterly	[4]
1,4-Dichlorobenzene	µg/L	24-hr composite	Quarterly	[4]
3,3-Dichlorobenzidine	µg/L	24-hr composite	Quarterly	[4]
2,4-Dinitrotoluene	µg/L	24-hr composite	Quarterly	[4]
1,2-Diphenylhydrazine	µg/L	24-hr composite	Quarterly	[4]
Hexachlorobenzene	µg/L	24-hr composite	Quarterly	[4]
Hexachlorobutadiene	µg/L	24-hr composite	Quarterly	[4]
Hexachloroethane	µg/L	24-hr composite	Quarterly	[4]
N-Nitrosodimethylamine	µg/L	24-hr composite	Quarterly	[4]
N-Nitrosodi-n-propylamine	µg/L	24-hr composite	Quarterly	[4]
N-Nitrosodiphenylamine	µg/L	24-hr composite	Quarterly	[4]
PAHs[7]	µg/L	24-hr composite	Quarterly	[4]
TCDD equivalents[7, 12]	pµg/L	24-hr composite	Quarterly	[4]
Acrolein	µg/L	Grab	Quarterly	[4]
Acrylonitrile	µg/L	Grab	Quarterly	[4]
Benzene	µg/L	Grab	Quarterly	[4]
Carbon tetrachloride	µg/L	Grab	Quarterly	[4]
Chlorobenzene	µg/L	Grab	Quarterly	[4]
Chlorodibromomethane	µg/L	Grab	Quarterly	[4]
Chloroform	µg/L	Grab	Quarterly	[4]
Dichlorobromomethane	µg/L	Grab	Quarterly	[4]
Dichloromethane	µg/L	Grab	Quarterly	[4]

REVISED

TENTATIVE

Influent Monitoring Program				
Parameter	**Units**	**Sample Type[1]**	**Minimum Sampling Frequency[2]**	**Required Analytical Test Method**
1,1-Dichloroethylene	µg/L	Grab	Quarterly	[4]
1,2-Dichloroethane	µg/L	Grab	Quarterly	[4]
1,3-Dichloropropene	µg/L	Grab	Quarterly	[4]
Ethylbenzene	µg/L	Grab	Quarterly	[4]
Halomethanes[7]	µg/L	Grab	Quarterly	[4]
Methyl-tert-butyl-ether	µg/L	Grab	Quarterly	[4]
Toluene	µg/L	Grab	Quarterly	[4]
1,1,2,2-Tetrachloroethane	µg/L	Grab	Quarterly	[4]
1,1,1-Trichloroethane	µg/L	Grab	Quarterly	[4]
1,1,2-Trichloroethane	µg/L	Grab	Quarterly	[4]
Tetrachloroethylene	µg/L	Grab	Quarterly	[4]
Trichloroethylene	µg/L	Grab	Quarterly	[4]
Vinyl chloride	µg/L	Grab	Quarterly	[4]
Antimony	µg/L	24-hr composite	Quarterly	[4]
Arsenic	µg/L	24-hr composite	Quarterly	[4]
Beryllium	µg/L	24-hr composite	Quarterly	[4]
Cadmium	µg/L	24-hr composite	Monthly	[4]
Chromium (III)	µg/L	~~24-hr composite~~Grab	Monthly	[4]
Copper	µg/L	24-hr composite	Monthly	[4]
Hexavalent chromium~~[9]~~[7]	µg/L	~~24-hr composite~~Grab	Monthly	[4]
Lead	µg/L	24-hr composite	Monthly	[4]
Mercury~~-~~[13]	µg/L	24-hr composite	Monthly	[4]
Nickel	µg/L	24-hr composite	Monthly	[4]
Selenium	µg/L	24-hr composite	Monthly	[4]
Silver	µg/L	24-hr composite	Monthly	[4]
Thallium	µg/L	24-hr composite	Quarterly	[4]
Zinc	µg/L	24-hr composite	Monthly	[4]

REVISED TENTATIVE

IV. EFFLUENT MONITORING REQUIREMENTS

(For footnotes, see pages E-17 and E-18.)

Effluent monitoring is required to:

- Determine compliance with NPDES permit conditions and water quality standards.
- Assess plant performance, identify operational problems and improve plant performance.
- Provide information on wastewater characteristics and flows for use in interpreting water quality and biological data.

A. Monitoring Locations - EFF 001 and EFF 002

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

Table 3. Effluent Monitoring

Effluent Monitoring Program				
Parameter	**Units**	**Sample Type[1]**	**Minimum Sampling Frequency[2,10]**	**Required Analytical Test Method**
Flow	MGD	Recorder/totalizer	Continuous[3]	[4]
$BOD_5 20^0C$	mg/L	24-hr composite	Daily	[4]
Suspended solids	mg/L	24-hr composite	Daily	[4]
pH	pH unit	Grab	Weekly	[4]
Oil and grease	mg/L	Grab[5]	Weekly	[4]
Temperature[11]	^0C	Continuous	Continuous	[4]
Total Organic Carbon	mg/L	24-hr composite	Monthly	[4]
Settleable solids	mL/L	Grab[5]	Daily	[4]
Total residual chlorine (Discharge Point 001 only)	mg/L	Grab	Daily	[4]
Dissolved Oxygen	mg/L	Grab	Weekly	[4]
Turbidity	NTU	Grab and 24-hr composite	Weekly	[4]
Ammonia nitrogen	mg/L	24-hr composite	Weekly	[4]
Toxicity, Acute	TUa	24-hr composite	Monthly	[4]
Toxicity, Chronic	TUc	24-hr composite	Monthly	[4]
Cyanide	µg/L	grab	Monthly	[4]
Nitrate nitrogen	µmg/L	24-hr composite	Quarterly	[4]
Organic nitrogen	mg/L	24-hr composite	Quarterly	[4]
Radioactivity[6] (including gross alpha, gross beta, combined radium-226 & radium-228, tritium, strontium-90 and uranium)[6]	pCi/L	24-hr composite	Monthly	[4]
Total phosphorus (as P)	mg/L	24-hr composite	Quarterly	[4]
Tributyltin	ng/L	24-hr composite	Quarterly	[4]
Aldrin	µg/L	24-hr composite	Quarterly	[4]
Chlordane and related compounds[7]	µg/L	24-hr composite	Quarterly	[4]
DDT[7]	µg/L	24-hr composite	Quarterly	[4]
Dieldrin	µg/L	24-hr composite	Quarterly	[4]
Endosulfan[7]	µg/L	24-hr composite	Quarterly	[4]
Endrin	µg/L	24-hr composite	Quarterly	[4]
HCH[7]	µg/L	24-hr composite	Quarterly	[4]
Heptachlor	µg/L	24-hr composite	Quarterly	[4]
Heptachlor epoxide	µg/L	24-hr composite	Quarterly	[4]
PCBs[7]	µg/L	24-hr composite	Quarterly	[4]
PCB congeners[8]	µg/L	24-hr composite	Annually	[4]

REVISED TENTATIVE

Effluent Monitoring Program				
Parameter	**Units**	**Sample Type[1]**	**Minimum Sampling Frequency[2,10]**	**Required Analytical Test Method**
Toxaphene	µg/L	24-hr composite	Quarterly	[4]
2,4-Dinitrophenol	µg/L	24-hr composite	Quarterly	[4]
2,4,6-Trichlorophenol	µg/L	24-hr composite	Quarterly	[4]
4,6-Dinitro-2-methylphenol	µg/L	24-hr composite	Quarterly	[4]
Phenolic compounds (chlorinated)[7]	µg/L	24-hr composite	Quarterly	[4]
Phenolic compounds (non-chlorinated)[7]	µg/L	24-hr composite	Quarterly	[4]
Bis(2-chloro-ethoxy) methane	µg/L	24-hr composite	Quarterly	[4]
Bis(2-chloro-isopropyl) ether	µg/L	24-hr composite	Quarterly	[4]
Di-n-butylphthalate	µg/L	24-hr composite	Quarterly	[4]
Dichlorobenzenes[7]	µg/L	24-hr composite	Quarterly	[4]
Diethylphthalate	µg/L	24-hr composite	Quarterly	[4]
Dimethylphthalate	µg/L	24-hr composite	Quarterly	[4]
Fluoranthene	µg/L	24-hr composite	Quarterly	[4]
Hexachlorocyclopentadiene	µg/L	24-hr composite	Quarterly	[4]
Isophorone	µg/L	24-hr composite	Quarterly	[4]
Nitrobenzene	µg/L	24-hr composite	Quarterly	[4]
Benzidine	µg/L	24-hr composite	Quarterly	[4]
Bis(2-chloroethyl) ether	µg/L	24-hr composite	Quarterly	[4]
Bis(2-ethylhexyl) phthalate	µg/L	24-hr composite	Quarterly	[4]
1,4-Dichlorobenzene	µg/L	24-hr composite	Quarterly	[4]
3,3-Dichlorobenzidine	µg/L	24-hr composite	Quarterly	[4]
2,4-Dinitrotoluene	µg/L	24-hr composite	Quarterly	[4]
1,2-Diphenylhydrazine	µg/L	24-hr composite	Quarterly	[4]
Hexachlorobenzene	µg/L	24-hr composite	Quarterly	[4]
Hexachlorobutadiene	µg/L	24-hr composite	Quarterly	[4]
Hexachloroethane	µg/L	24-hr composite	Quarterly	[4]
N-Nitrosodimethylamine	µg/L	24-hr composite	Quarterly	[4]
N-Nitrosodi-n-propylamine	µg/L	24-hr composite	Quarterly	[4]
N-Nitrosodiphenylamine	µg/L	24-hr composite	Quarterly	[4]
PAHs[7]	µg/L	24-hr composite	Quarterly	[4]
TCDD equivalents[7,11~~23~~]	pµg/L	24-hr composite	Quarterly	[4]
Acrolein	µg/L	Grab	Quarterly	[4]
Acrylonitrile	µg/L	Grab	Quarterly	[4]
Benzene	µg/L	Grab	Quarterly	[4]
Carbon tetrachloride	µg/L	Grab	Quarterly	[4]
Chlorobenzene	µg/L	Grab	Quarterly	[4]
Chlorodibromomethane	µg/L	Grab	Quarterly	[4]
Chloroform	µg/L	Grab	Quarterly	[4]
Dichlorobromomethane	µg/L	Grab	Quarterly	[4]
Dichloromethane	µg/L	Grab	Quarterly	[4]
1,1-Dichloroethylene	µg/L	Grab	Quarterly	[4]

REVISED TENTATIVE

Effluent Monitoring Program				
Parameter	**Units**	**Sample Type[1]**	**Minimum Sampling Frequency[2,10]**	**Required Analytical Test Method**
1,2-Dichloroethane	µg/L	Grab	Quarterly	[4]
1,3-Dichloropropene	µg/L	Grab	Quarterly	[4]
Ethylbenzene	µg/L	Grab	Quarterly	[4]
Halomethanes[7]	µg/L	Grab	Quarterly	[4]
Methyl-tert-butyl-ether	µg/L	Grab	Quarterly	[4]
Toluene	µg/L	Grab	Quarterly	[4]
1,1,2,2-Tetrachloroethane	µg/L	Grab	Quarterly	[4]
1,1,1-Trichloroethane	µg/L	Grab	Quarterly	[4]
1,1,2-Trichloroethane	µg/L	Grab	Quarterly	[4]
Tetrachloroethylene	µg/L	Grab	Quarterly	[4]
Trichloroethylene	µg/L	Grab	Quarterly	[4]
Vinyl chloride	µg/L	Grab	Quarterly	[4]
Antimony	µg/L	24-hr composite	Quarterly	[4]
Arsenic	µg/L	24-hr composite	Monthly	[4]
Beryllium	µg/L	24-hr composite	Quarterly	[4]
Cadmium	µg/L	24-hr composite	Monthly	[4]
Chromium (III)	µg/L	~~24-hr composite~~Grab	Monthly	[4]
Copper	µg/L	24-hr composite	Monthly	[4]
Hexavalent chromium[9]	µg/L	~~24-hr composite~~Grab	Monthly	[4]
Lead	µg/L	24-hr composite	Monthly	[4]
Mercury[13]	µg/L	24-hr composite	Monthly	[4]
Nickel	µg/L	24-hr composite	Monthly	[4]
Selenium	µg/L	24-hr composite	Monthly	[4]
Silver	µg/L	24-hr composite	Monthly	[4]
Thallium	µg/L	24-hr composite	Quarterly	[4]
Zinc	µg/L	24-hr composite	Monthly	[4]

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Footnotes for Influent and Effluent Monitoring Program:

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

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

[4] 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, the State Water Board and USEPA Region 9. For any pollutant whose effluent limitation is lower than all the minimum levels (MLs) specified in Appendix II of the Ocean Plan, the analytical method with the lowest ML must be selected.

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

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

[7] See Attachment A for definition of terms.

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

[9] Discharger may, at its option, meet the hexavalent chromium limitation by analyzing for total chromium rather than hexavalent chromium.

[10] For Discharge Point 001, the minimum frequency of analysis shall be once per discharge day, but no more than one analysis need be done during the indicated sampling period; however, total chlorine residual shall be monitored daily, and acute toxicity shall not be monitored. During routine maintenance activities, sampling and analyses are not required, except for total chlorine residuals.

[11] For Discharge Point 002, sampling shall be continuous and the maximum daily temperature shall be reported.

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

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

~~C.~~ B. Mass Emission Benchmarks

The following Mass Emission Benchmarks, in metric tons per year (MT/yr), have been established for the discharge through the 5-mile outfall (Discharge Point 002). The Discharger shall monitor and report the mass emission rate for all constituents that have mass emission benchmarks. For each constituent, the 12-month average mass emission rate and the concentration and flow used to calculate that mass emission rate shall be reported in the annual pretreatment report and the annual receiving water monitoring report.

Table 4. 12-Month Average Effluent Mass Emission Benchmarks

Ocean Plan Constituent	12-month Average Mass Emission Benchmarks (MT/yr)
Marine Aquatic Life	
Arsenic	1.9
Cadmium	0.88
Chromium VI	4.6

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Ocean Plan Constituent	12-month Average Mass Emission Benchmarks (MT/yr)
Chromium (total)	N/A
Copper	13
Lead	2.1
Mercury	0.19
Nickel	8.3
Selenium	0.94
Silver	1.2
Zinc	22
Cyanide	4.6
Total chlorine residual	N/A
Ammonia as N	20,100
Acute toxicity	N/A
Chronic toxicity	N/A
Phenolic compounds (non-chlorinated)	3
Phenolic compounds (chlorinated)	0.5
Endosulfan	0.004
Endrin	0.004
HCH	0.02
Radioactivity	N/A
Human Health (noncarcinogens)	
Acrolein	1
Antimony	3
Bis(2-cl-ethoxy) methane	0.03
Bis(2-cl-isopropyl) ether	0.03
Chlorobenzene	0.066
Chromium (III)	3.6
Di-n-butyl phthalate	2.2
Dichlorobenzenes (BNA)	1
Diethyl phthalate	0.03
Dimethyl phthalate	0.15
2-methyl-4,6-dinitrophenol	0.2
2,4-dinitrophenol	0.12
Ethyl benzene	0.066
Fluoranthene	0.03
Hexachlorocyclopentadiene	1.6

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Ocean Plan Constituent	12-month Average Mass Emission Benchmarks (MT/yr)
Nitrobenzene	0.03
Thallium	4.3
Toluene	0.25
Tributyltin	N/A
1,1,1-trichloroethane	0.099
Human Health Protection (carcinogens)	
Acrylonitrile	0.17
Aldrin	N/A
Benzene	0.12
Benzidine	N/A
Beryllium	0.006
Bis(2-chloroethyl) ether	0.05
Bis(2-ethylhexyl) phthalate	3.8
Carbon tetrachloride	0.083
Chlordane	N/A
Chlorodibromomethane	2.2
Chloroform	3.6
DDT, total	N/A
1,4-dichlorobenzene (BNA)	7.7
3,3'-dichlorobenzidine	N/A
1,2-dichloroethane	0.03
1,1-dichloroethylene	0.072
Dichlorobromomethane	0.83
Methylene chloride	12
1,3-dichloropropene	0.17
Dieldrin	N/A
2,4-dinitrotoluene	0.04
1,2-diphenylhydrazine	0.03
Halomethanes	1.2
Heptachlor	N/A
Heptachlor epoxide	N/A
Hexachlorobenzene	N/A
Hexachlorobutadiene	0.04
Hexachloroethane	0.04
Isophorone	3.2

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Ocean Plan Constituent	12-month Average Mass Emission Benchmarks (MT/yr)
N-nitrosodimethylamine	0.094
N-nitrosodi-n-propylamine	0.072
N-nitrosodiphenylamine	0.05
PAHs	N/A
PCBs	N/A
TCDD equivalents	N/A
1,1,2,2-tetrachloroethane	0.1
Tetrachloroethylene	3.2
Toxaphene	N/A
Trichloroethylene	0.094
1,1,2-trichloroethane	0.094
2,4,6-trichlorophenol	0.05
Vinyl chloride	0.094

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V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. Acute Toxicity Testing for Discharge Point 002

1. 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 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.

2. Frequency

   a. Screening - The Discharger shall conduct the first acute toxicity test screening for three consecutive months beginning in 2011. 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 demonstrate 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 monthly using the most sensitive marine species.

3. Toxicity Units

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

$$TU_a = \frac{100}{LC50}$$

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 for Discharge Points 002 and 001

1. Methods and Test Species.

The Discharger shall conduct critical life stage chronic toxicity tests on flow-weighted, 24-hour composite effluent samples. The presence of chronic toxicity shall be estimated as specified in *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (EPA/600/R-95/136, 1995). When a chronic toxicity test method that incorporates a 96-hour acute toxicity endpoint is used to monitor toxicity at the chronic IWC in effluent discharged from Discharge Point 002, the 96-hour acute toxicity statistical endpoint may also be reported as LC50 and TUa, along with other chronic toxicity test results required by this Order/Permit.

2. Frequency

Screening - The Discharger shall conduct the first chronic toxicity test screening for three consecutive months beginning in 2011. 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 re-screening tests demonstrate 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.

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Regular toxicity tests. - After the screening period, monitoring shall be conducted monthly using the most sensitive marine species.

3. Toxicity Units.

The chronic toxicity of the effluent shall be expressed and reported in Chronic Toxic Units, TUc, where,

$$TU_c = \frac{100}{NOEC}$$

The No Observable Effect Concentration (NOEC) is expressed as the maximum percent effluent concentration that causes no observable effect on test organisms, as determined by the results of a critical life stage toxicity test.

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 receiving water or laboratory water, as appropriate, 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 dilutions and a control shall be tested. The dilution series shall include the instream waste concentration (IWC), and two dilutions above and two below the IWC. The chronic IWCs for Discharge Points 001 and 002 are 7.1% and 1.1% effluent, respectively. 7.1% is the result of 1 divided by 14, which is sum of dilution credit 13 plus 1. 1.1% is the result of 1 divided by 85, which is sum of dilution credit 84 plus 1. The acute IWC for Discharge Point 002 is 35.7% effluent.

5. Following Paragraph 10.2.6.2 of USEPA's chronic freshwater test methods manual (EPA/821/R-02/013, 2002), all chronic toxicity test results from the multi-concentration tests required by this Order/Permit must be reviewed and reported according to USEPA guidance on the evaluation of concentration-response relationships found in Method Guidance and Recommendations for Whole Effluent Toxicity (WET) Testing (40 CFR 136) (EPA/821/B-00-004, 2000).

6. Because this Order/Permit requires sublethal hypothesis testing endpoints from test methods in Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine

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Organisms (EPA/600/R-95/136, 1995), within-test variability must be reviewed for acceptability and a variability criterion (upper %MSD bound) must be applied, as directed under each test method. Based on this review, only accepted effluent toxicity test results shall be reported on the DMR form. If excessive within-test variability invalidates a test result, then the Discharger must resample and retest within 14 days.

7. If the discharged effluent is chlorinated, then chlorine shall not be removed from the effluent sample prior to toxicity testing without written approval by the permitting authority.

8. 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

If the effluent toxicity test result exceeds the toxicity 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~~three~~ days of the test results exceeding the toxicity limitation.

1. If all results of the six additional tests are in compliance with the toxicity limitation, then the Discharger may resume regular monthly testing.

2. If the result of any of the six additional tests exceeds the toxicity 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 additional tests (any two tests in the 12-week period) exceed the toxicity limitation, then the Discharger shall ~~initiate a Toxicity Identification Evaluation (TIE) and~~ implement the initial investigation Toxicity Reduction Evaluation (TRE) Workplan.

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4. If implementation of the initial investigation TRE workplan (see item E, 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 Workplan

The Discharger shall prepare and submit a copy of the Discharger's Initial Investigation Toxicity Reduction Evaluation (TRE) workplan to the Regional Water Board Executive Officer for approval and USEPA within 90 days of the effective date of this Order/Permit. If the Executive Officer does not disapprove the workplan within 60 days, the workplan shall become effective. The Discharger shall use USEPA manual EPA/833B-99/002 (municipal), or most current version, as guidance. At a minimum, the workplan must contain the provisions in Attachment G. This workplan shall describe the steps the Discharger intends to follow if toxicity is detected, and should include, 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 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). See MRP section V.F.3 for guidance manuals.

F. Steps in Toxicity Reduction Evaluation (TRE) and Toxicity Identification Evaluation (TIE)

1. If results of the implementation of the Initial Investigation TRE Workplan indicate the need to continue the TRE/TIE, then Discharger shall expeditiously develop a more detailed TRE Workplan for submittal to the Executive Officer and USEPA within 15 days of completion of the initial investigation TRE. The detailed workplan shall include, but not be limited to:

   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:

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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 Toxicity Identification Evaluation (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.

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

4. If a TRE/TIE is initiated prior to completion of the accelerated testing required in section V.D. 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 and USEPA.

G. Ammonia Removal

1. Except with prior approval from the Regional Water Board Executive Officer and USEPA, 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 and USEPA would allow for control of pH in the test.

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

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

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

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

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

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/Permit. Test results shall be reported in Acute Toxic Units (TUa) or Chronic Toxic Units (TUc), as required, with the self-monitoring report (SMR) and the discharge monitoring report (DMR) 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, then those results also shall be submitted with the DMR and SMR for the period in which the investigation occurred.

1. The full report shall be received by the Regional Water Board and USEPA by the 15th day of the second month following sampling.

2. A full laboratory report for all toxicity testing shall be submitted as an attachment to the SMR and DMR for the month in which the toxicity test was conducted and shall also include: the toxicity test results reported according to the test methods manual chapter on report preparation and test review; the dates of sample collection and initiation of each toxicity test; all results for effluent parameters monitored concurrently with the toxicity test(s); and progress reports on TRE/TIE investigations. Routine reporting shall include, at a minimum, as applicable for each toxicity test:

a. sample collection date(s)

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b. test initiation date

c. test species

d. end point values for each dilution (e.g. number of young, growth rate, percent survival)

e. LC_{50} value(s) in percent effluent

f. TUa value(s) $\left(TU_a = \frac{100}{LC50}\right)$

g. NOEC value(s) in percent effluent

h. TUc values $\left(TU_c = \frac{100}{NOEC}\right)$

i. Mean percent mortality (+standard deviation) after 96 hours in 100% effluent (if applicable)

j. IC/EC_{25} value(s) in percent effluent

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

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

3. The Discharger shall provide a compliance summary that includes a summary table of toxicity data from at least eleven of the most recent effluent samples for toxicity testing.

4. The Discharger shall notify the Regional Water Board and USEPA of any exceedance of a toxicity limitation, in writing, within 14 days after the receipt of the test results. 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 permit, with a schedule for actions not yet completed. If no actions have been taken, the reasons shall be given.

VI. RECEIVING WATER MONITORING REQUIREMENTS

(For footnotes, see page E-43.)

A. Inshore Water Quality Monitoring

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

1. The Discharger shall monitor the following 11 inshore stations ~~(Figure 1)~~:

Table 5. Inshore Monitoring Stations

Inshore Monitoring Stations								
Station	**Latitude***		**Longitude***		**Station**	**Latitude***		**Longitude***	
RW-IS-01	33	59.833	118	48.067	RW-IS-07	33	58.550	118	28.317
RW-IS-02	34	00.950	118	46.967	RW-IS-08	33	57.567	118	27.583
RW-IS-03	34	01.717	118	44.117	RW-IS-09	33	56.900	118	27.133
RW-IS-04	34	01.833	118	40.383	RW-IS-10	33	56.283	118	26.817
RW-IS-05	34	02.050	118	34.833	RW-IS-11	33	50.000	118	23.850
RW-IS-06	34	00.201	118	29.923					

Note: IS-01 to IS-11 shall be sampled at a distance of 100 ft from the shoreline or at the 30-ft depth contour, whichever is further from shore (except that station IS-11 is located at King Harbor in Redondo Beach).

* Given in decimal minutes.

Eleven inshore water quality sampling stations shall be sampled at a distance of 1000 feet from the shoreline or at the 30-foot depth contour, whichever is further from shore (except that station IS-11 is located at King Harbor in Redondo Beach). The stations shall be designated and located as shown in Table 5.

~~2. .~~ Parameters to be monitored at the 11 stations are as follows:

Table 6. Inshore Microbiological Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical ~~-~~Test Method
Total coliform	CFU/100 mL or MPN/100mL	Grab at surface and midwater	Annually (summer)[1]	15
Fecal coliform	CFU/100 mL or MPN/100mL	Grab at surface and midwater	Annually (summer)[1]	15
Enterococcus	CFU/100 mL or MPN/100mL	Grab at surface and midwater	Annually (summer)[1]	15

B. Offshore Water Quality Monitoring

This monitoring addresses the compliance questions: "Are Ocean Plan and Basin Plan objectives for physical and chemical parameters and bacteria being met?" Water quality data collected provide the information necessary to demonstrate compliance with the water quality standards. In addition, data collected by the City of Los Angeles contribute to the Central Bight Cooperative Water Quality Survey. This regionally coordinated survey provides integrated water quality surveys on a

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quarterly basis and covers more than 200 kilometers of coast in Ventura, Los Angeles, ~~and~~ Orange, and San Diego Counties, from the nearshore to approximately 10 kilometers offshore. This cooperative program contributes to a regional understanding of seasonal patterns in water column structure. The regional view provides context for determining the significance and causes of locally observed patterns in the area of wastewater outfalls.

1. ~~–~~The Discharger shall monitor the following 54 offshore stations (Figure 1~~3~~):

Table 7. Offshore Monitoring Stations

Offshore Monitoring Stations										
Station	Latitude*		Longitude*		Station	Latitude*		Longitude*	
RW-OS-3201	33	51.250	118	24.367	RW-OS-3604**	33	56.416	118	30.586
RW-OS-3202	33	50.917	118	25.067	RW-OS-3605**	33	55.666	118	32.133
RW-OS-3203	33	50.717	118	25.583	RW-OS-3606**	33	55.000	118	33.500
RW-OS-3204**	33	50.217	118	26.433	RW-OS-3701	33	59.166	118	29.166
RW-OS-3205**	33	49.433	118	27.817	RW-OS-3702	33	58.800	118	30.000
RW-OS-3206	~~-~~33	49.4~~6~~66	118	29.567	RW-OS-3703	33	58.450	118	30.600
RW-OS-3301	33	53.583	118	25.633	RW-OS-3704**	33	58.000	118	31.533
RW-OS-3302	33	53.350	118	26.183	RW-OS-3705**	33	57.216	118	33.216
RW-OS-3303	33	53.133	118	26.800	RW-OS-3706**	33	56.550	118	34.500
RW-OS-3304**	33	52.767	118	27.417	RW-OS-3801	34	2.000	118	35.000
RW-OS-3305**	33	52.100	118	29.600	RW-OS-3802	34	1.550	118	35.250
RW-OS-3306**	33	51.067	118	31.633	RW-OS-3803	34	0.350	118	35.833
RW-OS-3401	33	54.150	118	25.950	RW-OS-3804**	33	59.600	118	36.250
RW-OS-3402	33	54.000	118	26.833	RW-OS-3805**	33	58.333	118	36.850
RW-OS-3403	33	54.066	118	27.600	RW-OS-3806	33	57.366	118	37.416
RW-OS-3404**	33	53.816	118	28.116	RW-OS-3901	34	1.650	118	43.000
RW-OS-3405**	33	53.233	118	30.383	RW-OS-3902	34	1.166	118	43.000
RW-OS-3406**	33	52.750	118	32.133	RW-OS-3903	34	0.666	118	43.000
RW-OS-3501	33	55.883	118	26.883	RW-OS-3904**	33	59.850	118	43.000
RW-OS-3502	33	55.666	118	27.616	RW-OS-3905	33	57.616	118	43.000
RW-OS-3503	33	55.433	118	28.350	RW-OS-3906	33	56.566	118	43.000
RW-OS-3504**	33	55.000	118	29.650	RW-OS-4001	33	59.716	118	48.316
RW-OS-3505**	33	54.550	118	31.516	RW-OS-4002	33	59.300	118	48.316
RW-OS-3506**	33	54.000	118	32.983	RW-OS-4003**	33	58.833	118	48.316
RW-OS-3601	33	57.584	118	27.975	RW-OS-4004	33	57.500	118	48.316
RW-OS-3602	33	57.333	118	28.666	RW-OS-4005	33	55.683	118	48.316
RW-OS-3603	33	56.966	118	29.416	RW-OS-4006	33	54.750	118	48.316

* Given in decimal minutes.
** Discrete stations of the Central Bight Cooperative Water Quality Survey.

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2. Parameters to be monitored at the 54 offshore stations are as follows:

Table 8. Offshore Water Quality Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Dissolved oxygen	mg/L	continuous profile[3]	quarterly	[15]
Water temperature	°C	continuous profile[3]	quarterly	[15]
Salinity	ppt	continuous profile[3]	quarterly	[15]

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Transmissivity	% transmission	continuous profile[3] or Beam C	quarterly	[15]
Chlorophyll a	µg/L	continuous profile[3]	quarterly	[15]
pH	pH units	continuous profile[3]	quarterly	[15]
Ammonia	µg/L	discrete sampling at specified depth[2]	quarterly	[15]
Fecal coliform	CFU/100 mL or MPN/100mL	discrete sampling at specified depth[2]	quarterly	[15]
Total coliform	CFU/100 mL or MPN/100mL	discrete sampling at specified depth[2]	quarterly	[15]
Enterococcus	CFU/100 mL or MPN/100mL	discrete sampling at specified depth[2]	quarterly	[15]
Visual observations[4]	---	---	quarterly	[15]

3. Sampling Design - Fifty-four offshore water quality stations shall be sampled quarterly by a CTD profiler (see Figure 1). Water quality methods and protocols shall follow those described in the most current edition of the Field Operations Manual for Marine Water Column, Benthic, and Trawl Monitoring in Southern California. Visual observations shall be recorded at each station.

   Concurrent with the CTD profiling survey, discrete samples shall be collected quarterly at all 21 offshore discrete sampling stations for ammonia and fecal coliform, total coliform and ~~e~~*E*nterococcus at fixed depths of 1, 15, 30, and 45 meters (or as deep as practical for those stations located in depths less than 45 m) as noted in Table 7.

4. Whenever there is any discharge to the 1-mile outfall (Discharge Point 001), the following additional offshore sampling shall be conducted at Station A-2 (see Benthic and Trawl Stations table in Benthic Sediments Monitoring under Table 1 and Figure 2) and two additional stations within approximately 50 meters~~feet~~ of the discharge point:

Table 9. Additional Offshore Water Quality Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Total chlorine residual	~~µ~~mg/L	Grab[2,5]	Once per discharge day	[15]
Fecal coliform	CFU/100 mL or MPN/100mL	Surface & bottom grab[6]	Once per discharge day	[15]
Total coliform	CFU/100 mL or MPN/100mL	Surface & bottom grab[6]	Once per discharge day	[15]
Enterococcus	CFU/100 mL or MPN/100mL	Surface & bottom grab[6]	Once per discharge day	[15]

C. Benthic Infauna and Sediment Chemistry Monitoring

1. Local Benthic Trends Survey

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This survey addresses the question: "Are benthic conditions under the influence of the discharge changing over time?" The data collected are used for regular assessment of trends in sediment contamination and biological response along a fixed grid of sites within the influence of the discharge.

a. Sampling Design - Benthic infauna and sediment chemistry monitoring stations in Table 10 shall be sampled in summer (July – September) for the parameters in Table 11. Separate samples shall be collected for benthic infauna and sediment chemistry.

Forty-four benthic monitoring stations (24 fixed stations plus one set of 20 random stations) shall be sampled annually for benthic infauna community analysis[7]. Random station sets A and B shall be sampled in alternate years. The entire contents of each sample shall be passed through a 1.0 millimeter screen to retain ~~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.

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Table 10. Benthic ~~I~~infauna, Sediment Chemistry, and Trawl Monitoring Stations

Benthic and Trawl Monitoring Stations

Station	Latitude*		Longitude*	
FIXED GRID STATIONS				
RW-A-1 (T)	33	59.183	118	30.117
RW-A-2	33	55.117	118	26.883
RW-A-3 (T)	33	52.050	118	25.000
RW-B-1	34	00.417	118	42.933
RW-B-3	34	00.350	118	35.833
RW-B-5	33	57.983	118	31.533
RW-B-6	33	56.467	118	30.567
RW-B-7	33	55.283	118	29.500
RW-B-8	33	53.800	118	28.450
RW-B-10	33	50.483	118	24.940
RW-C-1 (T)	33	59.833	118	43.050
RW-C-3 (T)	33	59.383	118	36.033
RW-C-5	33	57.167	118	33.233
RW-C-6 (T)	33	55.683	118	32.083
RW-C-7	33	53.583	118	32.250
RW-C-8	33	52.750	118	31.417
RW-C-9A (T)	33	51.283	118	26.283
RW-D-1 (Benthic)	33	54.700	118	33.000
RW-D-1T (T)**	33	54.805	118	32.215
RW-E-1	33	59.057	118	42.867
RW-E-3	33	58.317	118	36.867
RW-E-6	33	55.700	118	33.417
RW-E-10	33	49.405	118	27.880
RW-Z-1	33	54.883	118	31.500
RW-Z-2 (T)	33	54.450	118	31.467
RW-Z-3 (T)**	33	54.005	118	30.395
RW-Z-4 (T)**	335	57.02	118	30.579
YEAR 1 RANDOM STATIONS				
RW-NA-1	33	53.396	118	31.190
RW-NA-2	33	54.054	118	30.907
RW-NA-3	33	54.199	118	32.025
RW-NA-4	33	55.061	118	30.380
RW-NA-5	33	55.167	118	31.114
RW-NA-6	33	56.041	118	31.636
RW-FA-7	33	52.397	118	29.837
RW-FA-8	33	52.675	118	32.650
RW-FA-9	33	52.981	118	29.263
RW-FA-10	33	53.132	118	30.983
RW-FA-11	33	53.594	118	30.105
RW-FA-12	33	53.870	118	29.438
RW-FA-13	33	54.398	118	34.130
RW-FA-14	33	54.874	118	28.602
RW-FA-15	33	55.073	118	33.387
RW-FA-16	33	55.966	118	30.050
RW-FA-17	33	56.086	118	33.208
RW-FA-18	33	56.612	118	29.351
RW-FA-19	33	56.671	118	32.167
RW-FA-20	33	57.157	118	31.470
RW-Random1A (T)**	33	54.874	118	28.602
RW-Random2A (T)**	33	52.397	118	29.837
RW-Random3A (T)**	33	51.451	118	28.185
YEAR 2 RANDOM STATIONS				
RW-NB-1	33	54.325	118	33.022
RW-NB-2	33	54.490	118	30.105
RW-NB-3	33	54.883	118	32.057
RW-NB-4	33	54.905	118	30.594
RW-NB-5	33	55.261	118	32.981
RW-NB-6	33	55.620	118	29.888
RW-NB-7	33	55.670	118	31.887
RW-NB-8	33	56.212	118	30.826
RW-FB-9	33	52.493	118	31.105
RW-FB-10	33	53.017	118	29.854
RW-FB-11	33	53.087	118	33.191
RW-FB-12	33	53.249	118	30.759
RW-FB-13	33	53.282	118	29.015
RW-FB-14	33	53.616	118	33.900
RW-FB-15	33	54.194	118	28.841
RW-FB-16	33	55.102	118	29.375
RW-FB-17	33	56.220	118	33.825
RW-FB-18	33	56.407	118	29.231
RW-FB-19	33	56.690	118	31.871
RW-FB-20	33	56.858	118	30.287
RW-Random1B (T)**	33	56.220	118	33.825
RW-Random2B (T)**	33	56.407	118	29.231
RW-Random3B (T)**	33	53.017	118	29.854

* Given in decimal minutes.
** Trawl site only.
(T) Trawl stations.

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For benthic infauna community analysis, the following determinations shall be made at each station, where appropriate: Identification of all organisms to lowest possible taxon; community structure analysis[7]; mean, range, standard deviation, and 95% confidence limits, if appropriate, for

value determined in the community analysis. The Discharger shall conduct additional statistical analyses to determine temporal and spatial trends in the marine environment.

Forty-four benthic monitoring stations (24 fixed stations plus one set of 20 random stations) shall also be sampled annually for Grain Size (sufficiently detailed to calculate percent weight in relation to phi size) and TOC; random station sets A and B shall be sampled in alternate years. Four benthic monitoring stations (RW- C1, C6, Z2, and E6) shall be sampled annually for Dissolved Sulfides. Nine benthic monitoring stations (RW- Z2, C1, C3, C6, C7, RW-C8, C9a, D1, and E6) shall be sampled annually for selected priority pollutants and compounds on the local 303(d) list; see Table 11. All 64 benthic monitoring stations (24 fixed stations plus both sets of 20 random stations) shall be sampled in year five of the Order/Permit for selected priority pollutants and compounds on the local 303(d) list; see Table 11.

Table 11. Benthic ~~l~~infauna and Sediment Chemistry Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Benthic Infauna	--	0.1 square meter Van Veen grab ~~(upper 2 centimeters)~~	Annually	15
Grain Size	Phi size	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	15
Total organic carbon	mg/kg	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	15
Dissolved Sulfides	mg/kg	0.1 square meter Van Veen grab (upper 2 centimeters, porewater)	Annually	15
Organic nitrogen	mg/kg	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	15
Priority Pollutants for Sediment Chemistry				
Arsenic	~~µ~~mg/kg	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	15
Cadmium	~~µ~~mg/kg	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	15
Chromium	~~µ~~mg/kg	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	15
Copper	~~µ~~mg/kg	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	15
Lead	~~µ~~mg/kg	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	15
Mercury	~~µ~~mg/kg	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	15
Nickel	~~µ~~mg/kg	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	15
Silver	~~µ~~mg/kg	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	15
Zinc	~~µ~~mg/kg	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	15

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Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Total DDT[13]	µg/kg	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	15
DDT derivatives[8]	µg/kg	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	15
Total PCB[14]	µg/kg	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	15
PCB derivatives[9]	µg/kg	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	15
Compounds on local 303(d) list	µg/kg	0.1 square meter Van Veen grab (upper 2 centimeters)	Annually	15

2. Local Benthic Mapping Survey

   a. Sampling Design - The benthic monitoring station array utilized was designed as a fixed station/random station combination, incorporating 246 stations from the old sampling array and two sets of 20 newly designated randomly positioned stations. These stations shall be sampled in alternate years for the purposes of monitoring benthic infaunal community and sediment chemistry changes resulting from the implementation of full secondary treatment at Hyperion Treatment Plant. The goal is to develop a better depiction of any impact footprint resulting from the discharge using a probabilistic monitoring approach.

   b. The Discharger shall evaluate monitoring data collected between January 1999 and December 2009 using a fixed station/random station combination, and any other relevant data, to assess the mapping ability of this benthic station array. The goal is to determine if the spatial coverage is appropriate to adequately delineate any changes and describe the extent of the footprint of any impacts. Following the analysis, the station array will be assessed and any recommendations for change will be submitted to the Regional Water Board Executive Officer and USEPA.

3. 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 biological communities in the Bight.

   Sampling Design - A regional survey of benthic conditions within the Southern California Bight took place in 2008 (Bight '08). The final survey design was determined cooperatively by participants represented on the Regional Steering

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Committee. The Discharger provided support to the Bight '08 benthic survey by participating in or performing the following activities:

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

This level of participation was consistent with that provided by the Discharger during the 2008, 2003, ~~and~~ 1998, and 1994 Regional Benthic Surveys. The next regional survey is expected to take place in 2013 and the Discharger's level of participation shall be consistent with that provided in previous surveys.

D. Fish and Macroi~~l~~nvertebrate (Trawl and Rig Fishing) Monitoring

1. Local Demersal Fish and Macroinvertebrates Survey

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

Sampling Design - ~~—~~Ten trawl monitoring stations (7 fixed stations plus one set of 3 random stations; see Table 12) shall be sampled in winter (January – March) and summer (July – September) for demersal fish and epibenthic invertebrates, using 10-minute otter trawls. Random station sets A and B shall be sampled in alternate years. Sampling methods and protocols shall follow those described in the most current edition of the Field Operations Manual for Marine Water Column, Benthic, and Trawl Monitoring in Southern California.

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Table 12. Local Demersal Fish and Macroinvertebrates Monitoring Stations

Trawl Monitoring Stations								
Station	Latitude*		Longitude*		Station	Latitude*		Longitude*	
FIXED GRID STATION					**YEAR 1 RANDOM STATIONS**				
RW-C-1 (T)	33	59.833	118	43.050	RW-Random1A (T)**	33	54.874	118	28.602
RW-C-3 (T)	33	59.383	118	36.033	RW-Random2A (T)**	33	52.397	118	29.837
RW-C-6 (T)	33	55.683	118	32.083	RW-Random3A (T)**	33	51.451	118	28.185
RW-Z-2 (T)	33	54.450	118	31.467	**YEAR 2 RANDOM STATIONS**				
RW-Z-3 (T)**	33	54.005	118	30.395	RW-Random1B (T)**	33	56.220	118	33.825
RW-Z-4 (T)**	335~~57.02~~82		118	30.579	RW-Random2B (T)**	33	56.407	118	29.231
RW-D-1T (T)**	33	54.805	118	32.215	RW-Random3B (T)**	33	53.017	118	29.854

* Given in decimal minutes.
** Trawl site only.
(T) Trawl stations.

All organisms captured shall be identified to the lowest possible taxon and counted. Fish shall be size-classed. Wet-weight biomass shall be estimated for all species. Each individual captured shall be examined for the presence of externally evident signs of disease or anomaly. Estimates of type, quantity, and weight of trash and debris in each trawl shall be made. Community analysis[10] shall be conducted for fish and macroinvertebrates at each station. Mean, range, standard deviation, and 95% confidence limits, if appropriate, shall be reported for the values determined in the community analysis. The Discharger ~~may~~ shall conduct additional statistical analyses to determine temporal and spatial trends in the marine environment.

2. Regional Demersal Fish and Macroi~~l~~nvertebrates Survey

This survey addresses the questions: 1) "What is the extent, distribution, magnitude and trend of ecological change in demersal fish and epibenthic invertebrate communities 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 health of biological resources in the Bight.

Sampling Design - ~~—~~A regional survey of trawl-caught demersal fish and epibenthic invertebrates within the Southern California Bight took place in 2008 (Bight '08). The final survey design was determined cooperatively by the participants as represented in the Regional Steering Committee. The Discharger provided support to the Bight '08 survey by participating in or performing the following activities:

~~—~~Participation on the Steering Committee

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

This level of participation was consistent with that provided by the Discharger during the 2008, 2003, and 1998 Regional Surveys. The next regional survey is expected to take place in 2013 and the Discharger's level of participation shall be consistent with that provided in previous surveys.

3. Bioaccumulation and Seafood Safety Monitoring

a. Local Bioaccumulation Trends Survey

This survey addresses the question: "Are fish tissue contamination levels in the vicinity of the outfall changing over time?" The data collected are used for regular assessment of temporal trends in horneyhead turbot tissue.

Sampling Design - ~~:~~ Three survey sites (Table 13) shall be sampled annually for the parameters in Table 14. The composite sample for muscle tissue and the composite sample for liver tissue for a survey site can be taken from any station within that survey site.

Table 13. Local Bioaccumulation Sampling Zones

Station Type	Monitoring Location Name	Monitoring Location Description
Bottom Station	RW-BA-Z4	**Zone 4 (south Santa Monica Bay)** - ~~:~~ Inshore of the 150 meter depth contour and between a line bearing 235° magnetic off the south end of the Redondo Beach Pier and a line bearing 240° magnetic off the south entrance of Marina Del Rey. This zone includes the Redondo Piers, the north rim of the Redondo Canyon, Short Bank, and the 1-, 5-, and 7-mile Hyperion outfalls.
Bottom Station	RW-BA-Z5	**Zone 5 (north Santa Monica Bay)** -~~:~~ Inshore of the 150-meter depth contour and between a line bearing 240° magnetic off the south entrance of Marina del Rey and a line bearing 180° magnetic off Point Dume. This zone includes the Santa Monica beaches, Venice and Santa Monica Piers, Paradise Cove and most of Point Dume Canyon.
Bottom Station	RW-BA-NF	**Nearfield** - ~~:~~ A 2-km radius around the 5-mile outfall (Discharge Point 002).

Table 14. Local Bioaccumulation Monitoring Requirements

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Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
% moisture	%	Composite of liver tissue from 10 individuals of hornyhead turbot	annually	[15]
		Composite of muscle tissue from 10 individuals of hornyhead turbot	annually	[15]
% lipid	%	Composite of liver tissue from 10 individuals of hornyhead turbot	annually	[15]
		Composite of muscle tissue from 10 individuals of hornyhead turbot	annually	[15]
Arsenic	µg/kg	Composite of liver tissue from 10 individuals of hornyhead turbot	annually	[15]
		Composite of muscle tissue from 10 individuals of hornyhead turbot	annually	[15]
Selenium	µg/kg	Composite of liver tissue from 10 individuals of hornyhead turbot[‡]	annually	[15]
		Composite of muscle tissue from 10 individuals of hornyhead turbot	annually	[15]
Mercury	µg/kg	Composite of liver tissue from 10 individuals of hornyhead turbot[‡]	annually	[15]
		Composite of muscle tissue from 10 individuals of hornyhead turbot	annually	[15]
Total DDT[13]	µg/kg	Composite of liver tissue from 10 individuals of hornyhead turbot	annually	[15]
		Composite of muscle tissue from 10 individuals of hornyhead turbot[‡]	annually	[15]
DDT derivatives[8]	µg/kg	Composite of liver tissue from 10 individuals of hornyhead turbot	annually	[15]
		Composite of muscle tissue from 10 individuals of hornyhead turbot	annually	[15]
Total PCB[14]	µg/kg	Composite of liver tissue from 10 individuals of hornyhead turbot	annually	[15]
		Composite of muscle tissue from 10 individuals of hornyhead turbot	annually	[15]

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Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
PCB derivatives[9]	µg/kg	Composite of liver tissue from 10 individuals of hornyhead turbot	annually	[15]
		Composite of muscle tissue from 10 individuals of hornyhead turbot	annually	[15]

b. Local Seafood Safety Survey

This survey addresses the questions: 1) "Where seafood consumption advisories exist locally, do tissue concentrations of contaminants continue to exceed the Advisory Tissue Concentration (ATC)?"; and 2) "What are tissue contaminant trends relative to the ATC in other species and for other contaminants not currently subject to local consumption advisories?" The data collected will be used to provide information necessary for the management of local seafood consumption advisories.

Sampling Design - A regionally coordinated survey covering Santa Monica Bay employing the sampling design proposed by the Santa Monica Bay Restoration Commission (SMBRC). During years one, three, and five of this Order/Permit, two survey sites (Table 15) shall be sampled annually (late summer/early fall)—focusing on a consistent size class of fish—for the parameters in Table 16. The composite sample for muscle tissue for a survey site can be taken from any station within that survey site.

Table 15. Local Seafood Safety Survey Zones

Station Type	Monitoring Location Name	Monitoring Location Description
Bottom Station	RW-BA-Z4	**Zone 4 (south Santa Monica Bay)** - Inshore of the 150 meter depth contour and between a line bearing 235° magnetic off the south end of the Redondo Beach Pier and a line bearing 240° magnetic off the south entrance of Marina Del Rey. This zone includes the Redondo Piers, the north rim of the Redondo Canyon, Short Bank, and the 1-, 5-, and 7-mile Hyperion outfalls.
Bottom Station	RW-BA-Z5	**Zone 5 (north Santa Monica Bay)** - Inshore of the 150-meter depth contour and between a line bearing 240° magnetic off the south entrance of Marina del Rey and a line bearing 180° magnetic off Point Dume. This zone includes the Santa Monica beaches, Venice and Santa Monica Piers, Paradise Cove and most of Point Dume Canyon.

One species from each of five groups of fish (rockfish, kelpbass, sandbass, surfperches and croakers) shall be sampled from each of the two zones in years one, three and five. For rockfishes, scorpionfish (*Scorpaena guttata*) is the preferred species, followed by bocaccio

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(*Sebastes paucispinis*) and then by any other abundant and preferably benthic rockfish species. For surfperches, black ~~surf~~perch (*Embiotoca jacksoni*) is the preferred species, followed by white sea~~urf~~perch (*Phanerodon furcatus*) and then by walleye surfperch (*Hyperprosopon argenteum*).

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

Table 16. Local Seafood Safety Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
% moisture	%	Composite of muscle tissue from 10 individuals of each of 5 species[10]	Annually during years 1, 3 and 5	15
% lipid	%	Composite of muscle tissue from 10 individuals of each of 5 species[10]	Annually during years 1, 3 and 5	15
Arsenic	µg/kg	Composite of muscle tissue from 10 individuals of each of 5 species[10]	Annually during years 1, 3 and 5	15
Selenium	µg/kg	Composite of muscle tissue from 10 individuals of each of 5 species[10]	Annually during years 1, 3 and 5	15
Mercury	µg/kg	Composite of muscle tissue from 10 individuals of each of 5 species[10]	Annually during years 1, 3 and 5	15
Total DDT[13] [5]	µg/kg	Composite of muscle tissue from 10 individuals of each of 5 species[10]	Annually during years 1, 3 and 5	1535
DDT derivatives[8] [6]	µg/kg	Composite of muscle tissue from 10 individuals of each of 5 species[10]	Annually during years 1, 3 and 5	15815
Total PCB[14] [7]	µg/kg	Composite of muscle tissue from 10 individuals of each of 5 species[10]	Annually during years 1, 3 and 5	1545
PCB derivatives[8] [9]	µg/kg	Composite of muscle tissue from 10 individuals of each of 5 species[10]	Annually during years 1, 3 and 5	15915

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~~c.~~cb. Regional Seafood Safety Survey

This regional survey addresses the question: "Are seafood tissue levels within the Southern California Bight below levels that ensure public safety?" The data collected will be used to assess levels of contaminants in the edible tissue of commercial or recreationally important fish within the Bight relative to Advisory Tissue Concentrations.

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

Participation on a Steering Committee

Participation on relevant Technical Committees (e.g., Information Management, Field Methods & Logistics, and Chemistry)

Field sampling at sea

Tissue chemical analysis

Data management

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

~~c.~~d. Regional ~~Regional Predator Risk Survey~~Bioaccumulation Survey

This regional survey addresses the question: "Are fish body burdens within the Southern California Bight a health risk to higher trophic levels in the marine food web?" The data collected will be used to estimate health risk to marine birds, mammals and wildlife from the consumption of fish tissue.

Sampling Design - A regional survey of whole fish body burdens of contaminants within the Southern California Bight took place in 2008 (Bight '08). The final survey design was determined cooperatively by participants represented on the Regional Steering Committee. The Discharger provided support to the Bight '08 ~~Predator Risk Survey~~Bioaccumulation by participating in or performing the following activities:

Participation on the Steering Committee
Participation on relevant Technical Committees (e.g., Information Management, Field Methods & Logistics, and Chemistry)

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Field sampling at sea
Tissue chemical analysis

This level of participation was consistent with that provided by the Discharger to the 2008, 2003, and 1998 Regional Bioaccumulation/Predator Risk ~~Predator Risk~~ Survey. The next regional survey is expected to occur in 2013 and the Discharger's level of participation shall be consistent with that provided in previous surveys.

E. Kelp Bed Monitoring

This regional survey is to address the question: "Is the extent of kelp beds in the Southern California Bight changing over time and are some beds changing at rates different than others?" The data collected in this regional survey will be used to assess status and trends in kelp bed health and spatial extent. The regional nature of the survey will allow the status of beds local to the discharge to be compared to regional trends.

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

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

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Footnotes for Receiving Water Monitoring Program:

1 The annual sample shall be taken in the summer quarter.

2 Discrete sampling for ammonia nitrogen, fecal coliform, total coliform, ~~e~~*E*nterococcus, and total residual chlorine shall be done below the surface within 1 m (3.1 ft) and at 15.0 m (49.2 ft), 30.0 m (98.4 ft), and 45.0 m (147.6 ft) (or as deep as practical for those stations located in depths less than 45 m).

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

4 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 stations. The character and extent of such matter shall be described. The dates, times and depths of sampling and these observations shall also be reported.

5 The ~~"~~"Daily Maximum"~~"~~ value shall be reported during periods of discharge.

6 Bottom sampling shall be done within 2.0 m (6.6 ft) of~~above~~ the seabed.

7 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.

8 At a minimum, 4,4'-DDT, 2,4'-DDT, 4,4'-DDE, 2,4'-DDE, 4,4'-DDD, and 2,4'-DDD.

9 At a minimum, chlorinated biphenyl congeners whose analytical characteristics resemble those of PCB-18, 28, 37, 44, 49, 52, 66, 70, 74, 77, 81, 87, 99, 101, 105, 110, 114, 118, 119, 123, 126, 128, 138, 149, 151, 153, 156, 157, 158, 167, 168, 169, 170, 177, 180, 183, 187, 189, 194, 201, and 206 shall be individually quantified.

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

11 Where appropriate, individuals collected for both local bioaccumulation trends or local seafood safety comprising the smallest 10 percent by weight shall not be used as part of the composite sample. Individuals for tissue analysis shall be randomly selected from the remaining organisms. It may not be possible to collect the required number of fish every year at each zone. If fish of the target size are absent in a given zone, additional sampling effort need not be attempted. If target size fish are present in a given zone, one additional sampling event shall be conducted to attempt to collect the necessary number of individuals.

12 Tissue samples removed from individuals shall be of uniform weight.

13 Total DDT means the sum of 4,4'-DDT, 2,4'-DDT, 4,4'-DDE, 2,4'-DDE, 4,4'-DDD and 2,4'-DDD.

14 Total PCBs (polychlorinated biphenyls) mean the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-l232, Aroclor-1242, Aroclor-l248, Aroclor-1254 and Aroclor-1260.

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, State Water Board, and USEPA Region 9.

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VII. OTHER MONITORING REQUIREMENTS

A. Special Study – Constituents of Emerging Concern in Effluent

Background

Advancements in analytical technology over the last decade have dramatically increased the number of chemicals that can be detected and greatly decreased the concentrations at which chemicals can be detected. This new ability to detect trace levels of chemical concentrations has expanded the existing understanding of the kinds of contaminants present in water and wastewater. Many man-made chemicals, particularly pesticides, pharmaceuticals and personal care products, have been found in waters across the United States.

Collectively, these compounds are referred to as Emerging Constituents (ECs) or Constituents~~ontaminants~~ of Emerging Concern (CECs) because their presence is starting to be revealed by rapid advances in analytical technology. Despite recent improvements in analytical science, there is still scarcity of data and lack of robust methodologies for measuring most CECs. CECs are part of the unregulated chemicals, for which no water quality standards or State notification levels have been established.

Recent publications and media reports on CECs have increased public awareness of the issue, providing an impetus for CEC investigations around the country, including local efforts by the City of Los Angeles and Southern California Coastal Water Research Project (SCCWRP). For instance, starting in 2005~~9~~, the City of Los Angeles has been conducting a special study as part of Order No. 2005-0020, and results suggest that the presence of natural and synthetic estrogen hormones has caused feminization of male fish (hornyhead turbot) in Santa Monica Bay, especially near the Hyperion Treatment Plant outfall. In January 2010, SCCWRP convened a workshop where 50 scientists, water quality managers, and stakeholders discussed and collaborated on developing an effective CEC monitoring and management strategy that is protective of water quality. Anticipated outcomes of this workshop include recommended lists of CECs for monitoring in recycled water (for groundwater concerns) by the end of 2010, and for monitoring in ambient waters, including ocean waters, by the summer of 2011.

In recent years, this Regional Water Board has incorporated monitoring of a select group of CECs into the NPDES permits issued to POTWs.

CEC Special Study Requirements

1. The Discharger shall initiate an investigation of CECs by conducting a special study. Specifically, within 6 months of the effective date of this Order/Permit, the Discharger shall develop a CEC Special Study Work Plan (Work Plan) and submit it for ~~approval by the~~ Regional Water Board Executive Officer and USEPA Director approval. Immediately upon approval of the Work Plan, the Discharger shall fully implement the Work Plan~~Special Study~~.

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This Work Plan shall include, but not be limited to, the following:

~~i.~~a. Identification of CECs to be monitored in the effluent, sample type (e.g., 24-hour composite), sampling frequency, and sampling methodology. Table 17 identifies the minimum parameters to be monitored.

Table 17. Effluent Monitoring of CECs

Parameter[2]	Units	Sample Type	Minimum Sampling Frequency	Analytical Test Method and (Minimum Level, units)
17α-Ethinyl Estradiol	ng/L	To be proposed	Annually[26]	To be proposed
17β-Estradiol	ng/L	To be proposed	Annually[26]	To be proposed
Estrone	ng/L	To be proposed	Annually[26]	To be proposed
~~Cortisol~~	~~ng/L~~	~~To be proposed~~	~~Annually[26]~~	~~To be proposed~~
~~11-Ketotesosterone~~	~~ng/L~~	~~To be proposed~~	~~Annually[26]~~	~~To be proposed~~
Bisphenol A	ng/L	To be proposed	Annually[26]	To be proposed
Nonylphenol and nonylphenol polyethoxylates	ng/L	To be proposed	Annually[26]	To be proposed
Octylphenol ~~and octylphenol polyethoxylates~~	ng/L	To be proposed	Annually[26]	To be proposed
Polybrominated diphenyl ethers	ng/L	To be proposed	Annually[26]	To be proposed
Acetaminophen	ng/L	To be proposed	Annually[26]	To be proposed
Amoxicillin	ng/L	To be proposed	Annually[26]	To be proposed
Azithromycin	ng/L	To be proposed	Annually[26]	To be proposed
Carbamazepine	ng/L	To be proposed	Annually[26]	To be proposed
Ciprofloxacin	ng/L	To be proposed	Annually[26]	To be proposed
Dilantin	ng/L	To be proposed	Annually[26]	To be proposed
~~Ethylenediamine tetra-acetic acid (EDTA)~~	~~ng/L~~	~~To be proposed~~	~~annually[26]~~	~~To be proposed~~
Gemfibrozil~~,~~	ng/L	To be proposed	A~~a~~nnually[26]	To be proposed
Ibuprofen	ng/L	To be proposed	A~~a~~nnually[26]	To be proposed
Lipitor	ng/L	To be proposed	A~~a~~nnually[26]	To be proposed
~~Methadone~~	~~ng/L~~	~~To be proposed~~	~~annually[26]~~	~~To be proposed~~
~~Morphine~~	~~ng/L~~	~~To be proposed~~	~~annually[26]~~	~~To be proposed~~
~~Primidone~~	~~ng/L~~	~~To be proposed~~	~~annually[26]~~	~~To be proposed~~
Sulfamethoxazole	ng/L	To be proposed	A~~a~~nnually[26]	To be proposed
Trimethoprim	ng/L	To be proposed	A~~a~~nnually[26]	To be proposed
Salicylic acid	ng/L	To be proposed	A~~a~~nnually[26]	To be proposed
Triclosan	ng/L	To be proposed	a~~a~~nnually[26]	To be proposed
DEET	ng/L	To be proposed	A~~a~~nnually[26]	To be proposed
Caffeine	ng/L	To be proposed	A~~a~~nnually[26]	To be proposed
Iodinated contrast media (i.e., iopromide)	ng/L	To be proposed	A~~a~~nnually[26]	To be proposed
Fire retardants (e.g., TCEP)	ng/L	To be proposed	A~~a~~nnually[26]	To be proposed

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Once the SCCWRP's recommended list of CEC monitoring in ambient waters, including ocean waters, is finalized, the above list of minimum

[2] Given the evolving state of research, science, and policy involving CECs, the Regional Water Board Executive Officer and USEPA Director may add or remove CECs from the monitoring and reporting program.

parameters to be monitored by the Discharger and the sampling frequency may be re-evaluated and modified by the Executive Officer and Director. At such time, upon request by the Executive Officer and Director, the Discharger shall monitor the requested CEC parameters at the specified frequency. In the Work Plan, the Discharger may also propose, for consideration and approval by the Executive Officer and Director, surrogate or indicator CECs that may contribute towards a better understanding of CECs in its effluent.

Sample Type - ~~–~~The Discharger shall propose in the Work Plan the appropriate sample type for each type of constituent.

Sampling Period - ~~–~~At minimum, the Discharger shall monitor the specified CECs once per year. The Work Plan shall propose the appropriate sampling month or quarter for each year, consistent with the goals of the analyses. The rationale for selecting the particular sampling month or quarter shall be explained in the Work Plan.

Analytical Test Methodology and QA/QC - ~~–~~The Discharger shall review and consider all available analytical test methodologies and appropriate QA/QC procedures, including but not limited to those listed in USEPA Methods 1694 and 1698~~, and methodologies approved~~ or utilized by the U.S. Geologic Survey, California Department of Public Health, ~~and~~or other federal or State agencies. Based on its review, the Discharger shall propose the most ~~sensitive~~appropriate analytical methodology, considering sensit~~i~~ivity, accuracy, availabi~~l~~ity~~e~~, and cost.

~~ii.~~

~~iii.~~b. Characterization of existing CEC data (data collected previous to Special Study). The Discharger shall propose a characterization of all existing CEC data (associated with its effluent or receiving water) that have been collected for various purposes in the past. At minimum, the characterization shall include:

- an identification of all CECs monitored to date (outside of this Special Study);
- monitoring duration, frequency, and date(s) (for example, from 2000-present, annually);
- analytical methodologies employed;
- RL, MLs, and MDLs achieved for each methodology used; and
- ~~T~~temporal/seasonal trend analyses (using both statistical and graphical demonstration) of CEC data, over time and by season.

~~iv.~~

~~v.~~c. Evaluation of CEC data collected as part of this Special Study. The Discharger shall propose an evaluation of CEC data (associated with its

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effluent) to be collected as part of this special study. At minimum, the characterization shall include:

~~vi.~~

- an identification of CECs that have been monitored;
- monitoring duration, frequency, and date(s);
- RL, MLs and MDLs achieved for each methodology used;
- a brief update on any improvements (or change) in the analytical methodologies and associated RL, MLs and MDLs achieved for each methodology used; and
- temporal/seasonal trend analyses (using both statistical and graphical demonstration) of CEC data collected as part of this special study.

2. Reporting ~~- —~~By April 15th of each year (starting April 15, 2012), the Discharger shall submit to the Regional Water Board Executive Officer and USEPA Director, an annual report summarizing the monitoring results from the previous calendar year. Each annual report shall include a compilation of effluent monitoring data of CECs listed in the approved Work Plan, MLs, sample type, analytical methodology used, sampling date/time, QA/QC information, and an evaluation of cumulative CEC data collected to date as part of this special study (see above for further details on CEC data evaluation). In addition, the first annual report due April 15, 2012 shall include a characterization of existing CEC data, i.e., all data collected outside of this special study (see above for further details on existing CEC data characterization).

B. Special Study ~~– —~~Nutrient Loading and Receiving Water Impacts

By November 4, 2011, consistent with the logistics described in section I.D.3 of the MRP, the Discharger shall propose, as a special study, a summary assessment of existing nutrient data (both effluent and receiving water) collected under the Order/Permit during the period of secondary treatment and quantify the resulting effects, if any, of the discharge on receiving water quality for dissolved oxygen, pH, and percent transmission~~mittance~~.

~~B.~~C. Outfall and Diffuser 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 ballasting system.

Each ocean outfall (001 and 002) shall be externally inspected a minimum of once a year. Inspections shall include general observations and photographic/videographic records of the outfall pipes and adjacent ocean bottom. The pipes shall be visually inspected by a diver, manned submarine, or remotely operated vehicle. A summary report of the inspection findings shall be provided. This written report, augmented

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with videographic and/or photographic images, will provide a description of the observed condition of the discharge pipes from shallow water to their respective termini. ~~The data collected will be used for a periodic assessment of the integrity of the outfall pipes and ballasting system.~~

~~C.~~D. Biosolids and Sludge Management

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

E~~D~~. Hauling Reports

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

   ~~a.~~Types of wastes and quantity of each type;
   a.
   ~~b.~~
   ~~c.~~Name and either the address or the State registration number for each hauler of wastes (or the method of transport if other than by hauling); and
   b.
   ~~d.~~
   c. Location of the final point(s) of disposal for each type of wastes.

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

VIII. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.

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

3. If the Discharger ~~samples and performs analyses~~monitors (other than for process/operational control, startup, research, or equipment testing) on any influent, effluent, or receiving water constituent more frequently than required by this Order/Permit using approved analytical methods, the results of those analyses shall be included in the monitoring report. These results shall be

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reflected in the calculation of the average (or median) used in demonstrating compliance with this Order/Permit.

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

5. Influent and effluent analyses shall be performed on different days of the week 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 January and July. Annual influent and effluent analyses shall be performed during the month of July. Should there be instances when monitoring cannot be done during these specified months, the Discharger must notify the Regional Water Board and USEPA, state the reason why the monitoring cannot be conducted, and obtain approval from the Regional Water Board Executive Officer and USEPA for an alternate schedule. Results of quarterly, semiannual, and annual analyses shall be reported by the 15th of the second month following the analysis.

6. Pollutants shall be analyzed using the analytical methods described in 40 CFR 136; or where no methods are specified for a particular pollutant, by methods approved by the Regional Water Board Executive Officer, in consultation with the State Water Board's Quality Assurance Program, and USEPA. For any analyses performed for which no procedure is specified in 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. The laboratory conducting analyses shall be certified by the California Department of Public Health Environmental Laboratory Accreditation Program (ELAP), in accordance with CWC section 13176, or approved by the Regional Water Board Executive Officer, in consultation with the State Water Board's Quality Assurance Program, and USEPA for that particular parameter, and must include quality assurance/quality control (QA/QC) data in their reports. A copy of the laboratory certification shall be provided each time a new/renewal certification is obtained from ELAP and must be submitted with the annual summary report. Each monitoring report must affirm in writing that: "All analyses were conducted at a laboratory certified for such analyses by the California Department of Public Health, or approved by the Regional Water Board Executive Officer (in consultation with the State Water Board's Quality Assurance Program) and USEPA, and in accordance with current USEPA guideline procedures or as specified in this MRP."

8. Water/wastewater samples must be analyzed within allowable holding time limits as specified in 40 CFR 136.3. All QA/QC analyses must be run on the same dates that samples are actually analyzed. The Discharger shall retain the QA/QC documentation in its files and make available for inspection and/or submit this documentation when requested by the Regional Water Board and/or

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USEPA. Proper chain of custody procedures must be followed and a copy of this documentation shall be submitted with the monthly report.

9. The Discharger shall calibrate and perform maintenance procedures on all monitoring instruments to insure accuracy of measurements.

10. The Discharger shall report with each sample result in the monitoring reports: the analytical method used, the Method Detection Limit (MDL) as determined by the procedure in 40 CFR 136, and the Reporting Level (RL) [the applicable minimum level (ML) or reported Minimum Level (RML)] for each pollutant. The MLs are those published by the State Water Board in Appendix II of the 2005 Ocean Plan. The ML represents the lowest quantifiable concentration in a sample based on the proper application of all method-based analytical procedures and the absence of any matrix interference. When all specific analytical steps are followed and after appropriate application of method specific factors, the ML also represents the lowest standard in the calibration curve for that specific analytical technique. When there is deviation from the analytical method for dilution or concentration of samples, other factors are applied to the ML depending on the sample preparation. The resulting value is the reported Minimum Level.

11. The Discharger shall select the analytical method that provides a ML lower than the effluent limitation or performance goal established for a given parameter, or where no such requirement exists, the lowest applicable water quality objective in the Ocean Plan. If the effluent limitation or performance goal, or the lowest applicable water quality objective, is lower than all the MLs in Appendix II of the 2005 Ocean Plan, the Discharger must select the method with the lowest ML for compliance purposes. The Discharger shall include in the annual summary reports a list of the analytical methods and MLs employed for each test.

12. Non-detect levels reported for the Hyperion effluent are generally higher than effluent limitations or water quality objectives for DDT, chlordane, PCBs and PAHs. Therefore, the Discharger shall strive for lower analytical detection levels than those specified in Appendix II of the 2005 Ocean Plan to facilitate pollutant load quantification for future DDT and ~~, chlordane,~~ PCBs ~~and PAHs~~ TMDLs.

13. The Discharger shall instruct its laboratories to establish calibration standards so that the ML (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve. In accordance with section 14 below, the Discharger's laboratory may employ a calibration standard lower than the ML in Appendix II of the 2005 Ocean Plan.

14. Upon request by the Discharger, the Regional Water Board, in consultation with the State Water Board's Quality Assurance Program and/or USEPA, may

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establish an ML that is not contained in Appendix II of the 2005 Ocean Plan, to be included in the Discharger's NPDES permit, in any of the following situations:

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

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

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

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

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

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

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

    b. Sample results less than the reported ML, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported. For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration" (may be shortened to "Est. Conc.").

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

16. 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 coliforms, at a minimum; and 1 to 1000 per 100 ml for ~~e~~*E*nterococcus).

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The detection methods used for each analysis shall be reported with the results of the analyses. Detection methods used for coliforms (total and fecal) and ~~*e*~~*Enterococcus* shall be those presented in Table 1A of 40 CFR 136 (most recent revision).

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

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

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

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

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

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

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

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

20. All reports must be submitted to the Regional Water Board and USEPA, signed and certified as required by the Standard Provisions (Attachment D), to the addresses listed below. (Reference the reports to Compliance File No. CI-1492 to facilitate routing to the appropriate staff and file.)

    California Regional Water Quality Control Board
    Los Angeles Region

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320 W. 4th Street, Suite 200
Los Angeles, CA 90013
Attention: Information Technology Unit

Regional Administrator
United States Environmental Protection Agency, Region IX
NPDES Data Team (WTR-1)
75 Hawthorne Street
San Francisco, CA 94105

B. Self Monitoring Reports (SMRs) and Discharge Monitoring Reports (DMRs)

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

2. The Discharger shall report in the SMR/with the DMR the results for all monitoring specified in this Order/Permit. The Discharger shall submit monthly SMRs/DMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order/Permit. If the Discharger monitors any pollutant more frequently than required by this Order/Permit, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the monitoring reports.

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

Table 18. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On…	Monitoring Period	Monitoring Report Due Date
Continuous	Order/Permit effective date	All	By the 15th day of the second month after the month of sampling
Hourly	Order/Permit effective date	Hourly	By the 15th day of the second month after the month of sampling
Daily	Order/Permit effective date	(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling	By the 15th day of the second month after the month of sampling

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Sampling Frequency	Monitoring Period Begins On…	Monitoring Period	Monitoring Report Due Date
Weekly	Sunday following Order/Permit effective date (or on Order/Permit effective date if that date is Sunday)	Sunday through Saturday	By the 15th day of the second month after the month of sampling
Monthly	First day of calendar month following Order/Permit effective date (or on Order/Permit effective date if that date is first day of month)	1st day of calendar month through last day of calendar month	By the 15th day of the second month after the month of sampling
Quarterly	Closest of January 1, April 1, July 1, or October 1 following (or on) Order/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) Order/Permit effective date	January 1 through June 30 July 1 through December 31	August 15 February 15
Annually	January 1 following (or on) Order/Permit effective date	January 1 through December 31	February 15

4. The Discharger shall submit hard copy SMRs in accordance with the following requirements:

   a. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.

   b. SMRs must be submitted to the Regional Water Board, signed and certified as required by the Standard Provisions (Attachment D), to the address listed below. (Reference the reports to Compliance File No. CI-1492 to facilitate routing to the appropriate staff and file.)

      California Regional Water Quality Control Board
      Los Angeles Region
      320 West 4th Street, Suite 200
      Los Angeles, CA 90013
      Attention: Information Technology Unit

5. The Discharger shall submit hard copy DMRs in accordance with the following requirements:

   a. As described in section VIII.B.1 above, at any time during the term of this Order/Permit, 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.

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b. 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 State Water Board address listed below. The Discharger shall submit one copy of the DMR to the USEPA 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, 15th Floor Sacramento, CA 95814
U.S. EPA, Region 9 ATTN: NPDES Data Team (WTR-1) 75 Hawthorne Street San Francisco, CA 94105-3901	

c. All discharge monitoring results must be reported on the official USEPA pre-printed DMR forms (EPA Form 3320-1). Forms that are self-generated must be approved by USEPA.

C. Other Reports

1. 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, as well as graphical and tabular summaries of the monitoring analytical data. The data shall be submitted to the Regional Water Board and USEPA on hard copy and a CD-ROM~~om~~ disk or other appropriate electronic medium. The submitted data must be IBM compatible, preferably using Microsoft Excel software. The Discharger shall discuss the compliance record and any corrective actions taken or planned that may be needed to bring the discharge into full compliance with Order/Permit requirements.

The first annual report shall be due April 15, 2011, covering the sampling period from January 2010 – December 2010.

2. 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 Board and USEPA by August 1 of the following year.

By August 1 of every other year, a detailed receiving water monitoring biennial assessment report of the data collected during the two previous calendar

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sampling years (January – December) shall be prepared and submitted to the Regional Water Board and USEPA. This report shall include an annual data summary and shall also include an in-depth analysis of the biological, chemical, and physical data following recommendations in 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. SCCWRP, Westminster, CA. 101 pp.). Data shall be tabulated, summarized, and graphed where appropriate, analyzed, interpreted, and generally presented in such a way as to facilitate ready understanding of its significance. Spatial and temporal trends shall be examined and compared. The relation of physical and chemical parameters to biological parameters shall be evaluated. See, also, section IV.H of this Monitoring and Reporting Program. All receiving water monitoring data shall be submitted in accordance with the data submittal formats developed for the Southern California Bight Regional Monitoring Surveys.

The first biennial assessment report shall be due August 1, 20112, covering sampling periods ofrom January – December 2009 and January – December 2010. Subsequent reports shall be due August 1, 2013, and August 1, 2015, to cover sampling periods of January 2011 – December 2012 and January 2013 – December 2014, respectively.

3. Outfall Inspection Report

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

The first summary report shall be due August 1, 2011, covering the monitoring period from January 2010 – December 2010.

4. Database Management System

The Regional Water Board and State Water Resources Control Board are developing a database compliance monitoring management system. The Discharger may be required to submit all monitoring and annual summary reports electronically in a specified format when this system becomes fully operational.

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Figure 1. Offshore Water ~~Q~~quality Station Locations

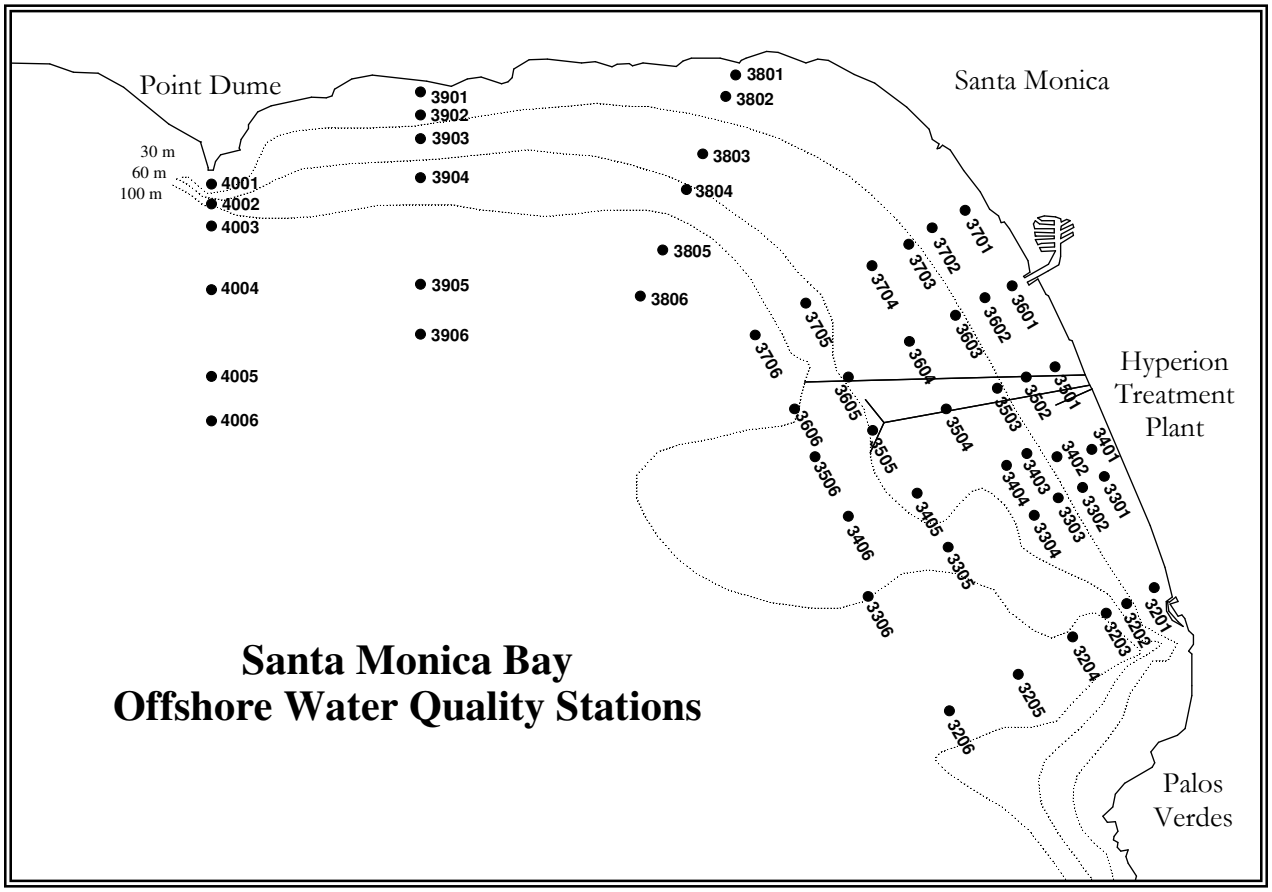

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Figure 2. Offshore Benthic Sediments and Macrofauna Station Locations for Fixed Stations plus Year 1 Random Stations.

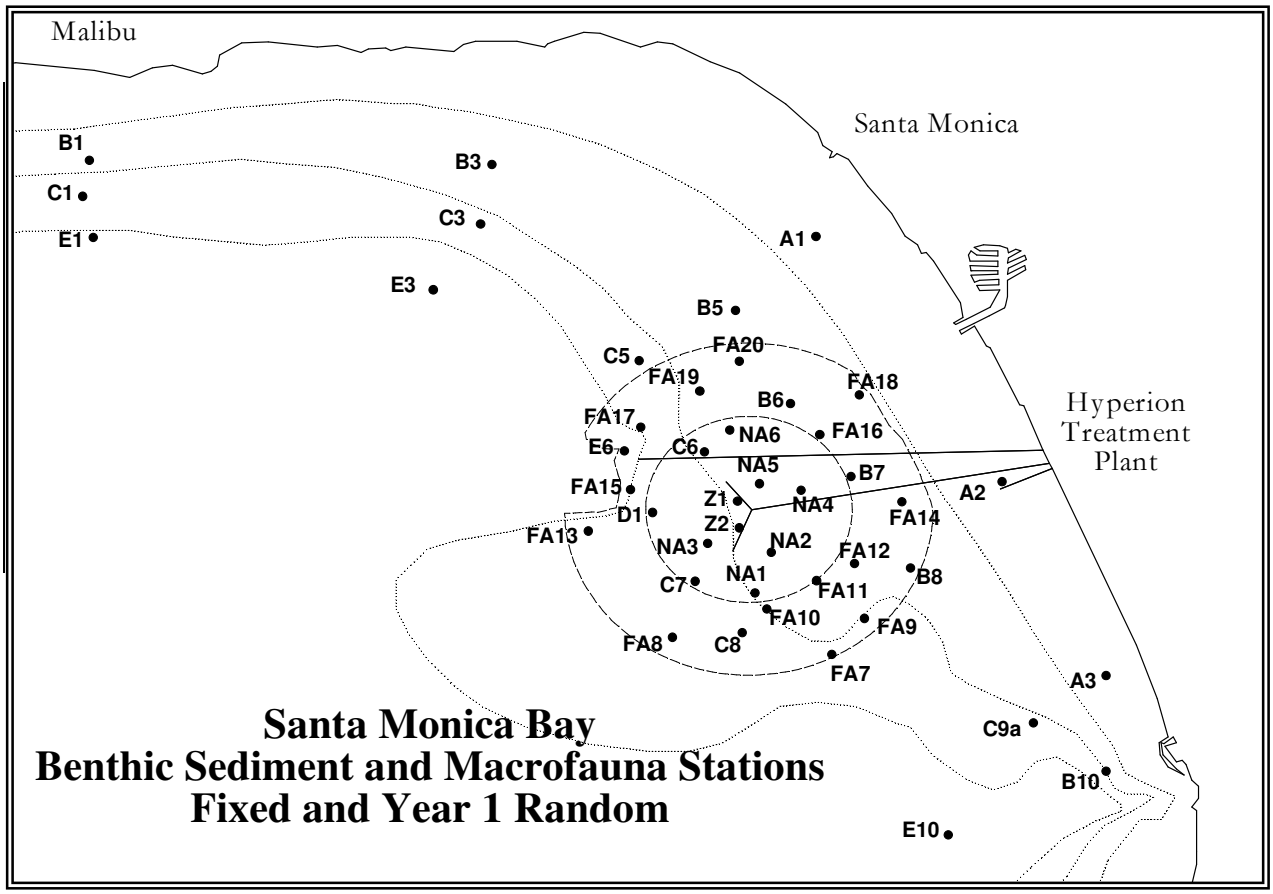

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Figure 3. Offshore Benthic Sediments and Macrofauna Station Locations for Fixed Stations plus Year 2 Random Stations.

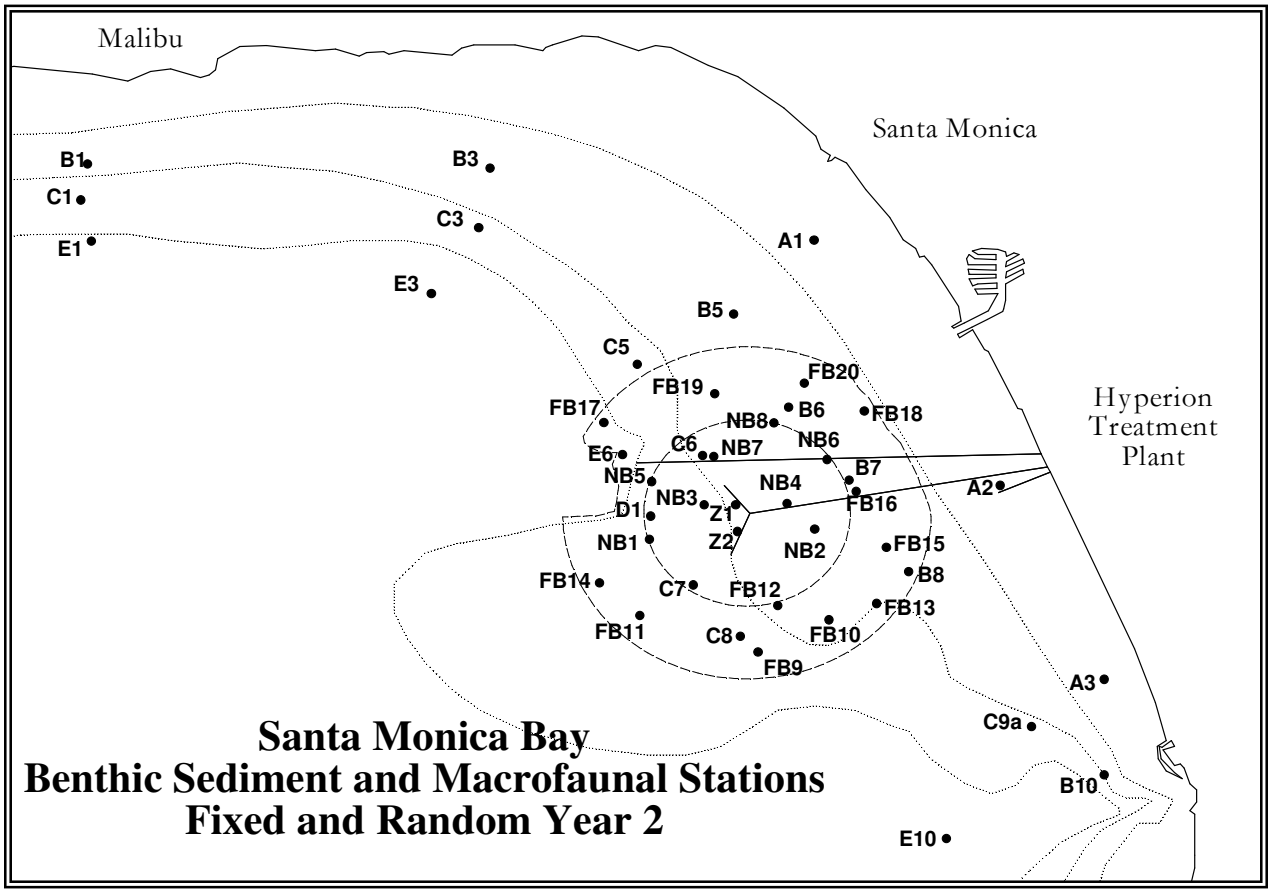

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Figure 4. Trawl Station Locations Including Fixed Stations and Example of a Combined Array of Year 1 and Year 2 Stations.

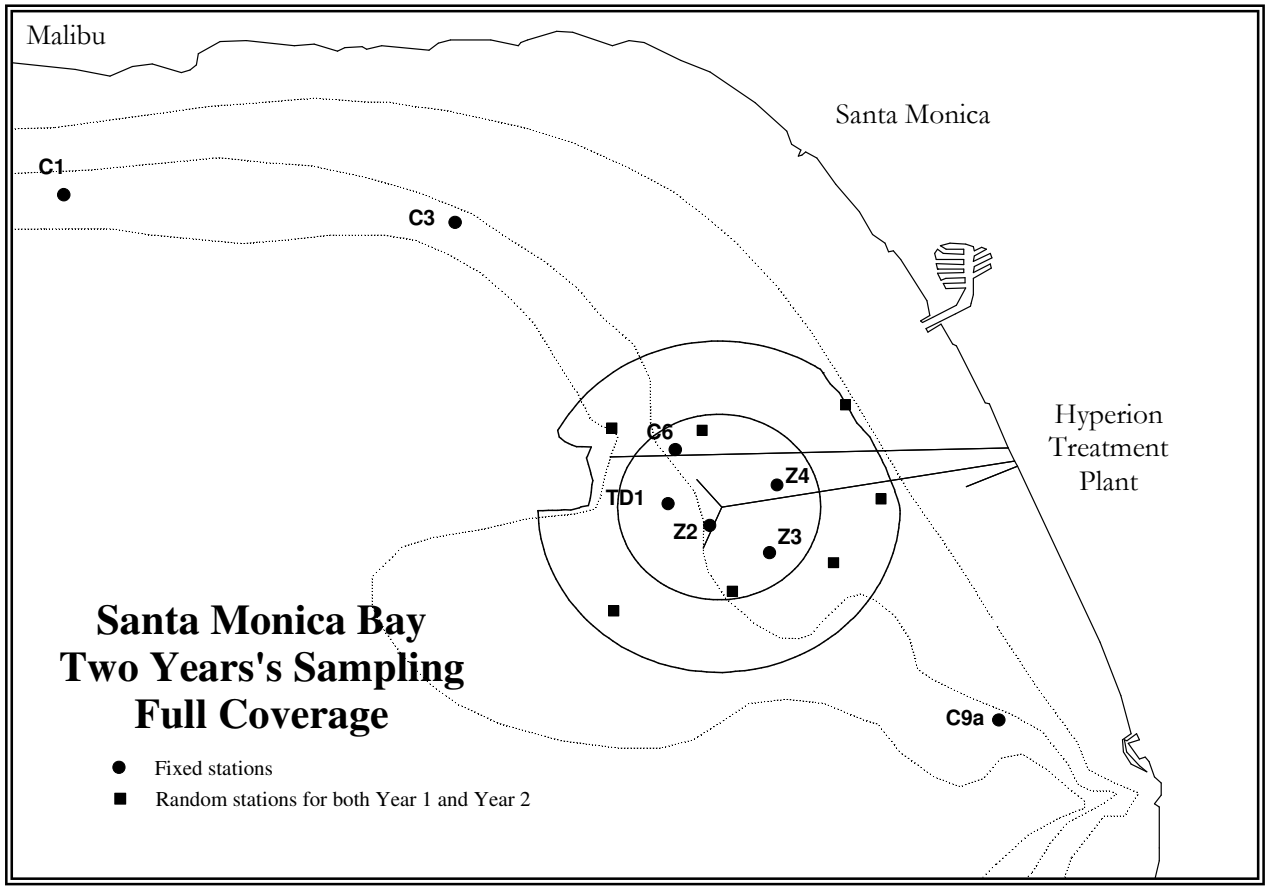

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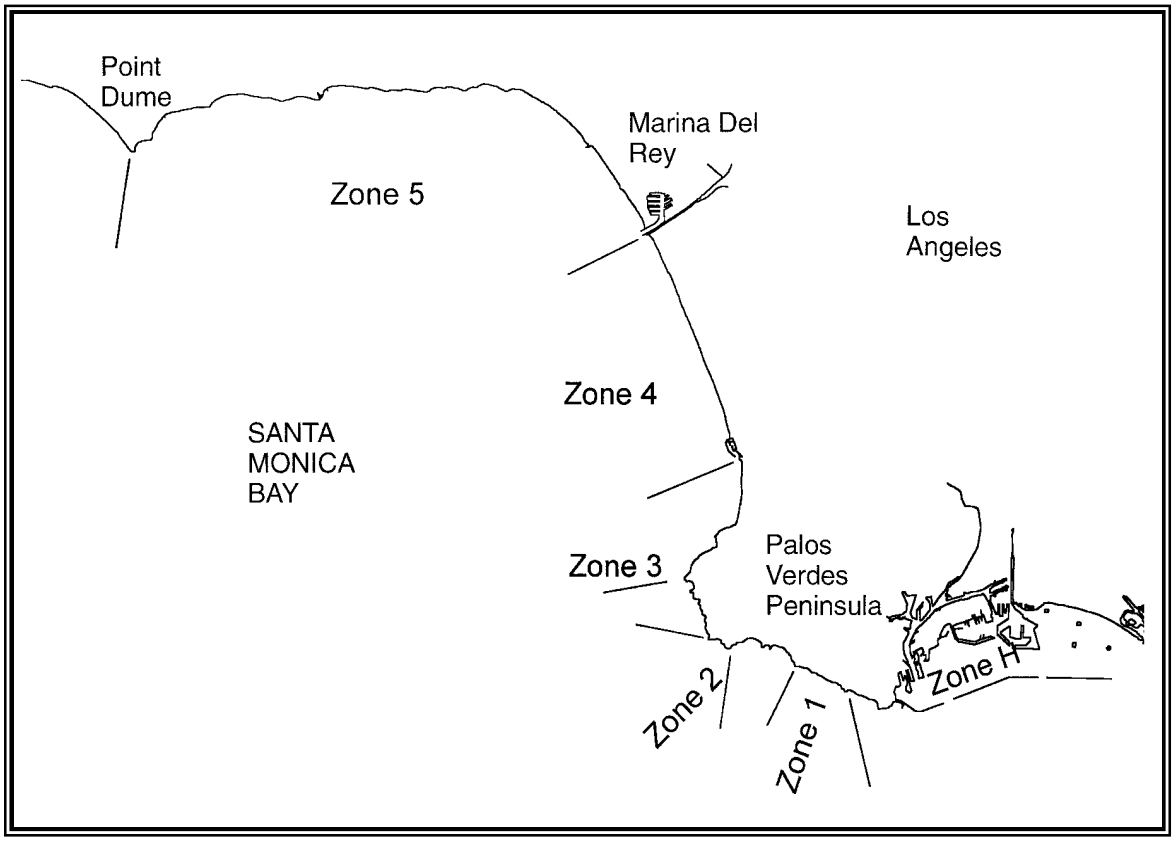
Figure 5. Local Seafood Survey Zones as Defined by SMBRC Seafood Tissue Mmonitoring Design.



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ATTACHMENT F – FACT SHEET

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ATTACHMENT F – FACT SHEET

As described in section II of this Order/Permit, this Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order/Permit.

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

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I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table 1. Facility Information

WDID	
Discharger	City of Los Angeles
Name of Facility	Hyperion Treatment Plant
Facility Address	12000 Vista del Mar Boulevard
	Playa del Rey, CA 90293
	Los Angeles County
Facility Contact, Title and Phone	Steven Fan, Sanitation Wastewater Manager III, (310) 648-5168
Authorized Person to Sign and Submit Reports	Steven Fan, Sanitation Wastewater Manager III, (310) 648-5168
Mailing Address	Public Works Building, Bureau of Sanitation ~~433 South Spring Street, Suite 400~~1149 S. Broadway, 9th Floor Los Angeles, CA 900153~~** ~~**
Billing Address	same
Type of Facility	POTW
Major or Minor Facility	Major
Threat to Water Quality	1
Complexity	A
Pretreatment Program	Yes
Reclamation Requirements	None
~~**Facility Permitted Flow**~~	~~450 (in million gallons per day)~~
Facility Design Flow	450 (in million gallons per day)
Watershed	Santa Monica Bay Watershed Management Area
Receiving Water	Pacific Ocean
Receiving Water Type	Ocean waters

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

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

B. The Hyperion Treatment Plant discharges wastewater to the Pacific Ocean, a water of the United States, and is currently regulated by Order R4-2005-0020 (NPDES Permit No. CA 0109991), which was issued on April 11, 2005, and expired on May 14, 2010. The terms and conditions of the current Order/Permit have been automatically continued and remain in effect until new Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permit are issued pursuant to this Order/Permit.

C. The Discharger submitted a Report of Waste Discharge, dated October 27, 2009, and applied for renewal of its WDR and NPDES permit to discharge up to 450 MGD of secondary-treated wastewater from the Hyperion Treatment Plant. The application was deemed complete on December 23, 2009. A site visit was conducted on October 7, 2010, to observe operations and to collect additional data to develop permit limitations and conditions.

II. BACKGROUND - CONSENT DECREE AND LEGAL ISSUES

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

1. Amended Consent Decree entered on February 19, 1987, in United States and State of California v. City of Los Angeles, No. CV 77-3047-HP (C.D. Cal.);

2. Settlement Agreement, Los Angeles Superior Court Case No. C 665238, dated January 29, 1990, in State of California v. City of Los Angeles; and

3. Regional Water Board Cease and Desist Order 98-073 adopted on September 14, 1998, amended by Order No. 00-128 adopted on August 31, 2000.

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

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1. Eliminate the discharge of sewage sludge into the Pacific Ocean from Hyperion Treatment Plant by December 31, 1987 (status: completed);

2. Comply with interim effluent limitations (status: interim limits are not applicable as of January 1, 1999);

3. Complete construction and begin operation of the Hyperion Energy Recovery System by June 30, 1989 (status: completed, but determined to be a technological failure and abandoned);

4. Achieve and thereafter maintain compliance with full secondary treatment at Hyperion Treatment Plant by December 31, 1998 (status: completed and achieved compliance before the deadline);

5. Prepare a storm water pollution reduction study and implement the recommended measures thereof (status: completed).

C. On June 7, 1991, the United States and the State of California filed a supplemental complaint under the existing Consent Decree CV 77-3047-HP (C.D. Cal.) for alleged pretreatment violations against the City. Settlement of the complaint had been concluded and modification to the Consent Decree was entered into court records on August 7, 2000. The settlement requires the City to implement the Westside Water Recycling Extension Project and the Santa Monica Bay Storm Drain Low-Flow Diversion Project. The Santa Monica Urban Runoff Recycling Facility (SMURRF), completed in 2000, is owned and operated by the City of Santa Monica. As the first full-scale, dry-weather runoff recycling facility in the U.S., SMURRF reclaims dry-weather run-off from storm drains and treats the water for reuse in landscape irrigation and toilet flushing. Since the City of Los Angeles contributes about half of the runoff treated at SMURRF, the City of Los Angeles pays for half of the capital and operations and maintenance costs of SMURRF, pursuant to an agreement with the City of Santa Monica.

D. In October 1987, the California Attorney General, on behalf of the Regional Water Board, filed a complaint with the Los Angeles Superior Court (Case No. C 665238) for civil penalties regarding unpermitted discharges to Discharge Point 001 and raw sewage overflows to surface waters from the Hyperion collection system. A settlement agreement was entered into on January 29, 1990. In lieu of civil penalties, the City was required to implement 23 projects to improve and enhance its collection system and benefit the waters in the Greater Los Angeles Area. Twenty two of the 23 Settlement Agreement projects were completed. The remaining project deals with the Los Angeles Zoo Wastewater Treatment Facility. Two of the original three elements of the Zoo project (construction of the retention basin and pump station for collection of the Zoo's wastewater and diversion to the North Outfall Sewer force main) were completed in 1995. The City proposes to substitute Best Management Practices (BMPs) for the stormwater peripheral drainage system, the third element of the original design concept. After reviewing the study, the Regional Water Board rejected the

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City's proposal because the proposed BMPs ~~can not~~cannot achieve the objectives of the original Settlement Agreement. In a letter dated November 5, 2008, the Regional Water Board approved the Fremont High School Stormwater Improvements Project (Freemont Project) as a substitute for the remaining project, the Los Angeles Zoo Perimeter Drain System (PDS). The Regional Water Board agreed that the PDS has ceased to be necessary due to the completion of the North East interceptor Sewer and East Central Interceptor Sewer. The Freemont Project includes the implementation of the following five ~~best management practices~~BMPs:~~-~~ Stormwater Diversion, Pollutant Settlement, Sediment Forebay, Dry Extended Detention/Retention Basin, and "Smart" (programmable) Irrigation System.

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

III. FACILITY DESCRIPTION

A. Description of Wastewater and Biosolids Treatment or Controls

The Discharger owns and operates the Hyperion Treatment Plant located at 12000 Vista del Mar Boulevard, Playa Del Rey, California. The plant has a 30-day (monthly) average daily dry weather ~~average~~ design treatment capacity of 450 million gallons per day (MGD) and a wet weather peak hydraulic capacity of approximately 850 MGD. In 2009, the HTP treated an average effluent flow of 312 MGD and discharged an average of 275 MGD. Approximately 37 MGD of the secondary effluent was sent to West Basin Water Recycling Facility for advanced treatment and reuse.

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

~~Currently, t~~The HTP started treating ~~accepts~~ dry weather ~~urban~~ runoff ~~that is diverted from storm drains into the City's collection system from April 1 to October 31. The City plans to extend this diversion operation from the dry summer months to year-round in order to conform to the six-year compliance schedule for bacteria concentration during winter dry weather, contained in the Santa Monica Bay Beaches Dry-weather Bacteria TMDL (Resolution No. 02-004 and Resolution No. 2002-022) adopted by the Regional Water Board~~from the low flow diverters (LFDs) year-round in November 2009.

Sludge from the City's two upstream plants (Tillman WRP and LAGWRP) is returned to the wastewater collection system and flows to the Hyperion Treatment Plant for treatment. Discharges from Tillman WRP and LAGWRP are regulated by Order No. R4-2010-0060 (NPDES ~~Permit~~ No. CA0056227) and Order No. R4-2010-0059 (NPDES ~~Permit~~ No. CA0053953), respectively. In addition, sludge generated from the Burbank WRP is also returned to the City of Burbank sewer system for treatment at the Hyperion Treatment Plant. The influent to the Burbank WRP can be diverted/bypassed to the Hyperion Treatment Plant during periods of emergency. Discharges from the Burbank WRP are regulated under R4-2010-0058 (NPDES No. CA0055531).

The Hyperion Treatment Plant has provided full secondary treatment since December 1998. Preliminary and primary wastewater treatments consist of screening, grit removal, and primary sedimentation with coagulation and flocculation. In secondary treatment, the primary effluent is biologically treated in a high purity oxygen activated sludge process comprised of a cryogenic oxygen plant, nine secondary reactor modules and 36 secondary clarifiers. Each secondary reactor module is designed to handle 50 ~~mgd~~MGD of flow which results in a total treatment capacity of 450 ~~mgd~~MGD producing secondary effluent. After clarification, undisinfected secondary effluent is discharged into Santa Monica Bay through a five mile submerged outfall pipe. Discharge up to 325 ~~mgd~~MGD flows by gravity to the outfall, or is pumped at the Effluent Pumping Plant when flows exceed 325 ~~mgd~~MGD.

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Solid fractions recovered from wastewater treatment processes include grit, primary screenings, primary sludge and skimmings, thickened waste activated sludge, digested sludge screenings and digester cleaning solids. The fine solids (grit, primary screenings, digested sludge screenings, digester cleaning solids) that consist of primarily inorganic materials are hauled away to landfills. The remaining solid fractions (primary sludge and skimmings, thickened waste activated sludge) are anaerobically digested onsite. The digested solids are screened and dewatered using centrifuges. Since January 1, 2003, the Hyperion Treatment Plant has implemented full thermophilic digestion to generate Class A "EQ" biosolids. The biosolids (treated sewage sludge) are beneficially reused offsite for land application and composting projects. The digester gas is cleaned and a major part of the gas is currently exported to the Los Angeles Department of Water and Power's Scattergood Steam Generating Plant, located immediately adjacent to the Hyperion Treatment Plant. The exported digester gas is used as fuel in the generation of electricity. In return, the generating plant provides steam for digester heating for the Hyperion Treatment Plant. During interruptions in the export of steam from the Scattergood Steam Generation Plant, digester gas can be used as fuel for in-plant boilers that provide steam to heat the anaerobic digesters. Any remaining non-exported digester gas may be flared, if necessary, and is regulated under a flare operation permit from the South Coast Air Quality Management District (AQMD).

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

The Hyperion Treatment Plant collects and treats in-plant storm water runoff except that, during intense storms, undisinfected storm water overflows may be discharged through Outfall 001. This storm water discharge is regulated under the State Water Board's *NPDES General Permit No. CAS00001 and Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities* contained in Order No. 97-03-DWQ, adopted on April 17, 1997. The City has developed and implemented a *Storm Water Pollution Prevention Plan* as required by the general permit.

Water Reclamation. A small fraction (approximately 37 MGD in 2009) of the HTP's secondary effluent is sent to West Basin Water Recycling Facility (West Basin Facility) for advanced treatment and reuse. The West Basin Municipal Water District (West Basin) operates the West Basin Facility in El Segundo. West Basin is contractually entitled to receive up to 70 MGD of secondary effluent from HTP. West Basin Facility provides tertiary treatment and/or advanced treatments such as microfiltration and reverse osmosis (RO) to the Hyperion secondary effluent to produce Title 22 and high purity recycled water. Title 22 recycled water is used for

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beneficial irrigiation, industrial applications including cooling water and boiler feed water, and other purposes. The RO-treated recycled water is primarily injected into the West Coast Basin Barrier Project to control seawater intrusion.

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

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

B. Discharge Points and Receiving Waters

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

1. Discharge Points 001 and 002

Table 2. Description of the Outfalls

Discharge Point No.	001	002
Diameter of Pipe at Discharge Terminus (feet)	12	12
Outfall Distance Offshore (feet)	5,364	26,525 (including a Y-shaped diffuser with two 3,840-ft legs)
Discharge Depth Below Surface Water (feet)	50	187
Latitude and Longitude	33° 55.06' N, 118° 26.51' W	33° 54.72' N, 118° 31.29' W (Outfall at start of wye structure) 33° 54.43' N, 118° 31.17' W (North terminus of wye structure) 33° 54.02' N, 118° 31.38' W (South terminus of wye structure)

Discharge Point 001

Discharge Point 001 is commonly referred to as the "one-mile outfall". It is a 12-foot diameter outfall terminating approximately 5,364 feet (1.6 kilometers (km))

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west-southwest of the treatment plant at a depth of approximately 50 feet (15 meters (m)) below the ocean surface (Latitude: 33° 55.06' N95', Longitude 118° 26.51' W). This outfall is permitted for emergency discharge of chlorinated secondary treated effluent during extremely high flows, and preventative maintenance, such as routine opening and closing the outfall gate valve(s) for exercising and lubrication. However, during intense storms or storms associated with plant power outages, direct discharge of undisinfected storm water overflow is also permitted at this outfall. This Order/Permit requires the City to notify the Regional Water Board and USEPA in advance of any planned preventative maintenance that results in discharges through Discharge Point 001.

The ocean water in this area is not listed as impaired under the 2006 Clean Water Act (CWA) section 303(d) List.

Discharge Point 002

Discharge Point 002 is commonly referred to as the "five-mile outfall". It is a 12-foot diameter outfall terminating approximately 26,525 feet (8.1 km) west-southwest of the treatment plant at a depth of approximately 187 feet (57m) below the ocean surface. This outfall is located north of Discharge Point 001 and ends in a ""Y"" shaped diffuser consisting of two 3,840-foot legs (Latitude: 33° 54.72' N18', Longitude: 118° 31.29' W87') (North terminus of wye structure – Latitude 33° 545.43' N160', Longitude 118° 31.71'09 W'; South terminus of wye structure – Latitude 33° 54.02' N39', Longitude 118° 31.38' W636'). This is the only outfall permitted for the routine discharge of undisinfected secondary treated effluent.

2. Outfall No. 003

This is a 20-inch diameter outfall terminating approximately 35,572 feet (10.8 km) west of the treatment plant, at the head of a submarine canyon at a depth of approximately 300 feet (91m) below the ocean surface (Latitude 33° 55.62' N2', Longitude 118° 33.18' W3'). This outfall had been used to discharge sludge. Under the 1987 amended Consent Decree No. CV77-3047-HP, this outfall was deactivated in November 1987 when sludge discharge to the ocean was terminated. Near the head of this outfall, a spool piece was removed and the discharge pipe was blind-flanged to prevent any possible discharge of sewage or sludge into the Pacific Ocean. This outfall has not been maintained since it was taken out of service. Any discharge from this outfall is prohibited.

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

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

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Table 3. Historic Effluent Limitations and Monitoring Data

Parameter	Units	Effluent Limitation in Order R4-2005-0020			Monitoring Data (From July 2005 – July 2009)		
		Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
Conventional/Non-Conventional							
BOD	mg/L	30	45	--	~~23~~24	~~23~~26.4	~~23~~38
Total Suspended Solids	mg/L	30	45	--	12	15	24
Oil & Grease	mg/L	25	40	75~~--~~	13	22	38
Settleable Solids	mL/L	1.0	1.5	3.0	<0.1	0.3	1.5
Total Coliform	MPN/100mL	--	--	--	119323	160000	160000
Fecal Coliform	MPN/100mL	--	--	--	60940	160000	160000
Enterococcus	MPN/100mL	--	--	--	3746	16000	16000
Nitrate-N	mg/L	--	--	--	0.22	--	--
Nitrite-N	mg/L	--	--	--	0.92	--	--
pH	pH Unit	6.0 – 9.0			7.4	7.5	7.6
Temperature	~~O~~ °C				29	29	29
Turbidity	NTU	75	100	225	11.7	13.6	18.8

Table 3. Historic Effluent Limitations and Monitoring Data (Continued)

Parameter	Units	Effluent Limitation in Order No. R4-2005-0020			~~Monitoring Data~~ Monitoring Data (From July 2005 – July 2009)			
		Average Monthly	~~Average Weekly~~Maximum Daily	~~Maximum Daily~~ Instantaneous Maximum	Minimum Nondetect	Maximum Nondetect	Minimum Detected	Maximum Detected
Marine Aquatic Life Protection								
Arsenic (As)	µg/L	--	--	--	<1	<1	1.1	3.5
Cadmium (Cd)	µg/L	--	--	--	<0.01	<0.4	--	--
Chromium VI (Cr VI)	µg/L	--	--	--	<0.5	<2	--	--
Chromium Total (Cr)	µg/L	--	--	--	<0.5	<10	--	--
Copper (Cu)*	µg/L	16	140	160	--	--	12.9	28
Lead (Pb)	µg/L	--	--	--	<0.5	<3	--	--
Mercury (Hg)	µg/L	--	--	--	<0.004	<0.022	--	--
Nickel (Ni)	µg/L	--	--	--	<20	<20	7.95	21.8
Selenium (Se)	µg/L	--	--	--	<1	<1	1	1.6
Silver (Ag)	µg/L	--	--	--	<0.2	<0.25	0.57	2.24

Parameter	Units	Effluent Limitation in Order No. R4-2005-0020			~~Monitoring Data~~ Monitoring Data (From July 2005 – July 2009)			
		Average Monthly	~~Average Weekly~~Maximum Daily	~~Maximum Daily~~ Instantaneous Maximum	Minimum Nondetect	Maximum Nondetect	Minimum Detected	Maximum Detected
Zinc (Zn)	µg/L	--	--	--	<20	<20	15.8	118
Cyanide*	µg/L	14	56	140	<~~0.00~~4	<~~0.00~~4	~~0.00~~5	~~0.00~~5
Total Residual Chlorine*	mg/L	~~--~~28	~~--~~112	~~--~~840	<0.1	<0.1	0.1	0.3
Ammonia-N*	mg/L	8.4	34	84	--	--	33.7	41.8
Acute Toxicity**	TUa	--	2.8	2--	--	--	0.59	3
Chronic Toxicity*	TUc	--	13	--	--	--	10	142.9
Chronic Toxicity**	TUc	--	84	--	--	--	10	142.9
Non-Chlorinated Phenolic Compounds	µg/L	--	--	--	<0.21	<2	--	--
Chlorinated Phenolic Compounds	µg/L	--	--	--	<0.4	<5	--	--
Endosulfan	µg/L	--	--	--	<0.002	<0.008	--	--
Endrin	µg/L	--	--	--	<0.001	<0.007	--	--
HCH*	µg/L	0.056	0.11	0.17	<0.002	<0.003	--	--
Human Health Toxicants – Non Carcinogens								
Acrolein	µg/L	--	--	--	<0.61	<1.96	--	--
Antimony	µg/L	--	--	--	<0.5	<0.5	0.84	1.53
Bis (2-Chloroethoxy) methane	µg/L	--	--	--	<0.05	<0.05	--	--
Bis (2-Chloroisopropyl) ether	µg/L	--	--	--	<0.05	<0.35	--	--
Chlorobenzene	µg/L	--	--	--	<0.06	<0.15	--	--
Chromium III (Cr)	µg/L	--	--	--	<0.5	<10	--	--
Di-n-Butyl Phthalate	µg/L	--	--	--	<0.15	<10	--	--
Dichlorobenzene	µg/L	--	--	--	<0.06	<2	--	--
Diethyl phthalate	µg/L	--	--	--	<0.06	<2	--	--
Dimethyl phthalate	µg/L	--	--	--	<0.08	<0.27	--	--
4,6-dinitro-2-methylphenol	µg/L	--	--	--	<0.4	<0.49	--	--
2,4-dinitrophenol*	µg/L	56	--	--	<0.08	<0.130	--	--
Ethylbenzene	µg/L	--	--	--	<0.08	<0.17	--	--
Fluoranthene	µg/L	--	--	--	<0.0047	<0.2	--	--
Hexachlorocyclopentadiene	µg/L	--	--	--	<2.42	<2.9	--	--
Nitrobenzene	µg/L	--	--	--	<0.05	<0.33	--	--

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Parameter	Units	Effluent Limitation in Order No. R4-2005-0020			~~Monitoring Data~~ Monitoring Data (From July 2005 – July 2009)			
		Average Monthly	~~Average Weekly~~Maximum Daily	~~Maximum Daily~~ Instantaneous Maximum	Minimum Nondetect	Maximum Nondetect	Minimum Detected	Maximum Detected
Thallium	µg/L	--	--	--	<0.01	<1	--	--
Toluene	µg/L	--	--	--	<0.08	<2	--	--
Tributyltin*	µg/L	0.02	--	--	<1	<1	--	--
Tributyltin**	µg/L	0.12	--	--	<1	<1	--	--
1,1,1-trichloroethane	µg/L	--	--	--	<0.05	<0.29	--	--
Human Health Toxicants - Carcinogens								
Acrylonitrile*	µg/L	1.4	--	--	<0.08	<0.96	--	--
Aldrin	µg/L		--	--	<0.003	<0.09	--	--
Benzene	µg/L		--	--	<0.07	<0.22	--	--
Benzidine	µg/L		--	--	<1.52	<5	--	--
Berylium (Be)*	µg/L	0.46	--	--	<0.04	<2	--	--
Bis (2-Chloroethyl) ether*	µg/L	0.63	--	--	<0.09	<0.32	--	--
Bis(2-ethylhexyl)-phthalate*	µg/L	49	--	--	<1	<5	--	--
Carbon tetrachloride	µg/L	--	--	--	<0.09	<0.34	--	--
Chlordane*	µg/L	0.0003	--	--	<0.003	<0.09	--	--
Chlordane**	µg/L	0.0019	--	--	<0.003	<0.09	--	--
Chlorodibromomethane	µg/L	--	--	--	<2	<2	2.16	2.16
Chloroform	µg/L	--	--	--	--	--	2.05	8.65
DDT*	µg/L	0.0024	--	--	<0.002	<0.006	--	--
DDT**	µg/L	0.014	--	--	<0.002	<0.006	--	--
1,4-Dichlorobenzene	µg/L	--	--	--	<0.07	<1	1.25	2.05
3,3'-Dichlorobenzidine	µg/L		--	--	<0.11	<1.79	--	--
1,2-dichloroethane	µg/L	--	--	--	<0.03	<0.1	--	--
1,1-dichloroethylene	µg/L	--	--	--	<0.12	<0.2	--	--
Dichlorobromomethane	µg/L	--	--	--	<2	<2	--	--
Dichloromethane	µg/L	--	--	--	<0.12	<2	2.13	6.49
1,3-dichloropropene	µg/L	--	--	--	<0.09	<0.15	--	--
Dieldrin	µg/L		--	--	<0.0009	<0.005	--	--
2,4-Dinitrotolulene	µg/L	--	--	--	<0.08	<0.13	--	--
1,2-Diphenylhydrazine	µg/L		--	--	<0.06	<0.21	--	--

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Parameter	Units	Effluent Limitation in Order No. R4-2005-0020			~~Monitoring Data~~ Monitoring Data (From July 2005 – July 2009)			
		Average Monthly	~~Average Weekly~~Maximum Daily	~~Maximum Daily~~ Instantaneous Maximum	Minimum Nondetect	Maximum Nondetect	Minimum Detected	Maximum Detected
Halomethanes	µg/L	--	--	--	<0.21	<2	--	--
Heptachlor	µg/L		--	--	<0.001	<0.007	--	--
Heptachlor epoxide	µg/L		--	--	<0.001	<0.003	--	--
Hexachlorobenzene	µg/L		--	--	<0.07	<0.18	--	--
Hexachlorobutadiene	µg/L	--	--	--	<0.07	<0.17	--	--
Hexachloroethane	µg/L	--	--	--	<0.07	<0.17	--	--
Isophorone	µg/L	--	--	--	<0.07	<1	--	--
N-Nitrosodimethylamine	µg/L	--	--	--	<0.17	<0.5	--	--
N-Nitrosodi-N-propylamine~~- Outfall 001~~	µg/L	5.3	--	--	<0.13	<0.36	--	--
N-Nitrosodiphenylamine	µg/L	--	--	--	<0.09	<0.86	--	--
PAH*	µg/L	0.123	--	--	<0.0037	<0.36	--	--
PAH**	µg/L	0.748	--	--	<0.0037	<0.36	--	--
PCBs*	µg/L	0.0003	--	--	<0.07	<0.49	--	--
PCBs**	µg/L	0.002	--	--	<0.07	<0.49	--	--
TCDD equivalents*	~~p~~g/L	0.055~~E-06~~	--	--	<1~~E-06~~	<1~~.E-06~~	--	--
TCDD equivalents**	~~p~~g/L	0.33~~E-06~~	--	--	<1E~~-06~~	<1~~.E-06~~	--	--
~~1~~1,1,2,2-tetrachloroethane	µg/L	--	--	--	<0.11	<0.19	--	--
Tetrachloroethylene	µg/L	--	--	--	<0.1	<2	2.37	4.03
Toxaphene	µg/L		--	--	<0.02	<0.1	--	--
Trichloroethylene	µg/L	--	--	--	<0.08	<0.18	--	--
1,1,2-trichloroethane	µg/L	--	--	--	<0.05	<0.2	--	--
2,4,6-Trichlorophenol	µg/L	--	--	--	<0.09	<0.45	--	--
Vinyl chloride	µg/L	--	--	--	<0.07	<0.22	--	--

*____—Indicates effluent limitations for Discharge Point 001.
**___—Indicates effluent limitations for Discharge Point 002.
<___—Indicates that the pollutant was not detected at that concentration level.
--___—Indicates not applicable.

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D. Compliance Summary

Monitoring data from 2005 to 2009 indicate that the Discharger has consistently complied with the effluent limitations of Order No. R4-2005-0020, except for the following exceedances:

Settleable Solids

- Daily maximum limitation of 3.0 ml/L on April 7, 2005.
- Weekly average limitation of 1.5 ml/L on April 9, 2005.
- Daily maximum limitation of 3.0 ml/L on July 16, 2009.

Ammonia as N - Daily maximum limitation of 34 mg/L on November 29, 2006.

Acute toxicity - Daily maximum acute toxicity limitation of 2.8 TUa on March 12, 2008.
An acute topsmelt toxicity test conducted on a 24-hour composite sample collected on March 11~~2~~, 2008 (and analyzed on Marched on March 12, 2008) resulted in an exceedance of the effluent limitation in Order No. R4-2005-0020. This triggered the initiation of accelerated testing, a requirement of Order No. R4-2005-0020. The Discharger conducted all six additional tests, which were in compliance with the toxicity limitation. The Discharger has since resumed regular monthly testing.

Sanitary Sewer Overflows (SSO) and Spills -
The Discharger has reported a number of spills and/or overflows in the HTP service area over the years. City of Los Angeles reported that, between January 2007 and April 2010, there was a total of 557 SSOs and spills in the Hyperion Service Area (totaling 524,450 gallons of spill, of which 183,847 gallons were recovered). Only one SSO incident, estimated at 1,700 gallons, was related to wet weather. Appropriate enforcement is being evaluated by the Regional Water Board and USEPA.

Discharge to Discharge Point 001 -
During the planned maintenance of the one-mile gates, secondary treated effluent was discharged through the Discharge Point 001 (one-mile outfall), on the following dates: July 21, 2005, August 29, 2005, May 2 and~~&~~ 24, 2007, February 12, 2008, May 21, 2008, August 20, 2008, January 13, 2009, April 28, 2009. In addition, from November 28 - 30, 2006, during a planned mainenance inspection of Discharge Point 002 (five-mile outfall), secondary treated effluent was discharged through the Outfall Discharge Point 001. The Discharger conducted the necessary notifications to the Regional Water Board and USEPA, appropriate sampling and monitoring was conducted as required by the Order No. R4-2005-0020.

E. Discharge Plume

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

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

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

The City has conducted shoreline and nearshore/inshore water quality monitoring in Santa Monica Bay since the late 1940s. The monitoring results indicated that effluent from the five-mile outfall does not reach the shoreline and that elevated bacterial counts are associated with runoff from storm drains and discharges from piers. The direct impacts of the discharge from the one-mile outfall on shoreline water quality have not been studied due to the lack of routine discharge. However, it is expected to be minimal because effluent discharged from the one-mile outfall is disinfected and the volume of the discharge is usually less than five million gallons, occurring at most once per quarter. This discharge is intended for conducting a functional test of equipment.

Shoreline monitoring requirements have been transferred to the monitoring program of the municipal storm water for the City (Order No. 01-182, NPDES No. CAS004001) adopted by this Regional Water Board on December 13, 2001.

F. Receiving Water Description

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

Over the years, the beneficial uses of the Bay have been impaired to various degrees due to pollution, resource over-exploitation, and habitat destruction. The primary problems of concern include acute health risk associated with swimming in runoff-contaminated surfzone waters, chronic (cancer) risk associated with consumption of certain sport fish species in areas impacted by DDT and PCB

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contamination, pollutant loading from point sources, urban runoff, and other nonpoint sources in light of projected population increases and their impacts on marine ecosystem, health of fishery resources, and degradation of natural habitats, and population decline of key species. (Santa Monica Bay Restoration Commission. 2004. "State of the Bay: 2004 Progress and Challenges", 45 pages; Santa Monica Bay Restoration Project. 1998. "Taking the Pulse of the Bay - State of the Bay 1998").

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

G. Planned Changes

The Discharger has no significant planned changes.

IV. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

A. Legal Authorities~~.~~

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

B. California Environmental Quality Act (CEQA)

Under California Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, ~~(~~Public Resources Code sections 21100 through 21177~~)~~.

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C. State and Federal Regulations, Policies, and Plans

1. **Los Angeles Water Quality Control Plan.** On June 13, 1994, the Regional Water Board adopted a water quality control plan for the Los Angeles Region (hereinafter Basin Plan), as amended, that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for the Pacific Ocean. 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. Basin Plan beneficial uses applicable to the Pacific Ocean are as follows:

Table 4. Basin Plan Beneficial Uses of the Applicable Receiving Waters

Discharge Point	Receiving Water	Beneficial Use(s)
001, 002	Dockweiler Beach (Hydrologic Unit 405.12)	Existing: Industrial service supply (IND), navigation (NAV), water contact recreation (REC-1), non-contact water recreation (REC-2), commercial and sport fishing (COMM), marine habitat (MAR), and wildlife habitat (WILD). Potential: Spawning, reproduction, and/or early development (SPWN)*.
	Pacific Ocean Nearshore** Zone	Existing: IND, NAV, REC-1, REC-2, COMM, MAR, WILD, preservation of biological habitats** (BIOL), RARE**, migration of aquatic organisms** (MIGR), SPWN**, and SHELL. Potential: None.
	Pacific Ocean Offshore Zone	Existing: IND, NAV, REC-1, REC-2, COMM, MAR, WILD, RARE**, MIGR**, SPWN**, and SHELL. Potential: None.

Requirements of this Order/Permit implement the Basin Plan. The Basin Plan relies primarily on the requirements of *the Water Quality Control Plan for Ocean Waters of California* (Ocean Plan) for protection of the beneficial uses of the State ocean waters. The Basin Plan, however, may contain additional water quality objectives applicable to the Discharger.

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

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inland surface waters. Requirements of this Order/Permit implement the Thermal Plan.

3. **California Ocean Plan.** In 1972, the State Water Board adopted the *Water Quality Control Plan for Ocean Waters of California, California Ocean Plan* (hereinafter Ocean Plan), as amended. The latest amendment became effective on February 14, 2006. The Ocean Plan is applicable, in its entirety, to point source discharges to the ocean waters of the State. Ocean Plan beneficial uses applicable to ocean waters of the State are shown in Table 5.

Table 5. Ocean Plan Beneficial Uses

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

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

4. **Santa Monica Bay Restoration Plan**. The Hyperion Treatment Plant discharges to Santa Monica Bay, one of the most heavily used recreational areas in California. Recognizing the importance of the Bay as a national resource, the State of California and USEPA nominated and Congress included Santa Monica Bay in the National Estuary Program. This led to the formation of the Santa Monica Bay Restoration Project (currently named Santa Monica Bay Restoration Commission) that developed the Bay Restoration Plan (BRP) which serves as a blueprint for restoring and enhancing the Bay. The Regional Water Board plays a lead role in the implementation of the BRP. Three of the proposed priorities of the BRP are reduction of pollutants of concern at the source (including municipal wastewater treatment plants), attainment of full secondary treatment at the City of Los Angeles' Hyperion Treatment Plant and the County Sanitation Districts of Los Angeles County's Joint Water Pollution Control Plant, and implementation of the mass emission approach for discharges of pollutants to the Bay.

5. **Alaska Rule.** USEPA has 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 Fed. Reg. 24641 (April 27, 2000)). Under the revised regulation (hereinafter Alaska R~~r~~ule), 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.

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6. **Stringency of Requirements for Individual Pollutants.** This Order/Permit contains restrictions on individual pollutants that are no more stringent than required by the federal CWA. Individual pollutant restrictions consist of technology-based effluent limitations and water quality-based effluent limitations. The technology-based effluent limitations consist of restrictions on biochemical oxygen demand (5-day) (BOD_5), total suspended solids (TSS), and pH, and percent removal of BOD_5 and TSS, which implement the minimum, applicable federal technology-based requirements for POTWs. Also, effluent limitations consisting of restrictions on oil and grease, settleable solids, and turbidity more stringent than federal technology-based requirements are necessary to implement State treatment standards in Table A of the Ocean Plan. Water quality-based effluent limitations consisting of ~~restricts~~restrictions on copper, ~~total~~ chlorine residual, ammonia (~~expressed~~ as nitrogen), acute toxicity, chronic toxicity, beryllium, chlordane, DDT, PAHs, PCBs, and TCCD equivalents ~~radioactivity, benzidine, hexachlorobenzene, and PCBs~~ , ~~and toxaphene~~ have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. Collectively, restrictions on individual pollutants in this Order/Permit are no more stringent than required by the CWA.

7. **Antidegradation Policy.** Title 40 of the Code of Federal Regulations[1] Part 131.12 requires that the State water quality standards include an antidegradation policy consistent with the federal antidegradation policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. This resolution incorporates the federal antidegradation policy, where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. As discussed in detail in the Fact Sheet (Attachment F), the permitted discharge is consistent with the antidegradation provisions of 40 CFR part 131.12 and State Water Board Resolution No. 68-16.

8. **Anti-Backsliding Requirements.** CWA sections 402(o)/303(d) and 40 CFR part 122.44(l) prohibit backsliding and require effluent limitations, permit conditions, and standards in a reissued NPDES permit to be as stringent as those in the previous permit, with some exceptions where limitations and conditions may be relaxed. Some effluent limitations in this Order/Permit are less stringent that those in the previous Order/Permit. As discussed in detail in the Fact Sheet (Attachment F), this relaxation of effluent limitations is

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[1] All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated and will be abbreviated as "40 CFR part number".

consistent with the anti-backsliding requirements of the CWA and federal regulations.

This Order/Permit is consistent with State and federal antidegradation policies in that it does not authorize a change 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 1994 permit of 420 ~~mgd~~MGD. Although the design flow rate of the treatment plant has increased to 450 ~~mgd~~MGD, this increase has been accompanied by a significant improvement in the level of treatment necessary to achieve full secondary treatment. As a result, both the quantity of discharged pollutants and quality of the discharge are expected to remain relatively constant or improve during this permit term, consistent with antidegradation policies. In conformance with reasonable potential analysis procedures identified in State Water Board and USEPA documents, effluent limitations for some constituents are not carried forward in this Order/Permit because there is not presently reasonable potential for the constituents to cause or contribute to an exceedance of water quality standards. Without reasonable potential, there is no longer a need to maintain prior WQBELs under NPDES regulations, antibacksliding provisions, and antidegradation policies. The accompanying monitoring and reporting program requires continued data collection and if monitoring data show reasonable potential for a constituent to cause or contribute to an exceedance of water quality standards, the Order/Permit will be reopened to incorporate WQBELs. Such an approach ensures that the discharge will adequately protect water quality standards for designated beneficial uses and conform with antidegradation policies and antibacksliding provisions.

9. **Endangered Species Act.** This Order/Permit does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the federal Endangered Species Act (16 U.S.C. sections 1531 to 1544). This Order/Permit 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 Endangered Species Act

11. **Monitoring and Reporting Requirements.** 40 CFR part 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. California Water Code sections 13267 and 13383 authorize~~s~~ the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program~~-~~ (Attachment E) establishes monitoring and reporting requirements to implement federal and State requirements.

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12. **Federal Permit Renewal Contingency.** The Discharger's federal permit renewal is contingent upon determination by the U.S. Fish and Wildlife Service and NOAA National Marine Fisheries Service that the proposed discharge is consistent with the: (1) federal Endangered Species Act; (2) Magnuson-Stevens Fishery Conservation and Management Act (MSA); and (3) the Regional Water Board's certification/concurrence that the discharge will comply with applicable State water quality standards.

    USEPA's reissuance of NPDES ~~permit~~ No. CA0109991 to the City of Los Angeles for Hyperion Treatment Plant is subject to requirements of MSA and ESA. In May 2010, USEPA requested updated information related to: (1) essential fish habitat and managed and associated species, and (2) threatened and endangered species and their designated critical habitats, in the vicinity of the Hyperion outfalls from the National Marine Fisheries Service and the U.S. Fish and Wildlife Service (collectively, the Services). Based on this and other relevant information, USEPA is currently evaluating whether there are effects on essential fish habitat and managed and associated species protected under the MSA, or on threatened and endangered species and their designated critical habitats protected under the ESA. Based on the outcome of this analysis, USEPA may engage in consultation with the Services during, and subsequent to, this permit reissuance. USEPA may decide that changes to this permit are warranted based on the results of the completed consultation, and a reopen~~en~~er provision to this effect has been included in the Order/Permit.

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

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

On June 28, 2007, the USEPA approved the State's 2006 303(d) List of Water Quality Limited Segments (hereinafter 303(d) list). The 303(d) list identifies water bodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations by point sources (water quality limited water bodies).

Santa Monica Bay (Offshore and Nearshore) is on the 303(d) list for the following pollutants/stressors from point and non-point sources: DDT (tissue & sediment, centered on Palos Verdes Shelf), PCBs (tissue & sediment), sediment toxicity, debris, and fish consumption advisory. Santa Monica Bay Beaches Total maximum daily loads (TMDLs) for DDT, PCBs, sediment toxicity, and fish consumption advisory have not been scheduled. A TMDL for Santa Monica Bay Nearshore

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Debris TMDL is under development. Santa Monica Bay Beaches Bacteria TMDLs were approved by USEPA in 2003, as described in the following section.

E. Other Plans, Polices and Regulations

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

2. **Storm Water.** See Fact Ssheet ~~page F-12~~.

3. **Sanitary Sewer Overflows.** The State Water Board issued General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order No. 2006-0003-DWQ (General Order) on May 2, 2006. The amended 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 Order. The General Order requires agencies to develop sanitary sewer management plans and report all sanitary sewer overflows (SSOs), among other requirements and prohibitions. Furthermore, the General Order contains requirements for operation and maintenance of collection systems and for reporting and mitigating SSOs. The requirements contained in this Order/Permit are generally consistent with the requirements in the SSO WDR. The Discharger's collection system is part of the POTW that is subject to this Order/Permit. The Discharger must comply with both the General Order and this Order/Permit.

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

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

6. **Watershed Management.** This Regional Water Board has been implementing a Watershed Management Approach (WMA) 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* (EPA 841-R-95-

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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 Management 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/Permit and the accompanying *Monitoring and Reporting Program* (Attachment E) fosters implementation of this approach. The *Monitoring and Reporting Program* requires the Discharger to participate in regional ~~water quality and kelp bed~~ monitoring programs in the Southern California Bight.

7. **Santa Monica Bay Beaches Bacteria Total Maximum Daily Loads (TMDLs).** The Regional Water Board has adopted two TMDLs to reduce bacteria at Santa Monica Bay beaches during dry and wet weather. The Regional Water Board adopted the Dry Weather and Wet Weather TMDLs on January 24, 2002 and December 12, 2002, respectively (Resolution Nos. 2002-004 and 2002-022). These TMDLs were approved by the State Water Board, State OAL and USEPA Region 9 and became effective on July 15, 2003. Since their approval, these TMDLs have been incorporated into the Los Angeles County Municipal Storm Water NPDES Permit (hereinafter, the LA MS4 Permit) (CAS004001, Order No. 01-182), as receiving water limitations.

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

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

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V. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

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

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A. Discharge Prohibitions

Discharge prohibitions in this Order/Permit are based on the requirements in section III.H of the Ocean Plan (2005).

B. Technology-Based Effluent Limitations

1. Scope and Authority

Section 301(b) of the CWA and implementing regulations at 40 CFR part 125.3, require that NPDES permits include limitations which meet applicable technology-based requirements, at a minimum. The discharge authorized by this Order/Permit must meet minimum federal technology-based requirements for POTWs at 40 CFR 133 and other technology requirements based on Best Professional Judgment (BPJ) in accordance with 40 CFR part 125.3. A detailed discussion of technology-based effluent limitations development is included in the Fact Sheet (Attachment F).

2. Applicable Technology-Based Effluent Limitations

Pursuant to sections 301(b)(1)(B) and 304(d) of the CWA, USEPA has established standards of performance for secondary treatment at 40 CFR -133. Secondary treatment is defined in terms of three parameters – 5-day biochemical oxygen demand (BOD_5), total suspended solids (TSS), and pH. The following summarizes the technology-based requirements for secondary treatment, which are applicable to the Facility:

Table 6. Summary of Technology-based Effluent Limitations for Secondary Treatment Facility 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 pH units		

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

Table 7. Summary of Technology-based Effluent Limitations for POTWs established by the Ocean Plan (2005)

Constituent	Average Monthly	Average Weekly	Instantaneous Maximum	Percent Removal
Oil & Grease	25 mg/L	40 mg/L	75 mg/L	--
TSS	--	--	--	75%[2]
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 pH units			

All technology-based effluent limitations from Order No. R4-2005-0020 for BOD_5, TSS, oil and grease, settleable solids, pH, and turbidity are retained in this Order/Permit with minor changes for oil and grease, settleable solids, and turbidity, as described below. Limitations for BOD_5, TSS, and pH are based on secondary treatment standards established by the USEPA at 40 CFR 133. Limitations for oil and grease, settleable solids, and turbidity are based on requirements in the 2005 Ocean Plan. To be consistent with the Ocean Plan, daily maximum limitations for these three constituents in the existing permit are prescribed as instantaneous maximum limitations in this Order/Permit. All technology-based effluent limitations 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 the average design flow rate of 420 million gallons per day for the Hyperion Treatment Plant in the 1994 permit are also included.

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

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

Table 8. Summary of Technology-based Effluent Limitations - Discharge Points 001 and 002

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
$BOD_5 20^0C$	mg/L	30	45	--	--	--
	lbs/day[3]	113,000	169,000	--	--	--
	% removal	85	--	--	--	--
Total Suspended Solids (TSS)	mg/L	30	45	--	--	--
	lbs/day[5]	113,000	169,000	--	--	--
	% removal	85	--	--	--	--
Oil and Grease	mg/L	25	40	--	--	75
	lbs/day[5]	93,800	150,000	--	--	281,000
Settleable Solids	mL/L	1.0	1.5	--	--	3.0
Turbidity	NTU	75	100	--	--	225
pH	pH unit	--	--	--	6.0	9.0

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C. Water Quality-Based Effluent Limits (WQBELs)

1. Scope and Authority

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

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

[3] The mass emission rates are based on the average design flow rate (420 MGD) of the Hyperion Treatment Plant in the 1994 permit: lbs/day = 0.00834 x Ce (effluent concentration, ug/L) x Q (flow rate, MGD). During wet-weather storm events in which the flow exceeds the design capacity, the mass discharge rate limitations shall not apply, and concentration limitations will provide the only applicable effluent limitations.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

The Basin Plan and 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 contains water quality objectives for bacterial characteristics, physical characteristics, chemical characteristics, biological characteristics, and radioactivity. The Basin Plan contains the bacteria objectives for water bodies designated for water contact recreation as amended by Resolution No. 01-018. Bacteria objectives from the Ocean Plan and Basin Plan were included as receiving water limitations in this Order/Permit.

Table B of the Ocean Plan includes 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, and 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 POTW continuous discharges, all permit effluent limitations, standards, and prohibitions, including those necessary to achieve water quality standards, shall, unless impracticable, be stated as average weekly and average monthly discharge limitations. It is impracticable to include only average weekly and average monthly effluent limitations in the Order/Permit because a single daily discharge of certain pollutants, in excess amounts, can cause violations of water quality objectives. The effects of pollutants on aquatic organisms are often rapid. For many pollutants, an average weekly or average monthly effluent limitation alone is not sufficiently protective of beneficial uses. As a result, maximum daily effluent limitations, as referenced in 40 CFR part 122.45(d), are included in the Order/Permit for certain constituents.

The WQBELs for marine aquatic life toxics contained in this Order/Permit are based on Table B water quality objectives contained in the 2005 Ocean Plan that are expressed as six-month median, daily maximum, and instantaneous maximum water quality objectives. However, in the existing Order/Permit (Order No. R4-2005-0020), the calculated effluent limitations based on 6-month

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median objectives for marine aquatic life toxics in the 2001 Ocean Plan were prescribed as monthly average limitations. Applying the antibacksliding regulations, this Order/Permit retains the same approach and sets effluent limitations derived from six-month median water quality objectives for marine aquatic life toxics in the 2005 Ocean Plan as monthly average limitations. To be consistent with the Ocean Plan, daily maximum and instantaneous maximum limitations are prescribed in this Order/Permit.

4. Determining the Need for WQBELs

Order No. R4-2005-0020 contains effluent limitations for non-conventional and toxic pollutant parameters in Table B of the Ocean Plan. For this Order/Permit, the need for effluent limitations based on water quality objectives in Table B of the 2005 Ocean Plan was reevaluated in accordance with the Reasonable Potential Analysis (RPA) procedures contained in Appendix VI of the 2005 Ocean Plan. This statistical RPA method (RPcalc version 2.0) 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/Permit, the UCB is calculated as the one-sided, upper 95 percent confidence bound for the 95th percentile of the effluent distribution after complete mixing. The calculated $UCB_{95/95}$ is then compared to the appropriate objective to determine the potential for an exceedance of that objective and the need for an effluent limitation. For constituents that have an insufficient number of monitoring data or a substantial number of non-detected data with a reporting limit higher than the respective water quality objective, the RPA result is likely to be inconclusive. As suggested by the Ocean Plan, existing effluent limitations for these constituents are retained in the new Order/Permit. For Discharge Point 001, these include beryllium, chlordane, DDT, PAH, PCBs, and TCDD. For Discharge Point 002, these include chlordane, DDT, PCBs, and TCDD. In addition, the MRP (Attachment E) of this Order/Permit also requires the Discharger to continue to monitor for these constituents.

Using this statistical procedure, in combination with effluent data provided by the Discharger from July 2005 to July 2009, and minimum initial dilution ratios of 13:1 for Discharge Point 001 and 84:1 for Discharge Point 002, Regional Water Board staff and USEPA have determined that the following constituents, when discharged through the specified outfall, either have reasonable potential to exceed Ocean Plan objectives, or have inconclusive results after performing the RPA, and therefore, require effluent limitations.

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Discharge Point 001

Copper, chlorine residual, ammonia (as nitrogen), chronic toxicity, beryllium, chlordane, DDT, PAHs, PCBs, TCDD equivalents.~~Ammonia, copper, chronic toxicity, chlorine residual, benzidine, beryllium, chlordane, DDT, PAHs, PCBs, and TCDD.~~

Discharge Point 002

Acute toxicity, chronic toxicity, chlordane, DDT, -PCBs, and TCDD equivalents.

~~Additional analysis for chlordane~~

~~Chlordane, an organochlorine insecticide, was widely used in agricultural on field crops such as corn and citrus fruits, and in urban settings to control termites in houses and for home and garden use, until it was banned in 1988. Technically, chlordane is not a single chemical but a mixture of pure chlordane with more than 140 other related compounds. Chlordane is extremely persistent in the environment. Sources include contaminated building materials from termiticide application, soils to which chlordane was historically applied, and hazardous waste sites. It may be found in urban runoff and sewage sludge. Adsorption to sediments and volatilization are important removal mechanisms in water. Chlordane has low water solubility and can be found in sediments, food crops, and fish and animal tissue. The ultimate fate of chlordane in oceans is in the bottom sediment. It is known to bioaccumulate in marine organisms.~~

~~The effluent detection limit for chlordane ranged from <0.002 ug/L to <0.09 ug/L. For Discharge Point 002, the calculated effluent limitation for chlordane is 0.001955 ug/L. For Discharge Point 001, the calculated effluent limitation for chlordane is 0.000322 ug/L.~~

~~Recent reported effluent detection limits for chlordane are too high to establish that the Hyperion Treatment Plant discharge will not exceed applicable Ocean Plan objectives following initial dilution of the effluent. The Discharger reports that chlordane and its breakdown products are detected <13 percent of the time in sediments and/or fish tissue samples within the vicinity of the discharge. The Discharger provides minimal discussion related to these sediment and tissue concentrations and how these data relate to threshold levels used by NOAA, FDA, USEPA and California to establish adverse or significant biological effects or human health problems based on sediment and fish tissue levels. Although the Discharger asserts that "potential problems associated with chlordane are diminishing, if not gone", there is a current 303(d) listings for chlordane in sediments in the vicinity of the discharge with potential sources given as both nonpoint and point sources. During the Order/Permit term, total chlordane measurements in fish from the vicinity of the discharge have periodically exceeded California's Maximum Tissue Residual Level for fish tissue. As described in this Fact Sheet, the Order/Permit does not propose new WQBELs for chlordane, but carries forward mass emission and concentration WQBELs~~

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~~contained in the 1994 permit until the TMDL for chlordane (sediments) is completed in the future. This is consistent with the provision in Appendix VI (page 43) of the 2005 Ocean Plan, which requires an existing limitation to remain in the permit if the RPA is inconclusive, as is the case for chlordane. Based on the information described above and because chlordane is known to occur in municipal effluents, sewage sludge and urban runoff, a conservative reasonable potential decision is warranted. Consequently, to ensure water quality protection as a result of Hyperion Treatment Plant discharges, the Final Order/Permit continues forward mass emission and concentration WQBELs for chlordane contained in the 2005 permit.~~

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

54. 303(d) Listed Constituents and Discharge Limitations - DDT and PCBs

At various locations in Santa Monica Bay, DDT, and PCBs are found in sediments at levels that can be harmful to marine organisms. In addition, DDT and PCBs are found in certain Bay-captured seafood species at levels posing potential health risks to humans. A brief description of these pollutants and their occurrence in Santa Monica Bay is given below.

In the U.S., DDT, an organochlorine insecticide, was widely used in agricultural and urban settings until they were banned in 1973. PCBs, a large group of industrial and commercial chemicals, were widely used as coolants and lubricants in transformers, capacitors and other electronic equipment until the late 1970s when their manufacture was banned. Because of their stable properties, DDT and PCBs persist in the environment, the result of historical uses which no longer occur. They have low water solubility and are generally found in sediments and fish tissue.

Bight '98 surveys included efforts to assess the spatial extent of anthropogenic contaminant accumulation in benthic sediments and their effects on marine biota in the Southern California Bight. These surveys showed that while elevated levels of DDT and PCBs continue to be measured in sediments near Hyperion Treatment Plant's 5-mile outfall, much of this is reflective of historical deposition and not the levels of contaminants associated with recent discharges. These surveys also concluded that DDT and PCBs in sediments are a dominant source of contaminant exposure levels in bottom living fish. DDT continues to be found in fish tissue at levels of concern throughout the Bight, although these levels are declining over time. Monitoring data show that

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effluent levels of DDT and PCBs discharged from the 5-mile outfall remain at non-detect concentrations.

Nearshore and offshore waters of Santa Monica Bay are on California's 2006 CWA 303(d) list of water quality limited segments for DDT (sediment and tissue, centered on Palos Verdes Shelf) and PCBs (sediment and tissue). TMDLs for DDT and PCBs have not been scheduled. As TMDLs for these two constituents have not been completed, the Order/Permit continues forward mass emission and concentration WQBELs contained in the 2005 Order/Permit. These limits are based on Ocean Plan water quality objectives and effluent limitation calculation procedures, and, for Discharge Point 002, the average design flow rate (420 MGD) of the Hyperion Treatment Plant in 1994. Current performance for DDT and PCBs in the Hyperion Treatment Plant effluent are set at non-detect concentrations. The Ocean Plan RPA results for DDT and PCBs are inconclusive.

DDT	Effluent Concentration (ug/L)	Effluent Limitation (ug/L) carried over from R4-2005-0020 (ug/L)
Outfall 002	<0.002 - <0.006	0.014
Outfall 001	<0.002 - <0.006	0.0024
PCBs	Effluent Concentration (ug/L)	R4-2005-0020 Effluent Limitation (ug/L) carried over from R4-2005-0020(ug/L)
Outfall 002	<0.07 - <0.49	0.002
Outfall 001	<0.002 - <0.09	0.002

65. WQBEL Calculations

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

$$C_e = C_o + D_m(C_o - C_s)$$

where

C_e = the effluent limitation (µg/L)
C_o = the water quality objective to be met at the completion of initial dilution (µg/L)
C_s = background seawater concentration (µg/L) (see Table below)
D_m = minimum probable initial dilution expressed as parts seawater per part wastewater

The Dm is based on observed waste flow characteristics, receiving water density structure, and the assumption that no currents of sufficient strength to influence

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the initial dilution process flow across the discharge structure. In this Order/Permit, dilution ratios of 84:1 and 13:1 have been applied to Discharge Points 002 and 001, respectively.

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, Cs equals zero for all pollutants, except the following:

Table 9. Pollutants with Background Seawater Concentrations

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

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

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

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

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

Copper

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

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

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

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Ammonia

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

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

C_e = 6.0 + 13(6.0) = 84.0 mg/L (rounded to 84 mg/L prescribed as Instantaneous Maximum)

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

Determination of radioactivity limitation: Since the descriptive water quality objective for radioactivity in the 2005 California Ocean Plan fails to establish applicable narrative or numerical effluent limitations for radionuclides, Regional Water Board staff used BPJ to establish radioactivity limitations for the effluent using Maximum Contaminant Levels (MCLs) for the drinking water specified in Title 22, California Code of Regulations because it is the only scientifically-based regulatory criteria available.

76. Whole Effluent Toxicity (WET)

This Order/Permit (Order No. R4-2005-0020) includes water quality-based effluent limitations for acute toxicity and chronic toxicity at Discharge Point 002 and for chronic toxicity at Discharge Point 001. While the 2005 Ocean Plan specifies that discharges with dilution ratios below 100:1 must conduct chronic toxicity testing, it does not preclude permitting authorities implementing 40 CFR 122.44(d)(1) from establishing acute toxicity testing requirements, including and effluent limitations, to ensure protection of the acute toxicity objective. Because ammonia andboth marine acute toxicity effluent quality data for POTW ocean discharges having dilution ratios greater than 84:1 periodically show acute toxicity related to effluent ammonia concentrations and the current operation of the Hyperion Treatment Plant does not effectively remove ammonia, the Regional Water Board and USEPA have determined that and acute toxicity data collected under the 2005 permit show that the Hyperion discharge has reasonable potential to exceed the current Ocean Plan objective for acute toxicity. Consequently, tThe Order/Permit contains a daily maximum acute toxicity effluent limitation for Discharge Point 002 and testing protocols consistent with the 2005 Ocean Plan.

Using the objective of 0.3 TUa for the daily maximum and 10% of the dilution ratio (as the acute toxicity mixing zone), the daily maximum acute toxicity limit for Discharge Point 002 is calculated as follows:

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

Where

C_e = the effluent daily maximum limit for acute toxicity
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 (84:1 and 13:1 for ~~Outfall Nos.~~Discharge Points 002 and 001, respectively) (This equation applies only when $D_m > 24$.)

$C_e = 0.3 + (0.1)(84)(0.3) = 2.8\ TU_a$

Since the above equation for calculating an acute toxicity limitation applies only when Dm > 24, this Order/Permit does not contain an acute toxicity limitation for Discharge Point 001 although RP is present. ~~However,~~ USEPA and Regional Water Board staff consider that ~~the issue of~~ acute toxicity ~~issue would be~~is adequately addressed by controlling ammonia, for which this Order/Permit contains an effluent limitation at Discharge Point 001. Ammonia is considered the primary probable cause of acute toxicity in secondary-treated wastewater from POTWs.

D. Final Effluent Limitations

1. Satisfaction of Anti-Backsliding Requirements

All effluent limitations in this Order/Permit are at least as stringent as the effluent limitations in the previous Order/Permit. The effluent limitations of the following marine aquatic life toxicants, and non-carcinogenic and carcinogenic human health toxicants have been deleted because they did not show reasonable potential to cause or contribute to an excursion above the respective water quality objectives~~standards~~ for: (1) Discharge Point 002 – radioactivity, tributyltin, and PAHs; and (2) Discharge Point 001 – cyanide, phenolic compounds (chlorinated), HCH, radioactivity, 2,4-dinitrophenol, tributyltin, acrylonitrile, bis(2-chloroethyl) ether, bis(2-ethylhexyl) phthalate, n-nitrosodi-n-propylamine, tetrachloroethylene, and 2,4,6-trichlorophenol. This relaxation of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations. ~~The results of reasonable potential analyses for beryllium, chlordane, DDT, PAHs, PCBs, and TCDDs were inconclusive, therefore, for the purpose of satisfying anti-backsliding requirements, the effluent limitations for these pollutants in Order R4-2005-0020 are carried over.~~

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2. 2. Satisfaction of Antidegradation Policy

On October 28, 1968, the State Water Board adopted Resolution No. 68-16, *Maintaining High Quality Water*, 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, CWA sections 402(o)/303(d)(4) and USEPA regulations at 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. The provisions of this Order/Permit are consistent with the antidegradation policies.

2. 3. Stringency of Requirements for Individual Pollutants

This Order/Permit contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based effluent limitations consist of restrictions on BOD_5, TSS, and pH. Restrictions on BOD_5, TSS, and pH are discussed in section IV.B.2 of this Fact Sheet. This Order/Permit's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

Water quality-based effluent limitations have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. The scientific procedures for calculating individual water quality-based effluent limitations for priority pollutants are based on the 2005 Ocean Plan, which was approved by USEPA on February 14, 2006. All beneficial uses and water quality objectives contained in the Basin Plan were approved under State law and approved by USEPA. Collectively, this Order/Permit's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA and applicable water quality standards.

Table 11. Summary of Final Effluent Limitations Discharge Point 002

Parameter	Units	Effluent Limitations[1,3]				Performance Goal[2]	Basis
		Average Monthly[3]	Average Weekly[3]	Maximum Daily[3,4]	Instantaneous Maximum[3,5]		
BOD_5 20°C[6]	mg/L	30	45	--	--	--	Existing/ Secondary treatment standard
	lbs/day	113,000	169,000	--	--		
	% removal	85	--	--	--		
Total Suspended Solids (TSS)[6]	mg/L	30	45	--	--	--	Existing/ Secondary treatment standard
	lbs/day	113,000	169,000	--	--		
	% removal	85	--	--	--		

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Parameter	Units	Effluent Limitations[1,3]				Performance Goal[2]	Basis
		Average Monthly[3]	Average Weekly[3]	Maximum Daily[3, 4]	Instantaneous Maximum[3,5]		
pH[5,6,7]	pH unit	6.0 (instantaneous minimum) – 9.0 (instantaneous maximum)				--	Existing/ Secondary treatment standard/Ocean Plan
Oil and Grease[7]	mg/L	25	40	--	75	--	Existing/ Carry-over; Ocean Plan
	lbs/day	93,800	150,000	--	--		Existing/ Ocean Plan
Settleable Solids[7]	ml/L	1.0	1.5	--	3.0	--	Existing/ Carry-over; Ocean Plan
Turbidity[7]	NTU	75	100	--	225	--	Existing/ Carry-over; Ocean Plan
Marine Aquatic Life Toxicants[8]							
Arsenic[9]	µg/L	--	--	--	--	3.5	No RP[10]
Cadmium[9]	µg/L	--	--	--	--	2.0	No RP[10]
Chromium (VI)[9]	µg/L	--	--	--	--	0.50	No RP[10]
Copper[9]	µg/L	--	--	--	--	25	No RP[10]
Lead[9]	µg/L	--	--	--	--	10	No RP[10]
Mercury[9]	µg/L	--	--	--	--	0.02	No RP[10]
Nickel[9]	µg/L	--	--	--	--	3	No RP[10]
Selenium[9]	µg/L	--	--	--	--	1.6	No RP[10]
Silver[9]	µg/L	--	--	--	--	2.2	No RP[10]
Zinc[9]	µg/L	--	--	--	--	31~~20~~	No RP[10]
Cyanide	µg/L	--	--	--	--	~~0.00~~5	No RP[10]
Chlorine Residual	mg/L	--	--	--	--	--	No RP[10]
Ammonia as N	mg/L	--	--	--	--	4~~4~~.1~~2~~	No RP[10]
Phenolic compounds (non-chlorinated)	µg/L	--	--	--	--	2.0	No RP[10]
Phenolic compounds (chlorinated)	µg/L	--	--	--	--	2.0	No RP[10]
Endosulfan	µg/L	--	--	--	--	0.04	No RP[10]
HCH	µg/L	--	--	--	--	0.015	No RP[10]

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Parameter	Units	Effluent Limitations[1,3]				Performance Goal[2]	Basis
		Average Monthly[3]	Average Weekly[3]	Maximum Daily[3,4]	Instantaneous Maximum[3,5]		
Endrin	µg/L	--	--	--	--	0.025	No RP[10]
Acute toxicity	TUa	--	--	2.8	--	--	RP; Existing; Carry-over; Ocean Plan[4]
Chronic toxicity	TUc	--	--	84	--	--	RP; Existing/ Carry-over; Ocean Plan[5]
Radioactivity							
Gross alpha	pCi/L	--	--	15	--	9.72	No RP BPJ[11]
Gross beta	pCi/L	--	--	50	--	27.5	No RP BPJ[11]
Combined Radium-226 & Radium-228	pCi/L	--	--	5.0	--	--	No RP BPJ[11]
Tritium	pCi/L	--	--	20,000	--	--	No RP BPJ[11]
Strontium-90	pCi/L	--	--	8.0	--	--	No RP BPJ[11]
Uranium	pCi/L	--	--	20	--	--	No RP BPJ[11]
Human Health Toxicants – Non Carcinogens[8]							
Acrolein	µg/L	--	--	--	--	20	No RP[10]
Antimony[9]	µg/L	--	--	--	--	1.5	No RP[10]
Bis(2-chloroethoxy) methane	µg/L	--	--	--	--	0.5	No RP[10]
Bis(2-chloroisopropyl) ether	µg/L	--	--	--	--	0.5	No RP[10]
Chlorobenzene	µg/L	--	--	--	--	0.6	No RP[10]
Chromium (III)[8]	µg/L	--	--	--	--	1	No RP[10]
Di-n-butyl-phthalate	µg/L	--	--	--	--	5	No RP[10]
Dichlorobenzenes[3]	µg/L	--	--	--	--	0.6	No RP[10]
Diethyl phthalate	µg/L	--	--	--	--	0.6	No RP[10]
Dimethyl phthalate	µg/L	--	--	--	--	2.7	No RP[10]
2-Methyl-4,6-dinitrophenol	µg/L	--	--	--	--	4	No RP[10]
2,4-Dinitrophenol	µg/L	--	--	--	--	2.1	No RP[10]
Ethyl benzene	µg/L	--	--	--	--	0.8	No RP[10]
Fluoranthene	µg/L	--	--	--	--	0.2	No RP[10]
Hexachlorocyclopentadiene	µg/L	--	--	--	--	29	No RP[10]
Nitrobenzene	µg/L	--	--	--	--	0.5	No RP[10]

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Parameter	Units	Effluent Limitations[1,3]				Performance Goal[2]	Basis
		Average Monthly[3]	Average Weekly[3]	Maximum Daily[3, 4]	Instantaneous Maximum[3,5]		
Thallium[9]	µg/L	--	--	--	--	0.1	No RP[10]
Toluene	µg/L	--	--	--	--	0.6	No RP[10]
Tributyltin	nµg/L	--	--	--	--	9.60.020	No RP[10]
1,1,1-Trichloroethane	µg/L	--	--	--	--	0.5	No RP[10]
Human Health Toxicants – Carcinogens[8]							
Acrylonitrile	µg/L	--	--	--	--	0.4	No RP[10]
Aldrin	µg/L	--	--	--	--	0.0019	No RP[10]
Benzene	µg/L	--	--	--	--	0.35	No RP[10]
Benzidine	µg/L	--	--	--	--	0.0059	No RP[10]
Beryllium[8]	µg/L	--	--	--	--	1	No RP[10]
Bis(2-chloroethyl) ether	µg/L	--	--	--	--	0.45	No RP[10]
Bis(2-ethylhexyl) phthalate	µg/L	--	--	--	--	5	No RP[10]
Carbon tetrachloride	µg/L	--	--	--	--	0.45	No RP[10]
Chlordane	µg/L	0.0019	--	--	--	--	Existing/ Carry-over; Ocean Plan
	lbs/day	0.0067	--	--	--	--	
Chlorodibromomethane	µg/L	--	--	--	--	0.25	No RP[10]
Chloroform	µg/L	--	--	--	--	8.7	No RP[10]
DDT[3]	µg/L	0.014	--	--	--	--	Existing/ Carry-over; Ocean Plan
	lbs/day	0.049	--	--	--	--	
1,4-Dichlorobenzene	µg/L	--	--	--	--	2.0	No RP[10]
3,3'-Dichlorobenzidine	µg/L	--	--	--	--	0.55	No RP[10]
1,2-Dichloroethane	µg/L	--	--	--	--	0.5	No RP[10]
1,1-Dichloroethylene	µg/L	--	--	--	--	0.6	No RP[10]
Bromodichloromethane	µg/L	--	--	--	--	0.3	No RP[10]
Dichloromethane[3]	µg/L	--	--	--	--	6.5	No RP[10]
1,3-Dichloropropene	µg/L	--	--	--	--	0.45	No RP[10]
Dieldrin	µg/L	--	--	--	--	0.0034	No RP[10]
2,4-Dinitrotoluene	µg/L	--	--	--	--	0.4	No RP[10]
1,2-Diphenylhydrazine	µg/L	--	--	--	--	0.3	No RP[10]
Halomethanes[3]	µg/L	--	--	--	--	1.05	No RP[10]
Heptachlor	µg/L	--	--	--	--	0.0043	No RP[10]
Heptachlor epoxide[10]	µg/L		--	--	--	0.0017	Existing/ Carry-over; Ocean Plan
Hexachlorobenzene	µg/L	--	--	--	--	0.018	No RP[10]
Hexachlorobutadiene	µg/L	--	--	--	--	0.35	No RP[10]

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Parameter	Units	Effluent Limitations[1,3]				Performance Goal[2]	Basis
		Average Monthly[3]	Average Weekly[3]	Maximum Daily[3,4]	Instantaneous Maximum[3,5]		
Hexachloroethane	µg/L	--	--	--	--	0.35	No RP[10]
Isophorone	µg/L	--	--	--	--	0.35	No RP[10]
N-Nitrosodimethylamine	µg/L	--	--	--	--	0.85	No RP[10]
N-Nitrosodi-N-propylamine	µg/L	--	--	--	--	0.65	No RP[10]
N-Nitrosodiphenylamine	µg/L	--	--	--	--	0.45	No RP[10]
PAHs[3]	µg/L	--	--	--	--	0.70	No RP[10]
PCBs[3]	µg/L	0.0020	--	--	--	--	Existing/ Carry-over; Ocean Plan
	lbs/day	0.0070	--	--	--	--	
TCDD equivalents[3]	pg/L	0.33	--	--	--	--	Existing/ Carry-over; Ocean Plan
	lbs/day	1.2xE-6	--	--	--	--	
1,1,2,2-Tetrachloroethane	µg/L	--	--	--	--	0.55	No RP[10]
Tetrachloroethylene	µg/L	--	--	--	--	0.5	No RP[10]
Toxaphene	µg/L	--	--	--	--	0.018	No RP[10]
Trichloroethylene	µg/L	--	--	--	--	0.4	No RP[10]
1,1,2-Trichloroethane	µg/L	--	--	--	--	0.25	No RP[10]
2,4,6-Trichlorophenol	µg/L	--	--	--	--	0.45	No RP[10]
Vinyl chloride	µg/L	--	--	--	--	0.35	No RP[10]

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Table 12. Summary of Final Effluent Limitations Discharge Point 001[11]

Parameter	Units	Effluent Limitations[1,3]				Performance Goal[2]	Basis
		Average Monthly[3]	Average Weekly[3]	Maximum Daily[3,4]	Instantaneous Maximum[3,5]		
BOD_5 20°C[6]	mg/L	30	45	--	--	--	Existing; Carry-over; Secondary treatment standard
	lbs/day	113,000	169,000	--	--		
	% removal	85	--	--	--		
Total Suspended Solids (TSS)[6]	mg/L	30	45	--	--	--	Existing; Carry-over; Secondary treatment standard
	lbs/day	113,000	169,000	--	--		
	% removal	85	--	--	--		
pH[5,6,7]	pH unit	6.0 (instantaneous minimum) – 9.0 (instantaneous maximum)				--	Existing; Carry-over; Ocean Plan
Oil and Grease[7]	mg/L	25	40	--	75	--	Existing; Carry-over; Ocean Plan
	lbs/day	93,800	150,000	--	--		

Parameter	Units	Effluent Limitations[1,3]				Performance Goal[2]	Basis
		Average Monthly[3]	Average Weekly[3]	Maximum Daily[3, 4]	Instantaneous Maximum[3, 5]		
Settleable Solids[7]	ml/L	1.0	1.5	--	3.0	--	Existing; Carry-over; Ocean Plan
Turbidity[7]	NTU	75	100	--	225	--	Existing; Carry-over; Ocean Plan
Marine Aquatic Life Toxicants[8]							
Arsenic[9]	µg/L	--	--	--	--	--3.5	No RP[10]
Cadmium[9]	µg/L	--	--	--	--	--2.0	No RP[10]
	lbs/day	--	--	--	--	--7.0	
Chromium (VI)[9]	µg/L	--	--	--	--	--0.50	No RP[10]
Copper[9]	µg/L	16	--	140	160	--	RP; Existing; Carry-over; Ocean Plan
	lbs/day	56	--	490	560	--	
Lead[9]	µg/L	--	--	--	--	--10	No RP[10]
Mercury[9]	µg/L	--	--	--	--	--0.02	No RP[10]
Nickel[9]	µg/L	--	--	--	--	--3	No RP[10]
Selenium[9]	µg/L	--	--	--	--	--1.6	No RP[10]
Silver[9]	µg/L	--	--	--	--	--2.2	No RP[10]
Zinc[9]	µg/L	--	--	--	--	--20	No RP[10]
Cyanide	µg/L	--	--	--	--	--0.005	No RP[10]
Chlorine Residual	µg/L	28	--	92112	840	--300	No RP[10]
	lbs/day	98	--	320	2900	--1100	
Ammonia as N	mg/L	8.4	--	34	84	--42	RP; Existing; Carry-over; Ocean Plan
	lbs/day	29,000	--	120,000	290,000	--150,000	
Phenolic compounds (non-chlorinated)	µg/L	--	--	--	--	--2	No RP[10]
Phenolic compounds (chlorinated)	µg/L	--	--	--	--	--2	No RP[10]
Endosulfan	µg/L	--	--	--	--	--0.04	No RP[10]
HCH	µg/L	--	--	--	--	--0.015	No RP[10]
Endrin	µg/L	--	--	--	--	--0.025	No RP[10]
Acute toxicity	TUu a	--	--		--	--	BPJ
Chronic toxicity	TUu c	--	--	13	--	--	RP; Existing Carry-over; Ocean Plan[4]
Radioactivity							
Gross alpha	pCi/L	--	--	--15	--	--	No RPBPJ[11]
Gross beta	pCi/L	--	--	--50	--	--	No RPBPJ[11]

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Parameter	Units	Effluent Limitations[1,3]				Performance Goal[2]	Basis
		Average Monthly[3]	Average Weekly[3]	Maximum Daily[3, 4]	Instantaneous Maximum[3,5]		
Combined Radium-226 & Radium-228	pCi/L	--	--	5.0	--	--	No RP BPJ[11]
Tritium	pCi/L	--	--	20,000	--	--	No RP BPJ[11]
Strontium-90	pCi/L	--	--	8.0	--	--	No RP BPJ[11]
Uranium	pCi/L	--	--	20	--	--	No RP BPJ[11]
Human Health Toxicants – Non Carcinogens[8]							
Acrolein	µg/L	--	--	--	--	20	No RP[10]
Antimony[9]	µg/L	--	--	--	--	1.5	No RP[10]
Bis(2-chloroethoxy) methane	µg/L	--	--	--	--	0.5	No RP[10]
Bis(2-chloroisopropyl) ether	µg/L	--	--	--	--	0.5	No RP[10]
Chlorobenzene	µg/L	--	--	--	--	0.6	No RP[10]
Chromium (III)[9]	µg/L	--	--	--	--	1	No RP[10]
Di-n-butyl-phthalate	µg/L	--	--	--	--	5	No RP[10]
Dichlorobenzenes[3]	µg/L	--	--	--	--	0.6	No RP[10]
Diethyl phthalate	µg/L	--	--	--	--	0.6	No RP[10]
Dimethyl phthalate	µg/L	--	--	--	--	2.7	No RP[10]
2-Methyl-4,6-dinitrophenol	µg/L	--	--	--	--	4	No RP[10]
2,4-Dinitrophenol	µg/L	--	--	--	--	2.1	No RP[10]
Ethyl benzene	µg/L	--	--	--	--	0.8	No RP[10]
Fluoranthene	µg/L	--	--	--	--	0.2	No RP[10]
Hexachlorocyclopentadiene	µg/L	--	--	--	--	29	No RP[10]
Nitrobenzene	µg/L	--	--	--	--	0.5	No RP[10]
Thallium[9]	µg/L	--	--	--	--	0.1	No RP[10]
Toluene	µg/L	--	--	--	--	0.6	No RP[10]
Tributyltin	ng/L	--	--	--	--	0.020	No RP[10]
1,1,1-Trichloroethane	µg/L	--	--	--	--	0.5	No RP[10]
Human Health Toxicants – Carcinogens[8]							
Acrylonitrile	µg/L	--	--	--	--	0.4	No RP[10]
Aldrin	µg/L	--	--	--	--	0.00031	No RP[10]
Benzene	µg/L	--	--	--	--	0.35	No RP[10]
Benzidine	µg/L	--	--	--	--	0.00097	No RP[10]
Beryllium[8]	µg/L	0.46	--	--	--	--	Existing/ Carry-over; Ocean Plan
	lbs/day	1.6	--	--	--	--	

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Parameter	Units	Effluent Limitations[1,3]				Performance Goal[2]	Basis
		Average Monthly[3]	Average Weekly[3]	Maximum Daily[3,4]	Instantaneous Maximum[3,5]		
Bis(2-chloroethyl) ether	µg/L	--	--	--	--	--0.45	No RP[10]
Bis(2-ethylhexyl) phthalate	µg/L	--	--	--	--	--5	No RP[10]
Carbon tetrachloride	µg/L	--	--	--	--	--0.45	No RP[10]
Chlordane	µg/L	0.0003	--	--	--	--	Existing/ Carry-over; Ocean Plan
	lbs/day	0.0011	--	--	--	--	
Chlorodibromomethane	µg/L	--	--	--	--	--0.25	No RP[10]
Chloroform	µg/L	--	--	--	--	--8.7	No RP[10]
DDT	µg/L	0.0024	--	--	--	--	Existing/ Carry-over; Ocean Plan
	lbs/day	0.0084	--	--	--	--	
1,4-Dichlorobenzene	µg/L	--	--	--	--	--2.0	No RP[10]
3,3'-Dichlorobenzidine	µg/L	--	--	--	--	--0.11	No RP[10]
1,2-Dichloroethane	µg/L	--	--	--	--	--0.5	No RP[10]
1,1-Dichloroethylene	µg/L	--	--	--	--	--0.6	No RP[10]
Bromodichloromethane	µg/L	--	--	--	--	--0.3	No RP[10]
Dichloromethane	µg/L	--	--	--	--	--6.5	No RP[10]
1,3-Dichloropropene	µg/L	--	--	--	--	--0.45	No RP[10]
Dieldrin	µg/L	--	--	--	--	--0.00056	No RP[10]
2,4-Dinitrotoluene	µg/L	--	--	--	--	--0.4	No RP[10]
1,2-Diphenylhydrazine	µg/L	--	--	--	--	--0.3	No RP[10]
Halomethanes[3]	µg/L	--	--	--	--	--1.05	No RP[10]
Heptachlor	µg/L	--	--	--	--	--0.0007	No RP[10]
Heptachlor epoxide[10]	µg/L		--	--	--	--0.00028	No RP[10]
Hexachlorobenzene	µg/L	--	--	--	--	--0.0029	No RP[10]
Hexachlorobutadiene	µg/L	--	--	--	--	--0.35	No RP[10]
Hexachloroethane	µg/L	--	--	--	--	--0.35	No RP[10]
Isophorone	µg/L	--	--	--	--	--0.35	No RP[10]
N-Nitrosodimethylamine	µg/L	--	--	--	--	--0.85	No RP[10]
N-Nitrosodi-N-propylamine	µg/L	--	--	--	--	--0.65	No RP[10]
N-Nitrosodiphenylamine	µg/L	--	--	--	--	--0.45	No RP[10]
PAHs[3]	µg/L	0.12	--	--	--	--	Existing/ Carry-over; Ocean Plan
	lbs/day[6]	0.43	--	--	--	--	
PCBs[3]	µg/L	0.00030	--	--	--	--	Existing/ Carry-over; Ocean Plan
	lbs/day[6]	0.0084	--	--	--	--	
TCDD equivalents[3]	pg/L	0.055	--	--	--	--	Existing/

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Parameter	Units	Effluent Limitations[1,3]				Performance Goal[2]	Basis
		Average Monthly[3]	Average Weekly[3]	Maximum Daily[3, 4]	Instantaneous Maximum[3,5]		
	lbs/day[6]	1.93xE-7	--	--	--	--	Carry-over; Ocean Plan
1,1,2,2-Tetrachloroethane	µg/L	--	--	--	--	--~~0.55~~	No RP[10]
Tetrachloroethylene	µg/L	--	--	--	--	--~~0.5~~	No RP[10]
Toxaphene	µg/L	--	--	--	--	--~~0.0029~~	No RP[10]
Trichloroethylene	µg/L	--	--	--	--	--~~0.4~~	No RP[10]
1,1,2-Trichloroethane	µg/L	--	--	--	--	--~~0.25~~	No RP[10]
2,4,6-Trichlorophenol	µg/L	--	--	--	--	--~~0.45~~	No RP[10]
Vinyl chloride	µg/L	--	--	--	--	--~~0.35~~	No RP[10]

Footnotes:

[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 84:1 (i.e., 84 parts seawater to one part effluent) and 13:1 for Discharge Points 002 and 001, respectively. ~~Effluent limitations for radioactivity are not dependent on minimum ratios.~~ The calculations of mass emission rates are shown in the accompanying Fact Sheet.

The mass emission rates are based on the average design flow rate (420 MGD) of the Hyperion Treatment Plant in the 1994 permit: lbs/day = 0.00834 x Ce (effluent concentration in ug/L) x Q (flow rate in MGD). During storm events when flow exceeds the dry weather design capacity, the mass emission rate limitations shall not apply.

[2] The performance goals are based upon the actual performance data of Hyperion Treatment Plant and are specified only as an indication of the treatment efficiency of the plant. They are not considered effluent limitations or standards for the treatment plant. Hyperion Treatment Plant shall make best efforts to maintain, if not improve, the effluent quality at the level of these performance goals. The Executive Officer and USEPA may modify any of the performance goals if the City requests and has demonstrated that the change is warranted.

[3] See section VII.I of this Order and Attachment A for definition of terms.

[4] 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.

[5] The instantaneous maximum effluent limitations shall apply to grab sample results.

[6] The effluent limitations are based on secondary treatment standards, 40 CFR 133.102.

[7] Based on Ocean Plan Table A effluent limitations.

[8] Effluent limitations for these constituents are based on Ocean Plan Table B objectives using initial dilution ratios of 84 and 13 parts of seawater to 1 part effluent for Discharge Points 002 and 001, respectively.

[9] Represents total recoverable metal value.

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[10] These constituents did not show reasonable potential to exceed Ocean Plan Table B objectives; therefore, no numerical water quality-based effluent limits are prescribed.

[11] ~~See "determination of radioactivity limitation" in section IV.C.5 of Fact Sheet.~~

VI. PERFORMANCE GOALS

Chapter III, section F.2, of the 2005 Ocean Plan allows the Regional Water Board to establish more restrictive water quality objectives and effluent limitations than those set forth in the Ocean Plan as necessary for the protection of the beneficial uses of ocean waters.

Pursuant to this provision and to implement the recommendation of the Water Quality Advisory Task Force (*Working Together for an Affordable Clean Water Environment, A final report presented to the California Water Quality Control Board, Los Angeles Region by Water Quality Advisory Task Force, September 30, 1993)* that was adopted by the Regional Water Board on November 1, 1993, performance goals that are more stringent than those based on Ocean Plan objectives are prescribed in this Order/Permit. This approach is consistent with the antidegradation policy in that it requires the Discharger to maintain its treatment level and effluent quality, recognizing normal variations in treatment efficiency and sampling and analytical techniques. However, this approach does not address substantial changes in treatment plant operations that could significantly affect the quality of the treated effluent.

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

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

Procedures for the D~~d~~etermination of P~~p~~erformance G~~g~~oals

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1. For constituents that have been routinely detected in the effluent (at least 20 percent detectable data), performance goals are based on the one-sided, upper 95 percent confidence bound ($UCB_{95/95}$) of the 95th percentile of July 2005 through July 2009 performance data using the RPA protocol contained in the 2005 Ocean Plan. 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~~= $UCB_{95/95}$.

   a. If the maximum detected effluent concentration is greater than the calculated performance goal, then the calculated performance goal is used as the performance goal; or

   b. If the maximum detected effluent concentration is less than the calculated performance goal, then the maximum detected effluent concentration is used as the performance goal.

2. For constituents where monitoring data have consistently shown nondetectable levels (less than 20 percent detectable data), ~~,~~ performance goals are set at five times the Method Detection Limit reported in the 2008 Annual Report. However, if the maximum detected effluent concentration is less than the calculated value based on MDL, then the maximum detected effluent concentration is used as the performance goal.

3. For constituents with no effluent limitations, if the performance goal derived from the ~~above~~ steps, above, exceeds the respective calculated Ocean Plan effluent limitation, then 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 the ~~above~~ steps, above, exceeds respective effluent limitation, then a performance goal is not prescribed ~~for that constituent~~.

The performance goals for Discharge Point~~s 001 and~~ 002 are prescribed in this Order/Permit. The listed performance goals are not enforceable effluent limitations or standards. 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 and USEPA on the nature of the exceedance, the results of the investigation as to the cause of the exceedance, and the corrective actions taken or proposed corrective measures with timetable for implementation, if necessary.

VII. RATIONALE FOR RECEIVING WATER LIMITATIONS

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A. Surface Water

The Ocean Plan and Basin Plan contain numeric and narrative water quality standards applicable to surface waters within the Los Angeles Region. Water quality objectives include a policy to maintain the high quality waters pursuant to federal regulations (40 CFR part 131.12) and State Water Board Resolution No. 68-16. Receiving water limitations in the Order/Permit are included to ensure protection of beneficial uses of the receiving water.

VIII. MASS EMISSION CAPS

Mass emission caps are applied to four pollutants of concern identified by~~in~~ the SMBRP (copper, lead, silver, and zinc) that are causing or could cause deterioration of designated beneficial uses in the Santa Monica Bay. Caps are set at 1995 allowable emission rates. The Discharger should make best efforts to discharge these pollutants of concern below cap values. The Executive Officer and USEPA may modify any of the mass emission cap values, if the Discharger requests and demonstrates that the change is warranted.

The mass emission caps are based on 1995 average flow rate of 347 ~~mgd~~MGD and the 1995 average concentration of the pollutant of concern. If performance data showed nondetectable levels, one half of the detection limit was used to calculate an average concentration. Mass emission cap~~s~~ calculations are shown below.

Parameter	Mass Emission CAP, lbs/year
Copper	41,100
Lead	2,700
Silver	5,500
Zinc	59,100

Mass Emission Cap Calculation:

1995 average flow: 347 ~~mgd~~MGD

Monthly Monitoring Results in 1995

		Constituent			
Month	**Unit**	**Copper**	**Lead***	**Silver**	**Zinc**
Jan	ug/L	35	<3	4.2	45
Feb	ug/L	46	<6	6	62
Mar	ug/L	33	<3	6	40
Apr	ug/L	30	<3	1.2	34
May	ug/L	36	<3	7	51
Jun	ug/L	45	3	6.7	77
Jul	ug/L	39	<3	8.9	45
Aug	ug/L	38	10	5.5	53

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		Constituent			
Month	Unit	Copper	Lead*	Silver	Zinc
Sep	ug/L	46	3	3.4	57
Oct	ug/L	42	<3	2.6	60
Nov	ug/L	43	<3	7.2	54
Dec	ug/L	34	<3	3.9	94
Average	ug/L	39	2.6	5.2	56
Mass Emission Cap **	Lbs/yr	41,181	2,745	5,491	59,132

* One half of the detection limit is used in the calculation.
** Mass Emission Cap is based on the 1995 flow rate of 347 ~~mgd~~MGD.

Example ~~of~~ calculation for copper:
39 ug/L x 1 g/1,000,000 ug x 347,000,000 gals/day x 3.785L/gal x lb/454 g x 365 days/year = 41,181 lbs/year

IX. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

40 CFR part 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. California Water Code sections 13267 and 13383 authorize~~s~~ the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP), Attachment E of this Order/Permit, 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.
- Assess effectiveness of the Pretreatment Program.

Influent monitoring in this Order/Permit follows the influent monitoring requirements in the previous Order/Permit with minor changes. The monitoring frequencies for some parameters have been increased due to RP for those parameters.

B. Effluent Monitoring

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The Discharger is required to conduct monitoring of the permitted discharges in order to evaluate compliance with permit limitations and conditions. Monitoring requirements are specified in the Monitoring and Reporting Program (Attachment E). This Order/Permit requires compliance with the Monitoring and Reporting Program, and is based on 40 CFR parts 122.48, 122.44(i), and 122.41(j). The Monitoring and Reporting Program is a standard requirement in almost all NPDES permits (including this Order/Permit) issued by the Regional Water Board or USEPA. In addition to containing definition of terms, it specifies general sampling/analytical protocols and the requirements of reporting spills, violation, and routine monitoring data in accordance with NPDES regulations, the California Water Code, and Regional Water Board and USEPA policies. The Monitoring and Reporting Program also contains sampling program specific for the Discharger's wastewater treatment plant. It defines the sampling stations and frequency, pollutants to be monitored, and additional reporting requirements. Pollutants to be monitored include all pollutants for which effluent limitations are specified.

Monitoring for those pollutants expected to be present in the discharge from the facility, will be required as shown on the proposed Monitoring and Reporting Program (Attachment E) and as required in the Ocean Plan.

C. Receiving Water Monitoring

1. Surface Water

Receiving water monitoring is required to determine compliance with receiving water limitations and to characterize the water quality of the receiving water. Requirements are based on the Ocean Plan and Basin Plan. The conceptual framework for the receiving water program has three components that comprise a range of spatial and temporal scales: (a) core monitoring; (b) regional monitoring; and (c) special studies.

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

b. Regional monitoring is focused on questions that are best answered by a region-wide approach that incorporates coordinated survey design and sampling techniques. The major objective of regional monitoring is to collect information required to assess how safe it is to swim in the ocean, how safe it is to eat seafood from the ocean, and whether the marine ecosystem is being protected. Key components of regional monitoring include elements to address pollutant mass emission estimations, public health concerns, monitoring of trends in natural resources, assessment of regional impacts from all contaminant sources, and protection of beneficial

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uses. The final design of regional monitoring programs is developed by means of steering committees and technical committees comprised of participating agencies and organizations and is not specified in this Order/Permit. Instead, for each regional component, the degree and nature of participation of the Discharger is specified. For this Order/Permit, these levels of effort are based upon past participation of the Discharger in regional monitoring programs.

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

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

The Discharger, the Regional Water Board and USEPA 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 and USEPA by December 31~~November 1~~, for the following year's monitoring effort (July through June). The following year, detailed scopes of work for proposals, including reporting schedules, shall be presented by the Discharger at a Spring Regional Water Board meeting, to obtain the Regional Water Board approval and to inform the public. Upon approval by the Regional Water Board and USEPA, the Discharger shall implement its special study or studies. (Note: The CEC and Nutrient special studies have~~y has a~~ different deadlines for submitting a Workplan ~~which is six months from the effective date of the Order/Permit~~.)

d. The receiving water monitoring program contains the following ~~components~~ core and regional components: Inshore and offshore water quality monitoring; benthic infauna and sediment chemistry monitoring; fish and macroinvertebrate (trawl and rig fishing) monitoring, including bioaccumulation/seafood safety; and kelp bed monitoring. Local and regional survey questions, sampling designs, monitoring locations, and other specific monitoring requirements are detailed in the MRP.

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d.Inshore Water Quality Monitoring: The inshore monitoring addresses the question: "Are Ocean Plan and Basin Plan objectives for bacteria being met?" Data collected at inshore stations provide the means to determine whether bacteriological objectives for water contact and shellfish harvesting are being met in the area of greatest potential for water contact and shellfish harvesting activities most proximal to the points of discharge.

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

f.Benthic Sediments Monitoring: The local benthic trends survey addresses the question: "Are benthic conditions under the influence of the discharge changing over time?" The data collected are used for regular assessment of trends in sediment contamination and biological response along a fixed grid of sites within the influence (or historical influence) of the discharge. 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. In addition, the regional benthic 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.

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DE. Other Monitoring Requirements

1. Outfall and Diffuser 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 ballasting system.

2. Biosolids and Sludge Management

   Attachment H ~~This section~~ establishes monitoring and reporting requirements for the storage, handling and disposal practices of biosolids/sludge generated from the operation of this POTW.

X. RATIONALE FOR PROVISIONS

A. Standard 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 NPDES permits in accordance with 40 CFR part 122.42, are provided in Attachment D to the Order/Permit. 40 CFR part 122.41(a) through (n) establish conditions that apply to all State-issued NPDES permits. These conditions are incorporated into this Order/Permit~~s~~ expressly.

B. Special Provisions

1. Reopener Provisions

   These provisions are based on 40 CFR part 123.25. The Regional Water Board and USEPA may reopen the Order/Permit to modify conditions and requirements. Causes for modifications can include, but are not limited to, the promulgation of new regulations, modification in sludge use or disposal practices, or adoption of new regulations by the State Water Board or Regional Water Board, including revisions to the Ocean Plan and Basin Plan.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

   a. Toxicity Reduction Requirements

      If the discharge consistently exceeds an effluent limitation for toxicity as specified in this Order/Permit, the Discharger shall conduct a TRE as detailed in section V of the MRP (Attachment E). The TRE will help the

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Discharger identify the possible source(s) of toxicity. The Discharger shall take all reasonable steps to reduce toxicity to the required level.

3. Best Management Practices and Pollution Prevention

a. Spill Clean-Up Contingency Plan (SCCP)

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

b. Pollutant Minimization Program

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

4. Construction, Operation and Maintenance Specifications

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~~4. Construction, Operation, and Maintenance Specifications~~

This provision is based on the requirements of 40 CFR 122.41(e) and the previous Order/Permit.

5. Special Provisions for Municipal Facilities (POTWs Only)

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

b. Pretreatment Program Requirements. Section 402 of the CWA and implementing regulations at 40 CFR part 403 establish pretreatment requirements for POTWs which receive pollutants from non-domestic users. This Order/Permit contains pretreatment program requirements that are applicable to the Discharger.

6. Spill Reporting Requirements for POTWs. This Order/Permit established a reporting protocol for how different types of spills, overflows, and ~~or~~ bypasses of raw or partially treated sewage from the POTW shall be reported to regulatory agencies.

In addition, the State Water Board issued General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order No. 2006-0003-DWQ (General Order) on May 2, 2006. The amended 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 Order. The General Order requires agencies to develop sanitary sewer management plans and report all sanitary sewer overflows (SSOs), among other requirements and prohibitions. Furthermore, the General 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 POTW that is subject to this Order/Permit. The Discharger must comply with both the General Order and this Order/Permit.

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XI. PUBLIC PARTICIPATION

The California Regional Water Quality Control Board, Los Angeles Region (Regional Water Board) and the U.S. Environmental Protection Agency, Region 9 (USEPA) are considering reissuance of waste discharge requirements (WDR) and a National Pollutant Discharge Elimination System (NPDES) permit for the above-referenced POTW. As an

initial step in this process, Regional Board and USEPA staff have developed a tentative WDR and NPDES permit. The Regional Water Board and USEPA encourage public participation in this reissuance process.

A. Written Comments

Staff determinations are tentative. Interested persons are invited to submit written comments concerning the tentative WDR and draft NPDES permit. Comments must be submitted either in person or by mail to:

EXECUTIVE OFFICER
California Regional Water Quality Control Board, Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

Robyn Stuber
U.S. Environmental Protection Agency, Region 9
NPDES Permits Office (WTR-5)
75 Hawthorne Street
San Francisco, CA 94105-3901

To facilitate consideration by the Regional Water Board and USEPA, written comments should be received at Regional Water Board and USEPA offices by June 21, 2010. In addition, written and oral public comments may be submitted until the close of the public hearing at the Regional Water Board's regular Board meeting on July 8 and 9, 2010.

B. Public Hearing

The Regional Water Board and USEPA ~~will~~ held~~old~~ a joint public hearing on the tentative WDR and NPDES permit during the regular Board meeting on the following date, time, and location:

Date and Time: July 8 at 9:00 a.m. and 9, 2010 at 8:00 a.m.
Location: County Government Center, Board of Supervisors Hearing Room
800 S. Victoria Avenue
Ventura, California

Interested parties and persons weare invited to attend. At the public hearing, the Regional Water Board and USEPA ~~will~~ heard testimonies~~y, if any,~~ pertinent to the waste discharge, WDR, and NPDES permit. ~~Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.~~

In addition, the Regional Water Board will hold a public hearing on the tentative WDR during its regular Board meeting on the following date and time and at the following location:

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Date and Time: November 4, 2010 at 9 a.m.
Location: Metropolitan Water District of Southern California
700 North Alameda Street
Los Angeles, California

Interested parties and persons are invited to attend. However, since the comment period ended on July 9, 2010, oral testimony pertinent to the waste discharge, WDR, and NPDES permit will not be heard at the public hearing.

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The Regional Water Board's web address is www.swrcb.ca.gov/rwqcb4 where interested persons can access the current agenda for changes in Board meeting dates, times and venues.

C. Information and Copying

The Report of Waste Discharge (ROWD), related documents, tentative effluent limitations and special conditions, comments received, and other information are on file and may be inspected at 320 West 4th Street, Suite 200, Los Angeles, California and 75 Hawthorne Street, San Francisco, California, at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged by calling the Los Angeles Regional Water Board at (213) 576-6600 or USEPA at (415) 972-3524.

D. Waste Discharge Requirements Appeals

Any aggrieved person may petition the State Water Board to review the decision of the Regional Water Board regarding the final WDR. 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
ATTN: Michael Lauffer
P.O. Box 100, 1001 I Street
Sacramento, CA 95812

E. Federal NPDES Permit Appeals

When a final NPDES permit is issued by USEPA, it will become effective 33 days following the date it is mailed to the Discharger, unless a request for review is filed. If a request for review is filed, only those permit conditions which are uncontested will go into effect pending disposition of the request for review. Requests for review must be filed within 33 days following the date the final permit is mailed and must meet the requirements of 40 CFR part 124.19. All requests for review should be addressed to the Environmental Appeals Board (EAB) as follows. Requests sent

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through the U.S. Postal Service (except by Express Mail) must be addressed to the EAB's mailing address, which is:

U.S. Environmental Protection Agency
Clerk of the Board
Environmental Appeals Board (MC 1103B)
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460-0001

All filings delivered by hand or courier, including Federal Express, UPS, and U.S. Postal Express Mail, should be directed to the following address:

Environmental Appeals Board
U.S. Environmental Protection Agency
Colorado Building
1341 G Street, N.W., Suite 600
Washington, D.C. 20460

Those persons filing a request for review must have filed comments on the draft permit, or participated in the public hearing. Otherwise, any such request for review may be filed only to the extent of changes from the draft to the final permit decision.

F. Additional Information

Requests for additional information or questions regarding this Order/Permit should be directed to Ms. Robyn Stuber at stuber.robyn@epa.gov or (415) 972-3524, or Dr. Cathy Chang at cchang@waterboards.ca.gov or (213) 576-6760.

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ATTACHMENT G – GENERIC TOXICITY REDUCTION EVALUATION (TRE) WORKPLAN (POTW)

1. Information and Data Acquisition

a. Operations and performance review

i. NPDES permit requirements
   (1) Effluent limitations
   (2) Special conditions
   (3) Monitoring data and compliance history

ii. POTW design criteria
   (1) Hydraulic loading capacities
   (2) Pollutant loading capacities
   (3) Biodegradation kinetics calculations/assumptions

iii. Influent and effluent conventional pollutant data
   (1) Biochemical oxygen demand (BOD_5)
   (2) Chemical oxygen demand (COD)
   (3) Suspended solids (SS)
   (4) Ammonia
   (5) Residual chlorine
   (6) pH

iv. Process control data
   (1) Primary sedimentation - hydraulic loading capacity and BOD_5 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_5 and COD removal
   (3) Secondary clarification - hydraulic and solids loading capacity, sludge volume index and sludge blanket depth

v. Operations information
   (1) Operating logs
   (2) Standard operating procedures
   (3) Operations and maintenance practices

vi. Process sidestream characterization data
   (1) Sludge processing sidestreams
   (2) Tertiary filter backwash
   (3) Cooling water

vii. Combined sewer overflow (CSO) bypass data
   (1) Frequency
   (2) Volume

viii. Chemical coagulant usage for wastewater treatment and sludge processing
   (1) Polymer
   (2) Ferric chloride
   (3) Alum

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b. POTW influent and effluent characterization data

i. Toxicity
ii. Priority pollutants
iii. Hazardous pollutants
iv. SARA 313 pollutants
v. Other chemical-specific monitoring results

c. Sewage residuals (raw, digested, thickened and dewatered sludge and incinerator ash) characterization data

i. EP toxicity
ii. Toxicity Characteristic Leaching Procedure (TCLP)
iii. Chemical analysis

d. Industrial waste survey (IWS)

i. Information on IUs with categorical standards or local limits and other significant non-categorical IUs
ii. Number of IUs
iii. Discharge flow
iv. Standard Industrial Classification (SIC) code
v. Wastewater flow
   (1) Types and concentrations of pollutants in the discharge
   (2) Products manufactured
vi. Description of pretreatment facilities and operating practices
vii. Annual pretreatment report
viii. Schematic of sewer collection system
ix. POTW monitoring data
   (1) Discharge characterization data
   (2) Spill prevention and control procedures
   (3) Hazardous waste generation
x. IU self-monitoring data
   (1) Description of operations
   (2) Flow measurements
   (3) Discharge characterization data
   (4) Notice of sludge loading
   (5) Compliance schedule (if out of compliance)
xi. Technically based local limits compliance reports
xii. Waste hauler monitoring data manifests
xiii. Evidence of POTW treatment interferences (i.e., biological process inhibition)

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