CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

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ORDER NO. R4-~~2012~~2013-XXXX
NPDES NO. CA0064246

WASTE DISCHARGE REQUIREMENTS FOR WEST BASIN MUNICIPAL WATER DISTRICT, JUANITA MILLENDER-MCDONALD CARSON REGIONAL WATER RECYCLING PLANT DISCHARGE TO THE PACIFIC OCEAN, VIA THE JOINT WATER POLLUTION CONTROL PLANT

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

Table 1. Discharger Information

Discharger	West Basin Municipal Water District[1]
Name of Facility	Juanita Millender-McDonald Carson Regional Water Recycling Plant
Facility Address	21029 South Wilmington Avenue
	Carson, CA 90810
	Los Angeles County
The United States Environmental Protection Agency and the Regional Water Quality Control Board have classified this discharge as a major discharge.	

The discharge by the West Basin Municipal Water District from the discharge points identified below is subject to waste discharge requirements as set forth in this Order:

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001[2]	Brine waste generated from reverse osmosis treatment	33º 41' 21" N	118º 19' 00" W	Pacific Ocean
002[2]		33º 42' 03" N	118º 20' 17" W	
003[2]		33º 42' 05" N	118º 20' 20" W	
004[2]		33º 41' 20" N	118º 19' 40" W	

[1] The West Basin Municipal Water District is a public agency providing wholesale water, including recycled water and potable water, to local water utility companies, municipalities, and seawater intrusion prevention barrier project. The West Basin Municipal Water District provides approximately 80% of the water used in the South Bay area of Los Angeles.

[2] Discharge Points 001 through 004 in the Order correspond to the Discharge Serial Outfall (Outfall) Nos. 001 through 004 in the Los Angeles County Sanitation Districts' Joint Water Pollution Control Plant (JWPCP) NPDES permit (CA0053813) Order No. R4-2011-0151, reissued on September 1, 2011. These four outfalls are located at Whites Point, off the Palos Verdes Peninsula. Outfall Nos. 001 and 002 are routinely used for discharge of treated wastewater. Outfall No. 003 is used only during times of heavy rains to provide hydraulic relief for flow in the outfall system. Outfall No. 004 serves as a standby outfall to provide additional hydraulic relief during the -heaviest flows.

Table 3. Administrative Information

This Order was adopted by the Regional Water Quality Control Board on:	~~November~~ March 7~~8~~, 201~~2~~3
This Order shall become effective on:	~~December 28, 2012~~April 26, 2013
This Order shall expire on:	~~October~~ February 10, ~~2017~~2018
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, 122.21(d))

IT IS HEREBY ORDERED that Order No. R4-2007-0001 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the California Water Code (commencing with section 13000) and the regulations adopted thereunder, and the provisions of the federal Clean Water Act and the regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order.

I, Samuel Unger, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region on ~~November 8~~March 7, 201~~2~~3.

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Samuel Unger, P.E.
Executive Officer

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I. FACILITY INFORMATION

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

Table 4. Facility Information

Discharger	West Basin Municipal Water District
Operator	United Water
Name of Facility	Juanita Millender-McDonald Carson Regional Water Recycling Plant
Facility Address	21029 South Wilmington Avenue
	Carson, CA 90810
	Los Angeles County
Facility Contact, Title, and Phone	Uzi Daniel, Environmental Quality Analyst, (310) 660-6245
Mailing Address	17140 S. Avalon Blvd., Suite 210, Carson, CA90746
Type of Facility	Water Recycling Facility
Facility Design Flow	1.2 million gallons per day (MGD) of untreated brine waste

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II. FINDINGS

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

A. Background. Pursuant to Order No. R4-2007-0001 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0064246, the West Basin Municipal Water District (Discharger) is currently discharging up to 0.9 MGD of brine waste via the Joint Water Pollution Control Plant (JWPCP) ocean outfalls, which discharge to the Pacific Ocean, a water of the United States. Brine waste is produced from the advanced wastewater treatment facilities located at the Juanita Millender-McDonald Carson Regional Water Recycling Plant (Plant or Facility). The Discharger submitted Report of Waste Discharge (ROWD), dated June 9, 2011**,** and applied for an NPDES permit renewal to discharge up to 1.2 MGD of brine waste produced at the Facility. A site visit was conducted on March 19, 2012. Regional Water Board staff discussed ROWD questions with the Discharger, observed operations, and collected additional data in order to develop permit limitations and conditions. The Regional Water Board issued a letter to the Discharger on March19, 2012, indicating that the application for the NPDES permit renewal and ROWD were complete.

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

B. Facility Description. The Plant is owned by the Discharger, operated by the United Water, and located at 21029 South Wilmington Avenue, Carson, California. The

Plant has a treatment design capacity of approximately 6.8 MGD. It provides additional treatment to a portion of the Title 22 non-potable water (tertiary-treated wastewater as recycled water) delivered from the Discharger's Edward C. Little Water Recycling Plant, located at approximately 10 miles northwest of the Plant for the following maximum productions:

1. 5.0 MGD of microfiltration (MF) and reverse osmosis (RO) treated water used for boiler feed water;

2. 0.9 MGD of nitrified water used for cooling towers at the ~~British Petroleum (BP)~~ Refinery, and,

3. 0.9 MGD of brine waste.

Pursuant the Recycled Water Policy (see finding Q for details), the Regional Water Board encourages the maximum use of recycled water to offset potable demand and for other beneficial uses. The Discharger is planning to expand recycled water treatment process in order to accommodate increased demands from the~~BP~~ Refinery:

1. Construct and install additional nitrification systems. These processes do not produce any brackish wastewaters and will not contribute to the discharge to the brine line.

2. Maximize RO. The Discharger will increase production of RO permeate by utilizing the existing spare (fourth) RO train. The current system was designed to produce 5 MGD of RO permeate by operating three RO trains, a keeping a fourth train as backup. This will increase the amount of RO permeate produced to approximately 6.83 MGD, resulting in an increase in brine waste production from 0.9 MGD to 1.2 MGD. The incoming water from the Edward C. Little Water Recycling Plant will be increased from 6.8 MGD to approximately 8 MGD as a result of the Plant's upgrade. A mass balance schematic of the brine waste is in included in Attachment C.

3. Construct additional MF process units. The Discharger will construct additional MF process units to provide enough water to feed the RO system.

The brine waste is discharged to a brine line that leads to the surge tower for JWPCP's effluent discharge tunnels (33º 47' 59" N, 118º 17' 14" W), approximately 4 miles southwest of the Carson Plant. There, it immediately commingles with the remainder of JWPCP's secondary-treated effluent and enters the JWPCP outfalls, typically Outfall Nos. 001 and 002. The annual average effluent flows from JWPCP between 2007 and 2011 ranged from 273 to 309 MGD. Attachment B provides a map of the area around the Plant, JWPCP, and Edward C. Little Water Recycling Plant. Attachment C provides a flow schematic of the Plant.

The Discharger maintains a Storm Water Pollution Prevention Program for the Plant, which includes spill response protocols as well as Best Management Practices to

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prevent spills, per NPDES General Permit No. CAS000001, State Board Order No. 97-03-DWQ.

C. Legal Authorities. This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the United States Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the California Water Code (CWC) (commencing with section 13370). This Order shall serve as an NPDES permit for point source discharges from this Facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the CWC (commencing with section 13260).

D. Background and Rationale for Requirements. The Regional Water Board developed the requirements in this Order based on information from the application, monitoring reports, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for Order requirements, is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A through O are also incorporated into this Order.

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

F. Technology-based Effluent Limitations (TBELs). Section 301(b) of the CWA and implementing regulations at 122.44, title 40 of the Code of Federal Regulations[3] (CFR) require that NPDES permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum State technology-based requirements based on Ocean Plan Table A Effluent Limitations and Best Professional Judgment (BPJ), in accordance with 40 CFR 125.3. A detailed discussion of technology-based effluent limitations development is included in the Fact Sheet (Attachment F).

G. Water Quality-Based Effluent Limitations (WQBELs). Section 301(b) of the CWA and 40 CFR 122.44(d) require that NPDES permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards. 40 CFR 122.44(d)(1)(i) mandates that permits include WQBELs for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, WQBELs must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed

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

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state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in 40 CFR 122.44(d)(1)(vi).

H. Water Quality Control Plans. The Regional Water Board has adopted a Water Quality Control Plan for the Los Angeles Region (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 Board Resolution No. 88-63, which established State policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Beneficial uses applicable to the Pacific Ocean are as follows:

Table 5. Basin Plan Beneficial Uses

Discharge Points	Receiving Water	Beneficial Use(s)
001 002 003 004	Point Vicente Beach Royal Palms Beach Whites Point Beach	Existing: Navigation (NAV); contact (REC-1) and non-contact (REC-2) water recreation; commercial and sport fishing (COMM); marine habitat (MAR); wildlife habitat (WILD); and shellfish[4] harvesting (SHELL). Potential: Spawning, reproduction, and/or early development of fish (SPWN).
	Nearshore[4] Zone	Existing: Industrial service supply (IND); NAV; REC-1; REC-2; COMM; MAR; WILD; preservation of biological habitats[4] (BIOL); preservation of rare, threatened, or endangered species[4] (RARE); migration of aquatic organisms[4] (MIGR); SPWN[4]; and SHELL[4, 5].
	Offshore Zone	Existing: IND; NAV; REC-1; REC-2; COMM; MAR; WILD; RARE[4]; MIGR[4]; SPWN[4]; and SHELL[4].

Requirements of this Order 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[4]. The Basin Plan, however, may contain additional water quality objectives applicable to the Discharger.

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

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[4] See Attachment A for definition of terms.
[5] Areas exhibiting large shellfish populations include Malibu, Point Dume, Point Fermin, White Point and Zuma Beach.

J. Integrated Report. The State Water Board proposed the California 2010 Integrated Report from a compilation of draft Regional Water Boards' 2008 Integrated Reports containing 303(d) List of Impaired Waters and 305(b) Reports, following Regional Water Board recommendations and information solicited from the public and other interested parties. On August 4, 2010, the State Water Board adopted California's 2010 Integrated Report. On November 12, 2010, the USEPA approved California's 2010 Integrated Report Section 303(d) List of Impaired Waters for the Los Angeles Region. The Santa Monica Bay and nearby locations are on the 303(d) list for the following pollutants:

1. Point Vicente Beach – Calwater Watershed No. 40511000

   Pollutant – Indicator bacteria[6]

2. Royal Palms Beach – Calwater Watershed No. 40511000

   Pollutants – Fish consumption advisory for dichlorodiphenyltrichloroethane[7] (DDT[4]); indicator bacteria[6]; and fish consumption advisory for polychlorinated biphenyls[7] (PCBs[4])

3. Santa Monica Bay Offshore & Nearshore – Calwater Watershed No. 40513000

   Pollutants –DDT[4] (tissue & sediment)[7]; debris[7], fish consumption advisory[7], PCBs[4] (tissue & sediment)[7]; and sediment toxicity[7] (centered on Palos Verdes Shelf)

4. Santa Monica Bay Beaches – Calwater Watershed No. 40513000

   Pollutants – Indicator bacteria[6]

5. Whites Point Beaches – Calwater Watershed No. 40511000

   Pollutants – Fish consumption advisory for DDT[4,7]; indicator bacteria[6]; and PCBs[4, 7]

K. Total Maximum Daily Loads (TMDLs). A TMDL is a determination of the amount of a pollutant, from point, nonpoint, and natural background sources, including a margin of safety, which may be discharged to a water quality-limited water body. Section 303(d) of the CWA established the TMDL process. The statutory requirements are codified at 40 CFR 130.7. TMDLs must be developed for the pollutants of concern, which impact the water quality of water bodies on the 303(d) list.

A 13-year schedule for development of TMDLs in the Los Angeles Region was established in a consent decree approved on March 22, 1999 (Heal the Bay Inc., et al. v. Browner, et al. C 98-4825 SBA) (United States District Court, Northern District of California, 1999). In compliance with the consent decree, a TMDL for bacterial

[6] A TMDL has been approved for this pollutant and is being addressed by USEPA.
[7] This pollutant requires TMDL.

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indicators at Santa Monica Bay Beaches became effective on July 15, 2003. A TMDL for debris was adopted by the Regional Water Board on November 4, 2010, and will become effective upon approval by the State Water Board, Office of Administrative Law, and USEPA. TMDLs for listings of ~~DDT,~~ debris, fish consumption advisory, ~~PCBs,~~ and sediment toxicity for the Santa Monica Bay Offshore and Nearshore are expected to be completed by January 1, 2019. Because all waste load allocations (WLAs) applicable to the JWPCP outfalls have been incorporated into JWPCP's 2011 Order, they do not need to be incorporated into this Order.

Santa Monica Bay TMDLs for DDTs and PCBs. Consistent with 40 CFR 130.2 and 130.7, section 303(d) of the CWA and USEPA guidance for developing TMDLs in California (USEPA, 2000a), the USEPA issued the *Santa Monica Bay TMDLs for DDTs and PCBs* on March 26, 2012, including WLAs for DDT and PCBs for point sources, including the Hyperion Treatment Plant (HTP), JWPCP, the Little WRP and the Carson WRP.

According to footnote 3 of table 6-2 of the TMDL, the effluent limitations for DDT and PCBs for the Carson WRP are supposed to be calculated according to the following formula:

$$\text{Carson WRP WLA} = C_{HTP}\ (Q_{HTP\ to\ Carson}) + C_{JWPCP}\ (Q_{JWPCP\ to\ Carson})$$

Where:

C_{HTP} is the concentration-based WLA (10.1 ng/L for DDT and 0.271 ng/L for PCBs) for the Hyperion effluent.
C_{JWPCP} is the concentration-based WLA (15.8 ng/L for DDT and 0.351 ng/L for PCBs) for the JWPCP effluent.
$Q_{HTP\ to\ Carson}$ and $Q_{JWPCP\ to\ Carson}$ are the flows diverted from Hyperion and JWPCP to the Carson WRP.

However, this formula presumes that the water coming into the Carson WRP is from HTP. Because the Little WRP is actually the source of incoming water, the following formula is more accurate and was used to calculate the effluent limitations in this permit:

$$\text{Carson WRP WLA} = C_{HTP}\ (Q_{Little\ WRP\ to\ Carson})$$

L. California Ocean Plan. The State Water Board adopted the California Ocean Plan in 1972 and the most recent amendments to the Ocean Plan on September 15, 2009. The Office of Administration Law approved it on March 10, 2010. On October 8, 2010, USEPA approved the 2009 Ocean Plan. The Ocean Plan is applicable, in its entirety, to the ocean waters of the State. The Ocean Plan identifies beneficial uses of ocean waters of the State to be protected as summarized below:

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Table 6. Ocean Plan Beneficial Uses

Discharge Points	Receiving Water	Beneficial Use(s)
001 002 003 004	Pacific Ocean	IND; REC1 and REC2 including aesthetic enjoyment; NAV; COMM; mariculture[4]; preservation and enhancement of designated Area of Special Biological Significance[4, 8] (ASBS); RARE; MAR; MIGR; SPWN; and, SHELL[4].

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

M. Santa Monica Bay Restoration Plan. This permit authorizes the discharge of brine waste to Santa Monica Bay, one of the most heavily used recreational areas in California. Recognizing the importance of Santa Monica 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) and the development of the Bay Restoration Plan (BRP), which serves as a blueprint for restoring and enhancing Santa Monica Bay. The Regional Water Board plays a lead role in 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 JWPCP, and implementation of the mass emission approach for discharges of pollutants to Santa Monica Bay.

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

O. Stringency of Requirements for Individual Pollutants. This Order contains both TBELs and WQBELs for individual pollutants. The TBELs consist of restrictions on biological oxygen demand[4] (BOD), total suspended solids[4] (TSS), oil and grease, settleable solids, turbidity, pH, and percent removal of BOD and TSS. Restrictions on BOD, TSS, oil and grease, settleable solids, turbidity, and pH are discussed in section IV.B.2 of the Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based

[8] There are no ASBS in the vicinity of this discharge.

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requirements. In addition, this Order contains effluent limitations more stringent than the minimum, federal technology-based requirements that are carried over from the previous permit.

Water quality-based effluent limitations have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. All beneficial uses and water quality objectives contained in the Basin Plan, Ocean Plan, and Thermal Plan have been approved under state law and by USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to 40 CFR part 131.21(c)(1). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the CWA.

P. Antidegradation Policy. 40 CFR 131.12 requires that state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy and requires that the existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. As discussed in the Fact Sheet, the permitted discharge is consistent with the antidegradation policy at 40 CFR 131.12 and State Water Board Resolution No. 68-16.

Q. Recycled Water Policy. On February 9, 2009, the State Water Board adopted Resolution No. 2009-0011, the State Board Recycled Water Policy. The Policy was approved by OAL on May 14, 2012. This Recycled Water Policy is intended to support the State Water Board's Strategic Plan to promote sustainable local water supplies. Increasing the acceptance and promoting the use of recycled water is a means towards achieving sustainable local water supplies and can result in reduction in greenhouse gases, a significant driver of climate change. The Recycled Water Policy is also intended to **encourage** beneficial use of, rather than solely disposal of, recycled water generated from municipal wastewater sources in a manner that fully implements state and federal water quality laws.

R. Anti-Backsliding Requirements. Sections 402(o)(2) and 303(d)(4) of the CWA and 40 CFR 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. Some mass emission effluent limitations in this Order are less stringent that those in the previous Order. As discussed in detail in the Fact Sheet this relaxation of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations.

S. Endangered Species Act (ESA). This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now

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prohibited, or becomes prohibited in the future, under either the California ESA (Fish and Game Code sections 2050 to 2097) or the federal ESA (16 United States Code (USC) sections 1531 to 1544). This Order requires compliance with effluent limitations, receiving water limitations, and other requirements to protect the beneficial uses of waters of the State. The Discharger is responsible for meeting all requirements of the applicable ESA.

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

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

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

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

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 (ASBS).

3. 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.

B. The discharge of waste that is not brine waste is prohibited.

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C. The discharge of brine waste at any location different from Discharge Points 001 to 004 is prohibited and constitutes a violation of this Order. Brine waste discharged from Discharge Points 001 to 004 shall be limited to a maximum of 1.2 MGD. The brine waste discharged through Discharge Points 001 to 004 shall be discharged in a manner that provides sufficient initial dilution to minimize the concentrations of substances not removed in treatment.

D. Other than the brine waste discharge authorized by this Order, the discharge of water, materials, chemicals, thermal wastes, elevated temperature wastes, toxic wastes, deleterious substances, radiological waste, biological warfare agent, or wastes to the Pacific Ocean, a storm drain system, or other waters of the State are prohibited.

E. Neither the treatment nor the discharge of brine waste shall create a pollution, contamination, or nuisance as defined by section 13050 of the CWC.

F. The discharge of brine waste shall not contain any substances in concentrations toxic to human, animal, plant, or aquatic life.

G. The discharge of brine waste shall not cause a violation of any applicable federal CWA water quality requirement, or water quality standard adopted by the Regional Water Board or State Water Board as required by the CWA and regulations adopted thereunder. If a more stringent applicable water quality standard is promulgated or approved pursuant to CWA section 303 and amendments thereto, the Regional Water Board will revise and modify this Order in accordance with the more stringent standard.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations – Discharge Points 001 to 004

1. Final Effluent Limitations – Discharge Points 001 to 004

a. The Discharger shall maintain compliance with the following effluent limitations at Discharge Points 001 to 004, with compliance measured at Monitoring Location EFF-001 as described in the attached MRP (Attachment E).

Table 7. Effluent Limitations

Parameter	Units	Effluent Limitations					
		Average Annually[9]	Average Monthly[9]	Average Weekly[9]	Maximum Daily[9]	Instantaneous Minimum[9]	Instantaneous Maximum[9]
Discharge Points 001, 002, 003, and 004							
Oil and Grease	mg/L	--	25	40	--	--	75
	lbs/day[10]	--	250	400	--	--	750

[9] See Section VII of this Order for definition.

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Parameter	Units	Effluent Limitations					
		Average Annually[9]	Average Monthly[9]	Average Weekly[9]	Maximum Daily[9]	Instan-taneous Minimum[9]	Instan-taneous Maximum[9]
Total Suspended Solids	mg/L	--	60	--	--	--	--
	lbs/day[10]	--	600	--	--	--	--
Settleable Solids	ml/L	--	1.0	1.5	--	--	3.0
Turbidity	NTU	--	75	100	--	--	225
pH	standard units	--	--	--	--	6.0	9.0
Temperature	°F	--	--	--	100	--	--
DDT (individual WQBEL)	g/year[11]	110		--	--	--	--
DDT (group WQBEL)	g/year	14,567[12]					
PCBs (individual WQBEL, as arochlors[4])	g/year[11]	3.0	--	--	--	--	--
PCBs (group WQBEL, as arochlors[4])	g/year	351[12]	--	--	--	--	--

b. Radioactivity: Not to exceed the limits specified in title 17, division 1, chapter 5, subchapter 4, group 3, article 3, section 30253 of the California Code of Regulations. Reference to section 30253 is prospective, including future changes to any incorporated provisions of federal law, as the changes take effect.

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

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

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

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

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

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[10] The mass emission rates are based on the existing plant design flow rate of 1.2 MGD for the brine waste, and are calculated as follows: Flow (MDG) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day.

[11] The mass emission rates are based on the incoming flow rate of 8 MGD for the upgraded Plant design and the concentration-based WLAs for Hyperion in the *Santa Monica Bay TMDL for DDTs and PCBs* of 10.1 ng/L and 0.271 ng/L for DDT and PCBs, respectively. The mass emission rates are calculated as follows: Flow (MDG) x Concentration (ng/L) x 1.38 (conversion factor) = g/year.
According to the *Santa Monica Bay TMDL for DDTs and PCBs*, all dischargers with WLAs identified in table 6-2 of the TMDL are to be considered by NPDES permit writers to have reasonable potential under 40 CFR 122.44(d) and require WQBELs following the TMDL.

[12] The total mass load for DDT and PCB from JWPCP, Hyperion Treatment Plant, and West Basin's WRPs shall not be more than 14,567 g/yr for DDT and 351 g/yr for PCB. The Discharger is deemed in compliance with these group WQBELs for DDT and PCBs if it is in compliance with the individual mass-based WQBELs for DDT and PCBs in Table 7 Effluent Limitations.

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

V. RECEIVING WATER LIMITATIONS

The Discharger shall not cause a violation of the following water quality objectives, expressed as receiving water limitations, in representative areas within the waste field where initial dilution is completed.

A. Bacterial Characteristics

1. Water Contact Standards

a. State/Regional Water Board Water Contact Standards

Within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is further from the shoreline, and in areas outside this zone used for water contact sports, as determined by the Regional Water Board (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

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

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

iii. Enterococcus density shall not exceed 35/100 ml.

Single Sample Maximum (SSM)

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

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

iii. Enterococcus density shall not exceed 104/100 ml.

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

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

c. California Department of Public Health[13] (CDPH) Standards

CDPH has established minimum protective bacteriological standards for coastal waters adjacent to public beaches and for public water contact sports areas in ocean waters. These standards are found in the California Code of Regulations, title 17, section 7958, and they are identical to the objectives contained in section V.A.1.a., above. When a public beach or public water contact sports area fails to meet these standards, CDPH or the local public health officer may post with warning signs or otherwise restrict use of the public beach or public water contact sports area until the standards are met. The CDPH regulations impose more frequent monitoring and more stringent posting and closure requirements on certain high-use public beaches that are located adjacent to a storm drain that flows in the summer.

For beaches not covered under Assembly Bill (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.

2. Shellfish Harvesting Standards

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

B. Physical Characteristics

The waste discharged shall not:

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

2. Cause aesthetically undesirable discoloration of the ocean surface;

3. Significantly reduce the transmittance of natural light at any point outside the initial dilution zone[4]; or,

[13] Formerly, the California Department of Health Services.

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

C. Chemical Characteristics

The waste discharged shall not:

1. 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;

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

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

4. Contain individual pesticides or combinations of pesticides in concentrations that adversely affect beneficial uses;

5. Cause the concentration of substances set forth in Chapter II, Table B, of the 2009 Ocean Plan, in marine sediments to increase to levels that would degrade indigenous biota;

6. Cause the concentration of organic materials in marine sediments to be increased to levels that would degrade[4] marine life;

7. Contain nutrients at levels that will cause objectionable aquatic growths or degrade[4] indigenous biota; or,

8. Cause the numeric water quality objectives established in Chapter II, Table B, of the 2009 Ocean Plan to be exceeded outside of the zone of initial dilution.

D. Biological Characteristics

The waste discharged shall not:

1. Degrade[4] marine communities, including vertebrate, invertebrate, and plant species;

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

3. 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.

E. Radioactivity

Discharge of radioactive waste shall not degrade marine life.

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VI. PROVISIONS

A. Standard Provisions

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

2. The Discharger shall comply with the following 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.

   b. Odors, vectors, and other nuisances 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[4] 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, and other solids removed from liquid wastes shall be disposed of in a manner approved by the Executive Officer of the Regional Water Board.

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

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

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

   i. 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 programs developed to comply with NPDES permits issued by the Regional Water Board to local agencies.

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j. Discharge of wastes[4] to any point other than specifically described in this Order is prohibited, and constitutes a violation thereof.

k. The Discharger shall comply with all applicable effluent limitations, national standards of performance, toxic effluent standards, and all federal regulations established pursuant to sections 301, 302, 303(d), 304, 306, 307, 316, 403, and 405 of the 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 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[4] 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[4] 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[4] disposal facilities, the discharger shall notify the Regional Water Board of such change and shall notify the succeeding owner or operator of the existence of this Order by letter, copy of which shall be forwarded to the Regional Water Board, 30 days prior to taking effect.

r. The CWC section 13385 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 may subject the violator to any of the penalties

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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. The California Water Code section 13387 provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this order, including monitoring reports or reports of compliance or noncompliance, or who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained in this order is subject to a fine of not less than $5,000 nor more than $50,000, imprisonment in the state prison , or both. For a subsequent conviction, such a person shall be punished by a fine of not more than $100,000 per day of violation, by imprisonment in the state prison for two, four or six years, or by both that fine and imprisonment.

t. The discharge of any waste[4] 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 permit.

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

   i. Name and general composition of the chemical,

   ii. Frequency of use,

   iii. Quantities to be used,

   iv. Proposed discharge concentrations, and

   v. USEPA registration number, if applicable.

v. In the event the Discharger does not comply or will be unable to comply for any reason with any prohibition, maximum daily effluent limitation, or receiving water limitation of this Order, the Discharger shall notify the Watershed Regulatory Section Chief at the Regional Water Board by telephone (213) 576-6616, or by Fax at (213) 576-6660 within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in writing to the Regional Water Board within five days, unless the Regional Water Board waives confirmation. The written notification shall state the nature, time, duration, and cause of noncompliance, and shall describe the measures being taken to remedy the current noncompliance, and the measures to prevent recurrence including, where applicable, a schedule of implementation. Other noncompliance requires written notification as above at the time of the normal monitoring report.

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

B. Monitoring and Reporting Program (MRP) Requirements

The Discharger shall comply with the MRP, and future revisions thereto, in Attachment E of this Order. If there is any conflict between provisions stated in the MRP and the Regional Water Board Standard Provisions, those provisions stated in the MRP shall prevail.

C. Special Provisions

1. Reopener Provisions

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

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

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

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

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

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

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

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

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

f. This Order may be modified, in accordance with the provisions set forth in 40 CFR parts 122 and 124, to include new Minimum Levels[7] (ML).

g. This Order 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 Area.

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

i. This Order may be modified, revoked, and reissued or terminated in accordance with the provisions of 40 CFR parts 122.44, 122.62 to 122.64, 125.62, and 125.64. Causes for taking such actions include, but are not limited to, failure to comply with any condition of this Order, endangerment to human health or the environment resulting from the permitted activity, or acquisition of newly obtained information which would have justified the application of different conditions if known at the time of Order adoption and issuance.

j. The waste discharged shall not cause a violation of any applicable water quality standard for receiving waters. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the CWA, or amendments thereto, the Regional Water Board will revise and modify this Order in accordance with such standards.

k. This Order may be reopened and modified to revise effluent limitations as a result of future Ocean Plan Amendments.

l. This Order may be reopened upon submission by the Discharger of adequate information, as determined by the Regional Water Board, to provide for dilution credits, as may be appropriate.

m. This Order may be reopened and modified to incorporate additional monitoring requirements and/or WQBELs for effluents discharged through Discharge Point 001, based on the results of the ~~special study for~~ chronic toxicity tests.

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n. This Order 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.

o. This Order may be reopened and modified to revise the receiving water monitoring program as a result of future other ocean outfalls being constructed in proximity to the existing City of Los Angeles' Outfalls.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

Not applicable.

3. Best Management Practices and Pollution Prevention

~~**a.** The Discharger shall submit within 90 days of the effective date of this Order:~~

~~i. Storm Water Pollution Prevention Plan (SWPPP) -- The treatment plant is regulated under the State Water Board Water Quality, NPDES General Permit, WDRs for Discharge of Storm Water Associated with Industrial Activities Excluding Construction Activities.~~

~~ii. An updated SWPPP that describes site-specific management practices for minimizing contamination of storm water runoff and for preventing contaminated storm water runoff from being discharged directly to waters of the State. The SWPPP shall be developed as specified under the statewide General Permit for Discharges of Storm Water Associated with Industrial Activities.~~

~~iii. An updated Spill Contingency Plan (SCP) that shall be site specific and shall cover all areas of the Facility. A Spill Control and Countermeasure Plan (SPCC), developed in accordance with 40 CFR 112, may be substituted for the SCP.~~

~~Each plan shall cover all areas of the Plant and shall include an updated drainage map for the Plant. The Discharger shall identify on a map of appropriate scale the areas that contribute runoff to the permitted discharge point; describe the activities in each area and the potential for contamination of storm water runoff and the discharge of hazardous waste/material; and address the feasibility of containment and/or treatment of storm water. The plans shall be reviewed annually and at the same time. Updated information shall be submitted within 30 days of revision.~~

a.Pollutant Minimization Program (PMP)

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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 (RML) and Method Detection Limit (MDL) are provided in the 2009 Ocean Plan. These reporting protocols and definitions are used in determining the need to conduct a PMP, as follows:

The Discharger shall develop and conduct a PMP as further described below when there is evidence (e.g., sample results reported as DNQ when the effluent limitation is less than the MDL, sample results from analytical methods more sensitive than those methods required by this Order/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:

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

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

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 CWC section 13263.3(d), shall fulfill the PMP requirements.

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

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

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

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

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

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

- All PMP monitoring results for the previous year;
- A list of potential sources of the reportable priority pollutant(s);
- A summary of all actions undertaken pursuant to the control strategy; and,
- A description of actions to be taken in the following year.

4. Construction, Operation and Maintenance Specifications

a. Wastewater treatment facilities subject to this Order shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to California Code of Regulations, title 23, chapter 3, subchapter 14 (Section 13625 of the CWC).

b. The Discharger shall provide safeguards to assure that, should there be a reduction, loss, or failure of electric power, the Discharger shall comply with the terms and conditions of this Order/Permit. Such safeguards may include alternate power sources, standby generators, retention capacity, operating procedures, or other means.

VII. COMPLIANCE DETERMINATION

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

A. 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 (ML).

B. 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).

C. Multiple Sample Data.

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

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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.

D. 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.

E. 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 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.

F. 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.

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

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

H. 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).

I. 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).

J. Six-month Median Effluent Limitation.

If the median of daily discharges over a 180-day period exceeds the 6-MMEL for a given parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for each day of that 180-day period for that parameter (e.g., resulting in 180 days of non-compliance in a 180-day period). However, an alleged violation of the 6-MMEL will be considered one violation for the purpose of assessing mandatory minimum penalties. The median of daily discharges over a 180-day period that exceeds the 6-MMEL for a parameter will be considered out of compliance for that 180-day period only. If only a single sample (daily discharge) is taken over a 180-day period and the analytical result for that sample exceeds the 6-MMEL, the Discharger will be considered out of compliance for that 180-day period. If no sample (daily discharge) is taken over a 180-day period, no compliance determination can be made for that 180-day period with respect to effluent violation

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determination, but compliance determination can be made for that 180-day period with respect to reporting violation determination.

K. 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 (%) = $[1-(C_{Efluent}/C_{Influent})] \times 100\ \%$

L. 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.

M. Mass Emission Rate.

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:

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

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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.

N. Bacterial Standards and Analysis.

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

   Geometric Mean = $(C_1 \times C_2 \times \ldots \times C_n)1/n$

   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.

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

3. Detection methods used for coliforms (total and fecal) and *Enterococcus* shall be those presented in Table 1A of 40 CFR 136 (most recent revision), 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.

O. Single Operational Upset (SOU).

A SOU that leads to simultaneous violations of more than one pollutant parameter shall be treated as a single violation and limits the Discharger's liability in accordance with the following conditions:

1. A 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.

2. 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.

3. 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).

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

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ATTACHMENT A – DEFINITIONS

Acute Toxicity:

a. Acute Toxicity (TUa)

Expressed in Toxic Units Acute (TUa)

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

b. Lethal Concentration 50% (LC 50)

LC 50 (percent waste giving 50% survival of test organisms) shall be determined by static or continuous flow bioassay techniques using standard marine test species as specified in Ocean Plan Appendix III, 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 Annual Effluent Limitation (AAEL) means the highest allowable average of "daily discharges" over a calendar year, calculated as the sum of all "daily discharges" measured during a calendar year divided by the number of "daily discharges" measured during that year.

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

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"daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week. (40 CFR 122.2.)

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

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

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

a. Chronic Toxicity (TUc)

   Expressed as Toxic Units Chronic (TUc)

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

b. No Observed Effect Level (NOEL)

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

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

Composite sample means, for other than flow rate measurement,

a. 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.

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

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 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.

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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 Quality Control 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.

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.

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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 title 40 of the Code of Federal Regulations, 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) are 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.

Pesticides are, for purposes of this order, those six constituents referred to in 40 CFR part 125.58 (p) (methoxychlor, demeton, guthion, malathion, mirex, and parathion).

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.

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Publicly Owned Treatment Works (POTW). 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 wastes of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to a POTW Treatment Plant. The term also means the municipality as defined in section 502(4) of the Act, 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.

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 Resolution No.s 74-28, 74-32, and 75-61 are now also classified as a subset of State Water Quality Protection Areas and require special protections afforded by the Ocean Plan.

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.

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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

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

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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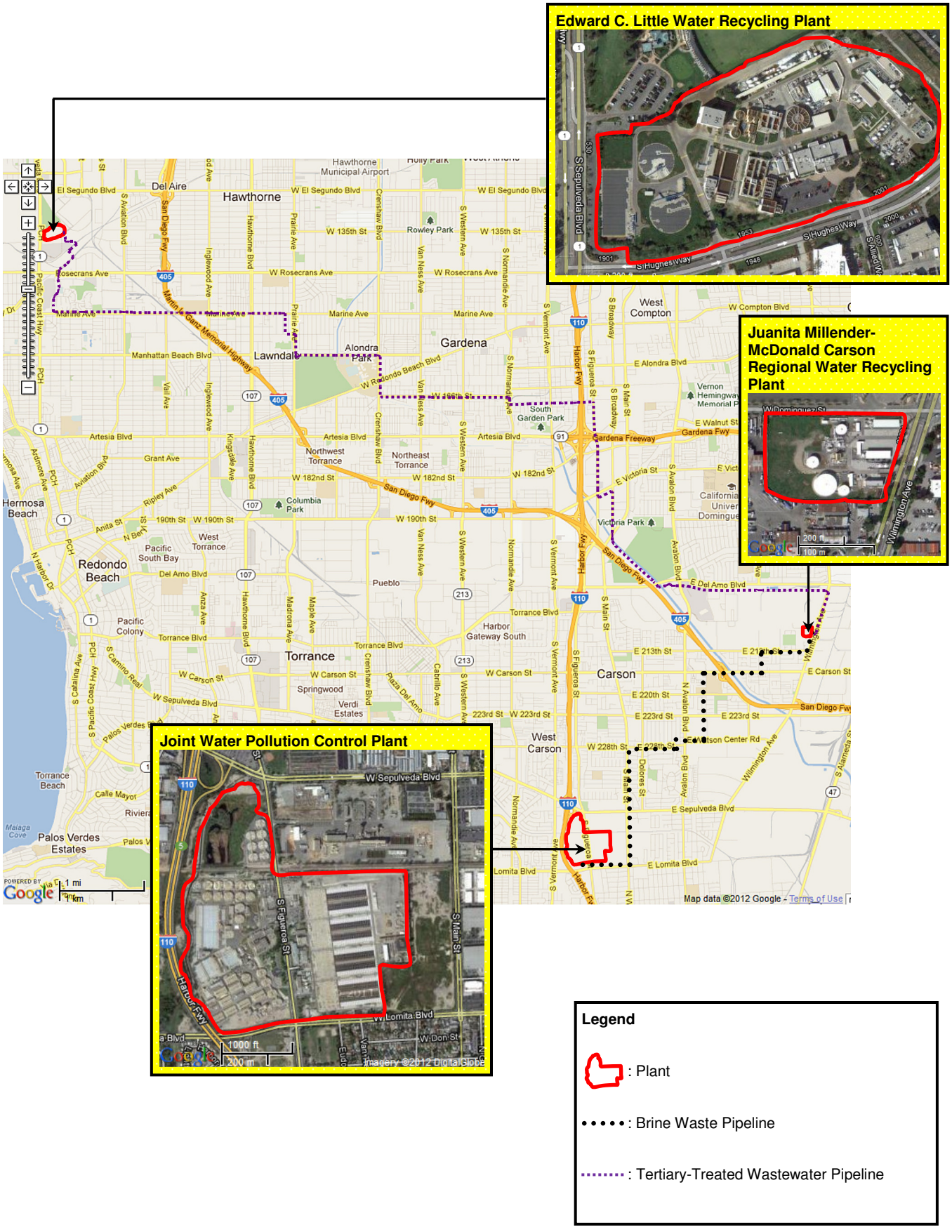
ATTACHMENT B – VICINITY MAP



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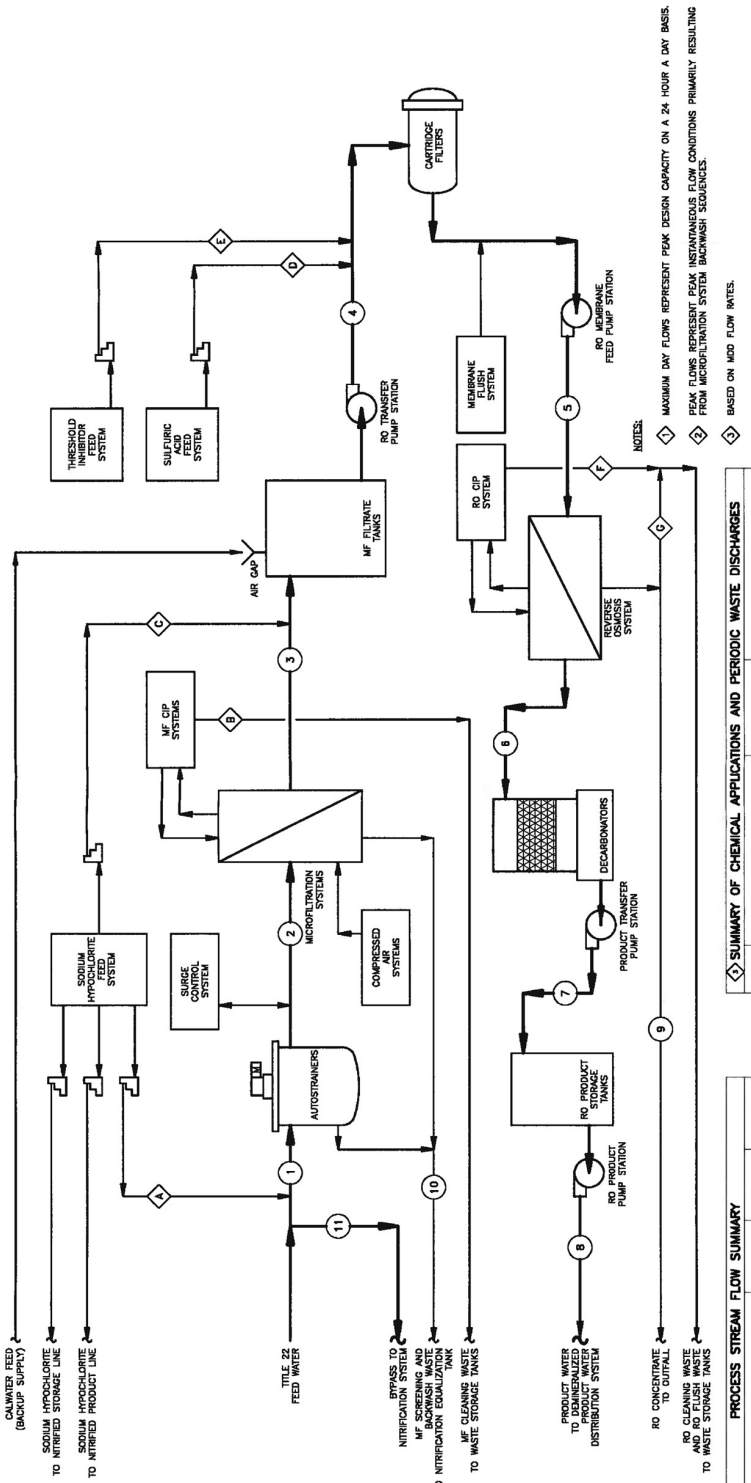
ATTACHMENT C – FLOW SCHEMATIC



NOTES:
1. MAXIMUM DAY FLOWS REPRESENT PEAK DESIGN CAPACITY ON A 24 HOUR A DAY BASIS.
2. PEAK FLOWS REPRESENT PEAK INSTANTANEOUS FLOW CONDITIONS PRIMARILY RESULTING FROM MICROFILTRATION SYSTEM BACKWASH SEQUENCES.
3. BASED ON MDD FLOW RATES.

PROCESS STREAM FLOW SUMMARY

STREAM	DESCRIPTION	MDD FLOW (1) (MGD)	PEAK FLOW (2) (GPM)	PRESSURE (PSI)
1	MF FEED	9.08	9,400	35
2	MF PRETREATED FEED	8.92	8,800	35
3	MF FILTRATE	8.03	7,805	15
4	RO LOW PRESSURE FEED	8.03	5,575	50
5	RO HIGH PRESSURE FEED	8.03	5,575	300
6	RO PERMEATE	6.83	4,740	15
7	DECARBONATED PRODUCT	6.83	4,740	15
8	RO PRODUCT WATER	6.83	4,740	87
9	RO CONCENTRATE	1.20	838	45
10	MF SCREENING AND BACKWASH WASTE	1.03	3,000	ATM
11	TITLE 22 FEED WATER TO NITRIFICATION	0.80	557	100

SUMMARY OF CHEMICAL APPLICATIONS AND PERIODIC WASTE DISCHARGES

STREAM	DESCRIPTION	FREQUENCY	DISCHARGE FLOW AMOUNT
A	SODIUM HYPOCHLORITE 12.5%	CONSTANT	325 GPD
B	MF CIP BLOWDOWN	INTERMITTENT	2,000 GAL ONCE PER DAY
C	SODIUM HYPOCHLORITE 12.5%	INTERMITTENT	146 GPD
D	SULFURIC ACID 93%	CONSTANT	138 GPD
E	THRESHOLD INHIBITOR	CONSTANT	22 GPD
F	RO CIP BLOWDOWN	INTERMITTENT	12,000 GAL TWICE PER YEAR
G	RO SYSTEM SHUTDOWN FLUSH	INTERMITTENT	380 GPM FOR 60 MINUTES

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ATTACHMENT D –STANDARD PROVISIONS

Any sludge discharge/disposal requirements in this Attachment D are not applied for the Juanita Millender-McDonald Carson Regional Water recycling Plant.

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

1. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code 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 has not yet been modified to incorporate the requirement. (40 CFR part 122.41(a)(1))

B. Need to Halt or Reduce Activity Not a Defense

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

C. Duty to Mitigate

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

D. Proper Operation and Maintenance

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

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E. Property Rights

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

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

F. Inspection and Entry

The Discharger shall allow the Regional Water Quality Control Board (Regional Water Board), State Water Resources Control 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 section 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 (40 CFR part 122.41(i)(1));

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (40 CFR part 122.41(i)(2));

3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (40 CFR part 122.41(i)(3)); and

4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the California Water Code, 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 exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 CFR part 122.41(m)(2))

3. Prohibition of bypass. Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless (40 CFR part 122.41(m)(4)(i)):

   a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 CFR part 122.41(m)(4)(i)(A));

   b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 CFR part 122.41(m)(4)(i)(B)); and

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

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

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 below (24-hour notice). (40 CFR part 122.41(m)(3)(ii))

H. Upset

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

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

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

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

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

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

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

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

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

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

B. Duty to Reapply

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

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C. Transfers

This Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the California Water Code. (40 CFR parts122.41(l)(3) and 122.61)

III. STANDARD PROVISIONS – MONITORING

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

B. Monitoring results must be conducted according to test procedures under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503 unless other test procedures have been specified in this Order. (40 CFR parts 122.41(j)(4) and 122.44(i)(1)(iv))

IV. STANDARD PROVISIONS – RECORDS

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

B. Records of monitoring information shall include:

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

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

a. The name and address of any permit applicant or Discharger (40 CFR part 122.7(b)(1)); and

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

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

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

B. Signatory and Certification Requirements

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

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

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

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

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field,

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superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 CFR part 122.22(b)(2)); and

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

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

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

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

C. Monitoring Reports

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

2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices. (40 CFR part 122.41(l)(4)(i))

3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board. (40 CFR part 122.41(l)(4)(ii))

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

D. Compliance Schedules

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

E. Twenty-Four Hour Reporting

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided to the Regional Water Board within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. (40 CFR part 122.41(l)(6)(i))

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

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

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

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

F. Planned Changes

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

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 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

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subject neither to effluent limitations in this Order nor to notification requirements under section 122.42(a)(1) (see Additional Provisions — Notification Levels VII.A.1). (40 CFR part 122.41(l)(1)(ii))

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

G. Anticipated Noncompliance

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

H. Other Noncompliance

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

I. Other Information

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

VI. STANDARD PROVISIONS – ENFORCEMENT

A. The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the California Water Code, including, but not limited to, sections 13385, 13386, and 13387.

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP) NO. 7972

The title 40, Code of Federal Regulations (CFR)[1], part 122.48 requires that all National Pollutant Discharge Elimination System (NPDES) permits specify monitoring and reporting requirements. California Water Code sections 13267 and 13383 also authorize the Los Angeles Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements, which implement the federal and California regulations.

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I. GENERAL MONITORING PROVISIONS

A. An effluent sampling station shall be established for the point of brine waste discharge (Latitude 33° 50' 19" N, Longitude 118° 14' 14" W) and shall be located where representative samples of that effluent can be obtained.

B. Effluent samples shall be taken downstream of any addition to treatment facility and prior to mixing with the Los Angeles County Sanitation Districts' Joint Water Pollution Control Plant (JWPCP) discharge and the receiving waters.

C. The Regional Water Board shall be notified in writing of any change in either the sampling station once established, or in the methods for determining the quantities of pollutants in the waste stream.

D. Pollutants shall be analyzed using the analytical methods described in 40 CFR 136 (most recent revision); or where no methods are specified for a given pollutant, by methods approved by the Regional Water Board, or the State Water Resources Control Board (State Water Board).

E. All analyses shall be accompanied by the chain of custody or internal laboratory tracking documents, as applicable, including but not limited to date and time of sampling, sample identification, name of person who performed sampling, date of analysis, ~~name of person who performed the analysis,~~ QA/QC data, and method detection limits~~, analytical methods, copy of laboratory certification, and a perjury statement executed by the person responsible for the laboratory~~. ELAP requires log books and internal lab documents to track the person who performed the analysis. A general perjury statement is included by every lab manager / project manager on their report of analysis.

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

G. The Discharger shall have, and implement, an acceptable written quality assurance (QA) plan for laboratory analyses. The annual monitoring report required in Section

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

X.C shall also summarize the QA activities for the previous year. Duplicate chemical analyses must be conducted on a minimum of ten percent (10%) of the samples, or at least one sample per sampling period, whichever is greater. A similar frequency shall be maintained for analyzing spiked samples.

H. The Discharger shall instruct its laboratories to establish calibration standards so that the Minimum Levels[2] (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 K. below, the Discharger's laboratory may employ a calibration standard lower than the ML in Appendix II of the 2009 Ocean Plan.

I. In accordance with Section III.C.5.b of the 2009 Ocean Plan, the Regional Water Board Executive Officer, in consultation with the State Water Board's Quality Assurance Program Manager, may establish an ML that is not contained in Appendix II of the 2009 Ocean Plan to be included in the Discharger's permit in any of the following situations:

1. When a pollutant under consideration is not listed in Appendix II;

2. When the discharger and the Regional Water Board agree to include in the permit a test method that is more sensitive than those specified in 40 CFR part 136 (revised May 18, 2012);

3. When the discharger agrees to use an ML that is lower than those listed in Appendix II;

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

5. When the discharger uses a method, which quantification practices are not consistent with the definition of the ML. Examples of such methods are the United States Environmental Protection Agency (USEPA) approved method 1613 for dioxins, and furans, method 1624 for volatile organic substances, and method 1625 for semi-volatile organic substances. In such cases, the discharger, the Regional Water Board, and the State Water Resources Control Board shall agree on a lowest quantifiable limit and that limit will substitute for the ML for reporting and compliance determination purposes.

II. MONITORING LOCATIONS

The Discharger shall establish the following effluent monitoring location to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order. The effluent sampling station shall be located downstream of brine waste

[2] See Attachment A for definition of terms.

effluent discharged from the Juanita Millender-McDonald Carson Regional Water Recycling Plant (Plant or Facility) before commingling with the secondary-treated effluent from the JWPCP.

Table E-1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
001 002 003 004	EFF-001	The effluent sampling station (33º 50' 19" N, 118º 14' 14" W) is located at southeast side of the RO Trains facility and the downstream of brine waste effluent discharged from the Plant before commingling with the secondary-treated effluent from the JWPCP.

III. INFLUENT MONITORING REQUIREMENTS

Not applicable.

IV. EFFLUENT MONITORING REQUIREMENTS

Effluent monitoring is required to:

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

A. Monitoring Location EFF-001

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

Table E-2. Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency[3]	Required Analytical Test Method
Total brine flow	MGD	Recorder	Continuously[4]	[4]
Oil and Grease	mg/L	Grab	Monthly	[5]

[3] See section VI.B. Criteria 1-3 on Page F-31 of Fact Sheet for the minimum sampling frequency rationale.
[4] Total actual daily flow (24-hour basis) shall be recorded and reported.
[5] Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136. For priority pollutants the methods must meet the lowest minimum levels (MLs) specified in Attachment 4 of the SIP;

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Parameter	Units	Sample Type	Minimum Sampling Frequency[3]	Required Analytical Test Method
pH	pH unit	Grab	Monthly	[5]
Temperature	^{0}C	Grab	Monthly	[5]
Settleable solids	mL/L	Grab	Monthly	[5]
Total suspended solids	mg/L	Grab	Monthly	[5]
Turbidity	NTU	Grab	Monthly	[5]
Salinity	$^0/_{00}$	Grab	Monthly	[5]
Total residual chlorine[6]	mg/L	Grab	Quarterly	[5]
Ammonia	mg/L	Grab	quarterly	[5]
All metals[7]	µg/L	Grab~~24-hr composite~~	Quarterly	[5]
Cyanide	µg/L	Grab	Quarterly	[5]
Phenolic compounds	µg/L	Grab~~24-hr composite~~	Quarterly	[5]
Diethyl phthalate	µg/L	Grab~~24-hr composite~~	Quarterly	[5]
Dimethyl phthalate	µg/L	Grab~~24-hr composite~~	Quarterly	[5]
4,6-dinitro-2-methylphenol	µg/L	Grab~~24-hr composite~~	Quarterly	[5]
2,4-dinitrophenol	µg/L	Grab~~24-hr composite~~	Quarterly	[5]
Nitrobenzene	µg/L	Grab~~24-hr composite~~	Quarterly	[5]
Toluene	µg/L	Grab	Quarterly	[5]
Bis(2-ethylhexyl)phthalate	µg/L	Grab~~24-hr composite~~	Quarterly	[5]
Chlorodibromomethane	µg/L	Grab	Quarterly	[5]
Chloroform	µg/L	Grab	Quarterly	[5]
DDT[2]	ng/L	Grab~~24-hr composite~~	Semiannually	[8]
1,4-dichlorobenzene	µg/L	Grab	Quarterly	[5]
Dichlorobromomethane	µg/L	Grab	Quarterly	[5]
Dichloromethane	µg/L	Grab	Quarterly	[5]
Halomethanes[2]	µg/L	Grab	Quarterly	[5]
Isophorone	µg/L	Grab~~24-hr composite~~	Quarterly	[5]
N-nitrosodimethylamine	µg/L	Grab~~24-hr composite~~	Quarterly	[5]
N-nitrosodi-N-propylamine	µg/L	Grab~~24-hr~~	Quarterly	[5]

where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or State Water Resources Control Board.

6 JWPCP's Manifold Monitoring Stations EFF002-A and EFF-002B are used as the chlorine residual compliance points for the Juanita Millender-McDonald Carson Regional Water Recycling Plant's brine waste discharge.

7 "All metals" refers to the list of metals in the Ocean Plan Table B.

8 Pollutants shall be analyzed using the USEPA Method 608.

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Parameter	Units	Sample Type	Minimum Sampling Frequency[3]	Required Analytical Test Method
		~~composite~~		
PCBs (as arochlors[2])	ng/L	Grab~~24-hr composite~~	Semiannually	[9]
PCBs (as individual congeners)	ng/L	Grab~~24-hr composite~~	Semiannually	[10]
TCDD Equivalents[2]	pg/L	Grab~~24-hr composite~~	Quarterly	[5]
Tetrachloroethylene	µg/L	Grab	Quarterly	[5]
Remaining pollutants in Table B of the 2009 Ocean Plan[11]	µg/L	24-hr composite[12], or grab, as applicable according to 40 CFR part 136	Semiannually	[5]

The type of sample required has been revised from a 24-hour composite to grab for all polltants but chronic toxicity test. The discharge is composed of reverse osmosis brine waste and is not expected to contain much variability. Because the discharge is not expected to change much throughout the day, a grab sample is considered representative of the effluent. Further, grab samples are more cost-effective and may eliminate unnecessary monitoring costs.

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V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. Chronic Toxicity Testing

1. **Methods and test species**. The Discharger, in coordination with the JWPCP, shall conduct critical life stage chronic toxicity tests on combined effluent samples in accordance with USEPA's *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms, 1995,* (EPA/600/R-95/136). This combined effluent sample is a manual composite comprised of 0.457%[13] Carson Regional Water Recycling Plant brine waste effluent (24-hour composite) and 99.543%[10] JWPCP secondary treated effluent (24-hour composite) collected on the same

[9] Pollutants shall be analyzed using the USEPA Method 608. PCBs (as arochlors) are defined as Aroclor-1016, 1221, 1232, 1242, 1248, 1254, and 1260.

[10] USEPA draft Method 1668c and individually quantified and reported. PCBs (as congeners) are defined as 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.

[11] This constituent did not show the reasonable potential. The minimum frequency of effluent analysis remains as "semiannually".

[12] 24-hour composite sample is for chronic toxicity test. No monitoring is required for acute toxicity.

[13] The Regional Water Board has chosen these values because under critical conditions in the JWPCP outfall, 0.457% of the combined effluent flow is from the Carson Plant discharge [1.2 MGD, Carson Plant's design brine waste flow, divided by (261.3 + 1.2 MGD), lowest monthly average JWPCP effluent flow rate (2007 to 2011) and Carson Plant's design brine waste flow] and the rest of combined effluent flow is from JWPCP discharge (100% - 0.457%).

day. Pursuant to the 2009 California Ocean Plan, upon the approval of the Executive Officer of the Regional Water Board, the Discharger may use a second tier organism (e.g., silverside) if first tier organisms (e.g., topsmelt) are not available. However, the Discharger is required to immediately resume the chronic toxicity test using the original testing organism as soon as this organism becomes available.

2. **Frequency**

a. Screening – In the third quarter of 2013 [14], the Discharger shall conduct the first chronic toxicity test screening for three consecutive months with a marine vertebrate (Topsmelt, *Atherinops affinis*), a marine invertebrate (mysid, *Holmesimysis costata;* pacific oyster, *Crassostrea gigas;* mussel, *Mytilus* spp.; red abalone, *Haliotis rufescens;* purple sea urchin, *Strongylocentrotus purpuratus;* or sand dollar, *Dendraster excentricus*), and a marine plant (giant kelp, *Macrocystis pyrifera*) for the first three suites of tests. After the screening period, monitoring shall be conducted using the most sensitive species.

b. Re-screening - Re-screening is required every 24 months. The next re-screening shall be conducted in 2015. 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.

c. Regular toxicity tests - After the screening period, monitoring shall be conducted annually in August using the most sensitive 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.

B. 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).

[14] The latest chronic toxicity test screening was conducted in August 2011.

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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 IWC for Discharge Points 001 to 002 is 0.5988%[15] combined effluent. In case of brine waste discharge via Discharge Point 003 or 004, the chronic IWC for Discharge Points 003 and 004 is 0.6623% and 0.8621%[16] combined effluent, respectively.

5. Because this permit requires sublethal hypothesis testing endpoints from the 1995 West Coast marine and estuarine WET test methods manual and the 2002 East Coast marine and estuarine WET test methods manual, with-in test variability must be reviewed and variability criteria [e.g., Minimum Significance Difference (MSD) bound, Percent Minimum Significance Difference (PMSD) bounds] must be applied, as specified in the test methods manuals. The calculated MSD (or PMSDs) for both reference toxicant test and effluent toxicity test results must meet the MDS bound (or PMSD bounds) variability criteria specified in the test methods manuals.

C. Accelerated Monitoring

If the effluent toxicity test result exceeds 167[17] TUc maximum daily limitation in the combined effluent of brine waste plus the JWPCP effluent for Discharge Points 001 and 002, 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 5 working days of receipt of the test results exceeding the toxicity limitation.

1. If all the results of the six additional tests are in compliance with the toxicity limitation (less than 167[13] TUc), the Discharger may resume regular annually testing.

2. If the result of any of the six additional tests exceeds the limitation of 167[14] TUc, 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 annually testing.

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[15] 0.5988% is the result of 1 divided by (166 + 1).
[16] 0.6623% and 0.8621% are the results of 1 divided by (150 + 1) and (115 +1), respectively.
[17] 167, 167, 151, and 116 TUc are for Discharge Points 001, 002, 003, and 004, respectively.

3. If the results of any two of the six tests (any two tests in a 12-week period) exceed the limitation of 167[14] TUc, the Discharger shall initiate a Toxicity Identification Evaluation (TIE) and implement the initial investigation Toxicity Reduction Evaluation (TRE) Workplan.

4. If implementation of the initial investigation TRE workplan (see item D below) indicates the source of toxicity (e.g., a temporary plant upset, etc.), then the Discharger shall return to the regular testing frequency.

D. Preparation of an Initial Investigation TRE Workplan

The Discharger shall prepare and submit a copy of the Discharger's initial investigation TRE workplan to the Executive Officer of the Regional Water Board for approval within 90 days of the effective date of this permit. If the Executive Officer does not disapprove the 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 TRE 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 TIE is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor). See MRP Section V.E.3 for guidance manuals.

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

1. If results of the implementation of the facility's initial investigation TRE workplan indicate the need to continue the TRE/TIE, the Discharger shall expeditiously develop a more detailed TRE workplan for submittal to the Executive Officer 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.

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2. The following section summarizes the stepwise approach used in conducting the TRE:

   a. Step 1 includes basic data collection. Data collected for the accelerated monitoring requirements may be used to conduct TRE;

   b. Step 2 evaluates optimization of the treatment system operation, facility housekeeping, and selection and use of in-plant process chemicals;

   c. If Steps 1 and 2 are unsuccessful, Step 3 implements a TIE and employment of all reasonable efforts using currently available TIE methodologies. The objective of the TIE shall be to identify the substance or combination of substances causing the observed toxicity;

   d. Assuming successful identification or characterization of the toxicant(s), Step 4 evaluates final effluent treatment options;

   e. Step 5 evaluates in-plant treatment options; and,

   f. Step 6 consists of confirmation once a toxicity control method has been implemented.

   By requiring the first steps of a TRE to be accelerated testing and review of the facility's TRE workplan, a TRE may be ended in its early stages. All reasonable steps shall be taken to reduce toxicity to the required level. The TRE may be ended at any stage if monitoring indicates there are no longer toxicity violations.

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

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

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

F. Ammonia Removal

1. Except with prior approval from the Executive Officer of the Regional Water Board, ammonia shall not be removed from bioassay samples. The Discharger must demonstrate the effluent toxicity is caused by ammonia because of increasing test pH when conducting the toxicity test. It is important to distinguish

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the potential toxic effects of ammonia from other pH sensitive chemicals, such as certain heavy metals, sulfide, and cyanide. The following may be steps to demonstrate that the toxicity is caused by ammonia and not other toxicants before the Executive Officer would allow for control of pH in the test.

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

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

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

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

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

G. 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 permit. Test results shall be reported in 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.C.4, then those results also shall be submitted with the SMR and the DMR for the period in which the Investigation occurred.

1. The full report shall be received by the Regional Water Board with the SMR and USEPA with the DMR for the month in which the test is conducted. The due date is the 15th day of the second month following sampling.

2. The full report shall consist of (1) the results; (2) the dates of sample collection and initiation of each toxicity test; (3) the toxicity limit.

3. Test results for toxicity tests also shall be reported according to the appropriate manual chapter on Report Preparation and shall be attached to the SMR. Routine reporting shall include, at a minimum, as applicable, for each test, as appropriate:

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a. sample date(s)

b. test initiation date

c. test species

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

e. NOEC value(s) in percent effluent

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

g. IC/EC_{25} values(s) in percent effluent

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

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

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

i. Available water quality measurements for each test (e.g., pH, D.O., temperature, conductivity, hardness, salinity, ammonia).

4. The Discharger shall notify this Regional Water Board immediately of any chronic toxicity exceedance over 167 TUc for Discharge Points 001 and 002, 151 TUc for Discharge Point 003, and 116 TUc for Discharge Point 004, and in writing 14 days after the receipt of the 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

The receiving water monitoring program is not prescribed in this Order as it is covered under the JWPCP NPDES permit (CA0053813), Monitoring and Reporting Program CI-1758. However, the regional monitoring program has been developed; the Discharger may need to participate in the regional monitoring program.

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VII. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

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

2. If there is no discharge during any reporting period, the report shall so state.

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

4. 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.

5. The Discharger shall report with each sample result the applicable ML and the current Method Detection Limit[2] (MDL), as determined by the procedure in 40 CFR part 136.

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

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

8. All effluent analyses and results of all analyses shall be reported in the monitoring reports as specified in Table E-3 below. Should there be instances when monitoring could not be done during these specified months, the Discharger must notify the Regional Water Board, state the reason why the monitoring could not be conducted, and obtain approval from the Executive Officer for an alternate schedule.

9. The Discharger shall select the analytical method that provides a ML lower than the permit limit established for a given parameter, unless the Discharger can demonstrate that a particular ML is not attainable, in accordance with procedures set forth in 40 CFR part 136, and obtains approval for a higher ML from the Executive Officer, as provided for in Item No. 10 below. If the effluent limitation is lower than all the MLs in Appendix II of the 2009 Ocean Plan, the Discharge must select the method with the lowest ML for compliance purposes.

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The Discharger shall include in the Annual Summary Report a list of the analytical methods employed for each test.

10. If the Discharger sample analyses (other than for process/operational control, startup, research, or equipment testing) on any effluent constituent more frequently than required by this monitoring program using approved analytical methods, the results of those analyses shall be reported. These results shall be reflected in the calculation of the average used in demonstrating compliance with average effluent, receiving water, etc., limitations.

11. The Discharger shall inform the Regional Water Board well in advance of any proposed construction or maintenance or modification to the Juanita Millender-McDonald Carson Regional Water Recycling Plant (Plant or Facility) that could potentially affect compliance with applicable requirements.

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

13. Water/wastewater samples must be analyzed within allowable holding time limits as specified in 40 CFR part 136.3 (revised May 18, 2012). All QA/QC analyses must be run on the same dates that samples are actually analyzed. The Discharger shall retain the QA/QC documentation in its files and make available for inspection and/or submit them when requested by the Regional Water Board and/or USEPA. Proper chain of custody procedures must be followed and a copy of that documentation shall be submitted with the quarterly reports.

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

15. 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 Item No. 16 below, the Discharger's laboratory may employ a calibration standard lower than the ML in Appendix II of the 2009 Ocean Plan.

16. Upon request by the Discharger, the Regional Water Board, in consultation with the State Water Board's Quality Assurance Program and/or USEPA, may establish an ML that is not contained in Appendix II of the 2009 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;

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b. When the Discharger agrees to use a test method that is more sensitive than those specified in 40 CFR part 136 (revised May 18, 2012);

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

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

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

17. Pollutants shall be analyzed using the analytical methods described in 40 CFR part 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. 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.

18. Laboratories analyzing effluent samples shall be certified by the California Department of Public Health Environmental Laboratory Accreditation Program (ELAP) or approved by the Executive Officer and must include quality assurance/quality control (QA/QC) data in their reports. A copy of the laboratory certification shall be provided each time a new certification and/or renewal of the 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 Department of Public Health or approved by the Executive Officer and in accordance with current USEPA guideline procedures or as specified in this MRP."

19. When requested by the Regional Water Board, the Discharger will participate in the NPDES discharge monitoring report QA performance study. The Discharger must have a success rate equal to or greater than 80%.

20. In the event that brine waste is transported to a different disposal site during the report period, the following shall be reported in the monitoring report:

a. Types of wastes and quantity of each type;

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b. Name and address for each hauler of wastes (or method of transport if other than by hauling); and,

c. Location of the final point(s) of disposal for each type of waste.

If no brine waste is transported off-site during the reporting period, a statement to that effect shall be submitted.

21. Each monitoring report shall state whether or not there was any change in the discharge as described in the Order during the reporting period.

22. The monitoring report shall specify the USEPA analytical method used, the MDL, and the Reporting Level[2] (RL) [the applicable ML or reported Minimum Level[2] (RML)] for each pollutant. The MLs are those published by the State Water Board in the 2009 Ocean Plan, Appendix II. The ML represents the lowest quantifiable concentration in a sample based on the proper application of all method-based analytical procedures and the absence of any matrix interference. When all specific analytical steps are followed and after appropriate application of method specific factors, the ML also represents the lowest standard in the calibration curve for that specific analytical technique. When there is deviation from the method analytical procedures, such as dilution or concentration of samples, other factors may be applied to the ML depending on the sample preparation. The resulting value is the reported Minimum Level.

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

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

1. At any time during the term of this Order, the State or Regional Water Board may notify the Discharger to electronically submit Self-Monitoring Reports (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 in accordance with the requirements described in subsection B.5 below. 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/DMR the results for all monitoring specified in this MRP under sections IV through VI. The Discharger shall submit quarterly and annual SMRs/DMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. If the Discharger monitors any pollutant more frequently

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than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.

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

Table E-3. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On	Monitoring Period	SMR Due Date
Continuous	Permit effective date	All	Submit with quarterly SMR/DMR
Monthly	First day of calendar month following permit effective date or on permit effective date if that date is first day of the month	1st day of calendar month through last day of calendar month	Submit with quarterly SMR/DMR
Quarterly	February 1, May 1, August 1, or November 1 following (or on) permit effective date	January 1 ~ March 31 April 1 ~ June 30 July 1 ~ September 30 October 1 ~ December 31	May 15 (1st quarter) August 15 (2nd quarter) November 15 (3rd quarter) February 15 (4th quarter)
Semiannually	Closest of January 1 or July 1 following (or on) permit effective date	January 1 ~ June 30 July 1 ~ December 31	August 15 (2nd quarter) February 15 (4th quarter)

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

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

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

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

   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).

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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[2]," 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."). The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (± a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

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

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

5. 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-7449 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

C. Discharge Monitoring Reports (DMRs)

1. As described in Section VII.B.1 above, at any time during the term of this 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

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Discharger shall submit DMRs in accordance with the requirements described below.

2. DMRs must be signed and certified as required by the standard provisions (Attachment D). The Discharger shall submit the original DMR and one copy of the DMR to the State Water Board address listed below.

   State Water Resources Control Board
   Division of Water Quality
   c/o DMR Processing Center
   PO Box 100
   Sacramento, CA 95812-1000

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

D. Other Reports

1. Annual Summary Report

   By March 15 of each year, the Discharger shall submit an annual summary report containing a discussion of the previous year's 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 on hard copy and a CD-Rom disk or other appropriate electronic medium. The submitted data must be IBM compatible, preferably using Microsoft Excel software. In addition, 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 waste discharge and permit requirements.

2. Database Management System: The Regional Water Board and State Water Board have developed a database compliance monitoring management system. The Discharger may submit all monitoring and annual summary reports electronically in a specified format.

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ATTACHMENT F – FACT SHEET

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ATTACHMENT F – FACT SHEET

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

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

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I. PERMIT INFORMATION

The following table summarizes administrative information related to the Juanita Millender-McDonald Carson Regional Water Recycling Plant.

Table F-1. Facility Information

WDID	4B190137004
Discharger	West Basin Municipal Water District
Operator	United Water
Operator Contact and Phone	Wyatt Won, (310) 660-6203
Name of Facility	Juanita Millender-McDonald Carson Regional Water Recycling Plant
Facility Address	21029 South Wilmington Avenue Carson, CA 90810 Los Angeles County
Facility Contact, Title and Phone	Uzi Daniel, Environmental Quality Analyst, (310) 660-6245
Authorized Person to Sign and Submit Reports	Richard Nagel, General Manager, (310) 660-6210; or Shivaji Deshmukh, Assistant General Manager, (310) 660-6234
Mailing and Billing Address	17140 S. Avalon Blvd., Suite 210, Carson, CA 90746
Type of Facility	Water Recycling Plant
Major or Minor Facility	~~Minor~~Major
Threat to Water Quality	3
Complexity	C
Pretreatment Program	No
Reclamation Requirements	None
Facility Permitted Flow	1.2 million gallons per day (MGD) of untreated brine waste
Facility Design Flow	1.2 MGD of untreated brine waste
Watershed	Santa Monica Bay
Receiving Water	Pacific Ocean
Receiving Water Type	Ocean water

A. The West Basin Municipal Water District (Discharger) is the owner of Juanita Millender-McDonald Carson Regional Water Recycling Plant (Plant or Facility) and operated by United Water.

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

B. The Facility discharges reverse osmosis brine waste (brine waste) to the Pacific Ocean, a water of the United States, and is currently regulated by Order R4-2007-0001, which was adopted on January 11, 2007 and expired on December 10, 2011. The terms and conditions of the current Order have been automatically continued and remain in effect until new Waste Discharge Requirements and NPDES permit are adopted pursuant to this Order.

C. The Discharger submitted Report of Waste Discharge (ROWD), dated June 9, 2011, and applied for an NPDES permit renewal to discharge up to 1.2 MGD of brine waste from the Plant. A site visit was conducted on March 19, 2012, to discuss ROWD questions with the Discharger, to observe operations, and to collect additional data in order to develop permit limitations and conditions. The application for the NPDES permit renewal and ROWD was deemed complete on March 19, 2012.

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II. FACILITY DESCRIPTION

The Plant is owned by the Discharger, operated by United Water, and located at 21029 South Wilmington Avenue, Carson, California. The Plant provides advanced treatment to further process the tertiary-treated Title 22 recycled water produced by and delivered from the West Basin Municipal Water District's Edward C. Little Water Recycling Plant, located at approximately 10 miles northwest of the Plant. The Facility may discharge up to 1.2 MGD of reverse osmosis brine waste from the treatment process to the Pacific Ocean (see section II.B. of Attachment F for detailed information), a water of the United States. Brine waste is not treated prior to discharge.

A. Description of Wastewater and Biosolids Treatment or Controls

1. One train, referred to as the micro filtration/reverse osmosis (MF/RO) plant consists of micro filtration, reverse osmosis, and post decarbonation~~, and pH stabilization~~. West Basin distribute the high purity MF/RO recycled water to customers located in the southern portion of the West Basin service areas, such as boiler feed water for Chevron, El Segundo Refinery boilers. The second treatment train, referred to as the ammonia removal or nitrification facilities, consists of biofiltration and break point chlorination. The treated recycled water from this train is used in the industrial processes (cooling towers/boilers) at the ~~British Petroleum (BP)~~Refinery.

2. The Facility was designed to be developed in two phases, depending on market volume for this recycled water. Phase I of the project constructed a plant with a

treatment capacity of 5.9 MGD – MF/RO train capacity of over 5 MGD and nitrification facilities train capacity of 0.9 MGD. The existing Phase I Facility generates approximately 0.9 MGD of waste brine. This second phase will increase the MF/RO train capacity by ~~5~~ 1.83 MGD (total MF/RO plant capacity will be ~~10.9~~8.63 MGD).

B. Discharge Points and Receiving Waters

1. RO brine waste produced at the Facility is discharged through the Los Angeles County Sanitation Districts' Joint Water Pollution Control Plant (JWPCP) Discharge Serial Outfall (Outfall) Nos. 001 to 004 (NPDES Permit No. CA0053813). These four outfalls are located at Whites Point, off the Palos Verdes Peninsula. Outfall Nos. 001 and 002 are routinely used for discharge of treated wastewater. Outfall No. 003 is used only during times of heavy rains to provide hydraulic relief for flow in the outfall system. Outfall No. 004 serves as a standby outfall to provide additional hydraulic relief during the very heaviest flows.

2. During periods of heavy rainfall and flooding when the full capacity of the JWPCP outfall is exceeded, the waste brine, under the previous permit (Order No. 99-014), may be discharged to the Dominguez Channel from Discharge Point No. 003-B. The frequency of use for discharge point No. 003-B is anticipated to be once in one hundred years, when the dilution ratio in Dominguez Channel will exceed 2,000 parts of storm water per unit of brine flow. Discharge point No. 003-B consists of a 12-inch pipeline discharging into Dominguez Channel near the intersection of Carson Street and the 405 Freeway. This permit does not authorize any discharge from Discharge Point 003-B. However, Regional Water Board staff recommend that the Discharger submit a request letter to the Regional Water Board for approval should the Discharger schedule use of Discharge point No. 003-B during periods of heavy rainfall and flooding when the full capacity of the JWPCP outfall is exceeded.

3. Discharge Points 001 through 004 in this Order correspond to the Outfall Nos. 001 through 004 in the JWPCP NPDES permit. Table F-2 shows the description of four Discharge Points. A location map of the Plant is provided in Attachment B of this Order.

Table F-2. The Description of the Discharge Points

Discharge Point	Description
001	**Whites Point 120-inch ocean outfall –** This outfall routinely discharges approximately 65% of the combined effluent from the West Basin Water Recycling Plant and JWPCP. It discharges south of the shoreline off Whites Point, San Pedro. The outfall is 7440 ft long to the beginning of a single L-shaped diffuser leg which is 4440 ft long. Depth at the beginning of the diffuser is 167 ft and at the end of the diffuser is 190 ft.
002	**Whites Point 90-inch ocean outfall –** This outfall routinely discharges approximately 35% of the combined effluent from the West Basin Water Recycling Plant and JWPCP. It discharges southwest of the shoreline off

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Discharge Point	Description
	Whites Point, San Pedro. The outfall is 7982 ft long to the beginning of a y-shaped diffuser with two legs. Each leg is 1208 ft long. Depth at the beginning of the diffusers is 196 ft and at the end of the diffusers is 210 ft.
003	**Whites Point 72-inch ocean outfall –** This outfall is used only during times of heavy rains to provide hydraulic relief for flow in the outfall system. When used, it discharges off the Whites Point shoreline between Discharge Points 001 and 002 and about 160 ft below the ocean surface. The outfall is about 6500 ft long and connect to one of three legs of a y-shaped diffuser upstream of the y-intersection. Each leg is approximately 200 ft long.
004	**Whites Point 60-inch ocean outfall –** This outfall is used as a standby to provide additional hydraulic relief during the heaviest flow. When used, it discharges off the Whites Point shoreline between Outfall Nos. 002 and 003 and about 110 ft below the ocean surface. The outfall is about 5000 ft long and connect to a single, very short diffuser.

4. The ocean water in this area is not listed as impaired under the 2010 Clean Water Act (CWA) Section 303(d) List.

C. Dilution Ratios and Percentages

The brine waste from the Facility first combines with the JWPCP's effluent at the surge tower (33º 47' 58.8" N, 118º 17' 14.5" W) and the combined effluent travels approximately 6 miles through tunnels prior to discharging into the Pacific Ocean via the JWPCP Outfalls. Annual effluent flows from JWPCP are approximately 309, 295, 280, 280, and 273 MGD in 2007, 2008, 2009, 2010, and 2011, respectively. The deep ocean Outfall nos. 001, 002, 003, and 004 of JWPCP provide an initial dilution of 166[1], 166[1], 150[2], and 115[3] parts seawater to 1 part effluent, respectively.

The brine waste effluent discharged from the Plant combines and mixes with secondary effluent from the JWPCP inside its Outfalls. Table F-4 shows dilution rations at the conditions of 385[4] MGD and 261.3[5] MGD for each outfall: (1) three

[1] The minimum dilution ratio used to calculate effluent limitations for nonconventional and toxic pollutants based on water quality objectives in *Table B* of the Ocean Plan is 1:166 (i.e., one part effluent to 116 parts seawater), which is the dilution ratio used for the JWPCP Outfalls 001 and 002 to the Pacific Ocean. This ratio was approved by the State Water Resources Control Board (State Water Board).

[2] The minimum dilution ratio used to calculate effluent limitations for nonconventional and toxic pollutants based on water quality objectives in *Table B* of the Ocean Plan is 1:150 (i.e., one part effluent to 150 parts seawater), which is the dilution ratio used for the JWPCP Outfall 003 to the Pacific Ocean. This ratio was approved by the State Water Board.

[3] The minimum dilution ratio used to calculate effluent limitations for nonconventional and toxic pollutants based on water quality objectives in *Table B* of the Ocean Plan is 1:115 (i.e., one part effluent to 115 parts seawater), which is the dilution ratio used for the JWPCP Outfall 004 to the Pacific Ocean. This ratio was approved by the State Water Board.

[4] This Order 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 JWPCP under the 1997 permit of 385 MGD. Although the design flow rate of the JWPCP has increased to 400 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

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dilution ratios for the brine waste and JWPCP's effluent combined and mixed in the tunnels leading to outfall, and the corresponding percentages of brine waste; and (2) three dilution ratios for the combined and mixed brine waste and JWPCP's effluent diluted in receiving waters of the Pacific Ocean at the end of critical initial dilution, and the corresponding percentages of brine waste. Critical condition dilution ratios are used to conduct RPAs and calculate WQBELs, as explained in this Fact Sheet.

Table F-4. Dilution Ratio~~n~~s and Brine Waste Percentages

Parameter	Dilution Ratio	Percentage of Brine Waste in Fluid
Design Capacity (385 MGD)		
Brine Waste to JWPCP Outfall Nos. 001, 002, 003, and 004		
Within Tunnel (First dilution)	1.2 MGD : 385 MGD (Total 386.2 MGD)	0.31%
Brine Waste to JWPCP Outfall Nos.001 and 002		
Entering Pacific Ocean (Second dilution)	1.2 : [386.2 × (166 + 1)] ≅ 1 : 53746.2	0.0019%
Brine Waste to JWPCP Outfall No. 003		
After Pacific Ocean (Second dilution)	1.2 : [386.2 × 150 + 1)] ≅ 1 : 48596.8	0.0021%
Brine Waste to JWPCP Outfall No. 004		
Entering Pacific Ocean (Second dilution)	1.2 : [386.2 × 115 + 1)] ≅ 1 : 37332.7	0.0027%
Lowest Flow (261.3 MGD) – Most Critical Condition Recorded		
Brine Waste to JWPCP Outfall Nos. 001, 002, 003, and 004		
Within Tunnel (First dilution)	1.2 MGD : 261.3 MGD (Total 262.5 MGD)	0.46%
Brine Waste to JWPCP Outfall Nos. 001 and 002		
Entering Pacific Ocean (Second dilution)	1.2 : [262.5 × (166 + 1)] ≅ 1 : 36531.3	0.0027%
Brine Waste to JWPCP Outfall No. 003		
Entering Pacific Ocean (Second dilution)	1.2 : [262.5 × (150 + 1)] ≅ 1 : 33031.3	0.0030%
Brine Waste to JWPCP Outfall No. 004		
Entering Pacific Ocean (Second dilution)	1.2 : [262.5 × 115 + 1)] = 1 : 25375	0.0039%

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

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

discharge are expected to remain relatively constant or improve during current permit term, consistent with antidegradation policies.

[5] The lowest monthly average flow, recorded in November 2011, via the JWPCP Outfalls 001 and 002 for the period between January 2007 and December 2011.

Table F-5. Historic Effluent Limitations and Monitoring Data

Parameter	Units	Effluent Limitation			Monitoring Data (From January 2007 – December 2011)		
		Average Monthly[6]	Average Weekly[6]	Maximum Daily[6]	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
Conventional/Non-Conventional							
Total Suspended Solids	mg/L	--	60	--	3.5	--	--
Oil & Grease	mg/L	25	40	75[7]	1.9	--	--
Settleable Solids	mL/L	1.0	1.5	3.0[7]	<0.1	--	--
pH	pH Unit	6.0 – 9.0			7.7	--	--
Temperature	^{O}F	--	--	100	87.8	--	--
Turbidity	NTU	75	100	225[7]	0.65	--	--
Marine Aquatic Life							
Arsenic (As)	µg/L	--	--	--	13.9	--	13.9
Cadmium (Cd)	µg/L	--	--	--	0.55	--	0.55
Chromium Total (Cr)	µg/L	--	--	--	41.5	--	41.5
Copper (Cu)	µg/L	--	--	--	63	--	63
Lead (Pb)	µg/L	--	--	--	1.5	--	1.5
Mercury (Hg)	µg/L	--	--	--	0.51	--	0.51
Nickel (Ni)	µg/L	--	--	--	77	--	77
Selenium (Se)	µg/L	--	--	--	31.5	--	31.5
Silver (Ag)	µg/L	--	--	--	6.6	--	6.6
Zinc (Zn)	µg/L	--	--	--	110	--	110
Cyanide	µg/L	--	--	--	27	--	27
Residual Chlorine	mg/L	--	--	--	4	--	4
Ammonia-N	mg/L	--	--	--	480	--	480
Chronic Toxicity (Survival)	TUc	--	--	--	41.8	--	--
Chronic Toxicity (Growth)	TUc	--	--	--	83.5	--	--
Non-Cl Phenolic Compounds	µg/L	--	--	--	72.3	--	72.3
Cl Phenolic Compounds	µg/L	--	--	--	<7.12	--	<7.12
Endosulfan	µg/L	--	--	--	<0.07	--	<0.07
Endrin	µg/L	--	--	--	<0.03	--	<0.03
HCH[8]	µg/L	--	--	--	<0.11	--	<0.11
Human Health - Noncarcinogens							
Acrolein	µg/L	--	--	--	<4.0	--	<4.0
Antimony	µg/L	--	--	--	5.7	--	5.7
Bis (2-Chloroethoxy) methane	µg/L	--	--	--	<1.63	--	<1.63
Bis (2-Chloroisopropyl) ether	µg/L	--	--	--	<1.82	--	<1.82

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[6] See Section VII in the accompanying Order for definition.
[7] This number represents instantaneous maximum.
[8] See Attachment A for definition of terms.

Parameter	Units	Effluent Limitation			Monitoring Data (From January 2007 – December 2011)		
		Average Monthly[6]	Average Weekly[6]	Maximum Daily[6]	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
Chlorobenzene	µg/L	--	--	--	<0.36	--	<0.36
Chromium III (Cr)	µg/L	--	--	--	41.5	--	41.5
Di-n-Butyl Phthalate	µg/L	--	--	--	<2.62	--	<2.62
Dichlorobenzene[8]	µg/L	--	--	--	<0.34	--	<0.34
Diethyl phthalate	µg/L	--	--	--	1.1	--	1.1
Dimethyl phthalate	µg/L	--	--	--	1.2	--	1.2
4,6-Dinitro-2-methylphenol	µg/L	--	--	--	7.7	--	7.7
2,4-Dinitrophenol	µg/L	--	--	--	3.4	--	3.4
Ethylbenzene	µg/L	--	--	--	<2	--	<2
Fluoranthene	µg/L	--	--	--	<2.27	--	<2.27
Hexachlorocyclopentadiene	µg/L	--	--	--	<5	--	<5
Nitrobenzene	µg/L	--	--	--	1.13	--	1.13
Thallium	µg/L	--	--	--	0.6	--	0.6
Toluene	µg/L	--	--	--	1.95	--	1.95
Tributyltin	µg/L	--	--	--	23.45	--	23.45
1,1,1-Trichloroethane	µg/L	--	--	--	<2	--	<2
Human Health - Carcinogens							
Acrylonitrile	µg/L	--	--	--	<0.809	--	<0.809
Aldrin	µg/L	0.0037	--	--	<0.03	--	<0.03
Benzene	µg/L	--	--	--	<2	--	<2
Benzidine	µg/L	0.012	--	--	<10.21	--	<10.21
Berylium (Be)	µg/L	--	--	--	0.7	--	0.7
Bis (2-Chloroethyl) ether	µg/L	--	--	--	<1.46	--	<1.46
Bis(2-ethylhexyl)-phthalate	µg/L	--	--	--	7.3	--	7.3
Carbon tetrachloride	µg/L	--	--	--	<2	--	<2
Chlordane[8]	µg/L	0.0038	--	--	<0.37	--	<0.37
Chlorodibromomethane	µg/L	--	--	--	7	--	7
Chloroform	µg/L	--	--	--	46.5	--	46.5
DDT[8]	µg/L	--	--	--	0.02	--	0.02
1,4-Dichlorobenzene	µg/L	--	--	--	4.7	--	4.7
3,3'-Dichlorobenzidine	µg/L	--	--	--	0.94	--	0.94
1,2-Dichloroethane	µg/L	--	--	--	<0.28	--	<0.28
1,1-Dichloroethylene	µg/L	--	--	--	0.18	--	0.18
Dichlorobromomethane	µg/L	--	--	--	11.5	--	11.5
Dichloromethane	µg/L	--	--	--	3.1	--	3.1
1,3-Dichloropropene	µg/L	--	--	--	<3.2	--	<3.2
Dieldrin	µg/L	--	--	--	<0.3	--	<0.3
2,4-Dinitrotolulene	µg/L	--	--	--	<2.06	--	<2.06

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Parameter	Units	Effluent Limitation			Monitoring Data (From January 2007 – December 2011)		
		Average Monthly[6]	Average Weekly[6]	Maximum Daily[6]	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
1,2-Diphenylhydrazine	µg/L	--	--	--	<1.34	--	<1.34
Halomethanes[8]	µg/L	--	--	--	6.67	--	6.67
Heptachlor	µg/L	0.0084	--	--	<0.03	--	<0.03
Heptachlor epoxide	µg/L	0.0033	--	--	<0.03	--	<0.03
Hexachlorobenzene	µg/L	--	--	--	<1.37	--	<1.37
Hexachlorobutadiene	µg/L	--	--	--	<1.17	--	<1.17
Hexachloroethane	µg/L	--	--	--	<1.56	--	<1.56
Isophorone	µg/L	--	--	--	2.2	--	2.2
N-Nitrosodimethylamine	µg/L	--	--	--	6.65	--	6.65
N-Nitrosodi-N-propylamine	µg/L	--	--	--	3.2	--	3.2
N-Nitrosodiphenylamine	µg/L	--	--	--	<1.54	--	<1.54
PAHs[8]	µg/L	--	--	--	<28.69	--	<28.69
PCBs[8]	µg/L	--	--	--	<3.62	--	<3.62
TCDD equivalents[8]	pg/L	0.65	--	--	4.25	--	4.25
Human Health - Carcinogens							
1,1,2,2-Tetrachloroethane	µg/L	--	--	--	<0.24	--	<0.24
Tetrachloroethylene	µg/L	--	--	--	9.8	--	9.8
Toxaphene	µg/L	--	--	--	<1.6	--	<1.6
Trichloroethylene	µg/L	--	--	--	<0.26	--	<0.26
1,1,2-Trichloroethane	µg/L	--	--	--	<0.30	--	<0.30
2,4,6-Trichlorophenol	µg/L	--	--	--	<1.26	--	<1.26
Vinyl chloride	µg/L	--	--	--	<0.3	--	<0.3

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E. Compliance Summary

Data submitted revealed that there were no violations during the last permit cycle.

F. Planned Changes

The Discharger is planning to expand recycled water treatment process in order to accommodate increased demands from ~~BP~~ the Refinery:

1. Construct and install additional nitrification systems. These processes do not produce any brackish wastewaters and will not contribute to the discharge to the brine line.

2. Maximize RO. The Discharger will increase production of RO permeate by utilizing the existing spare (fourth) RO train. The current system was designed to produce 5 MGD of RO permeate by operating three RO trains, a keeping a fourth train as backup. This will increase the amount of RO permeate produced

to approximately 6.83 MGD, resulting in an increase in brine waste production from 0.9 MGD to 1.2 MGD. The incoming water from the Edward C. Little Water Recycling Plant will be increased from 6.8 MGD to approximately 8 MGD as a result of the Plant's upgrade. A mass balance schematic of the brine waste is in included in Attachment C.

3. Construct additional MF process units. The Discharger will construct additional MF process units to provide enough water to feed the RO system.

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III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

A. Legal Authorities.

This Order is issued pursuant to section 402 of the federal CWA and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260).

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.

C. State and Federal Regulations, Policies, and Plans

1. **Water Quality Control Plans.** The Regional Water Board adopted a Water Quality Control Plan for the Los Angeles Region (Basin Plan) on June 13, 1994 that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for the Pacific Ocean. In addition, the Basin Plan implements 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. On May 26, 2000, the USEPA approved the revised Basin Plan except for the implementation plan for potential municipal and domestic supply (MUN) designated water bodies, which is not applicable to this discharge. Beneficial uses applicable to the Pacific Ocean are as follows:

Table F-6. Basin Plan Beneficial Uses

Discharge Points	Receiving Water	Beneficial Use(s)
001	Pacific Ocean Offshore	Existing: Industrial process water (IND); navigation (NAV); water contact recreation (REC1); non-water contact recreation (REC2); commercial and sport fishing (COMM); marine habitat (MAR); wildlife habitat (WILD); rare, threatened, or endangered species[8] (RARE), migration of aquatic organisms[8] (MIGR), spawning, reproduction, and/or early development[7] (SPWN), and shellfish harvesting (SHELL). Potential: None.

Requirements of this Order implement the Basin Plan.

The Basin Plan relies primarily on the requirements of the Water Quality Control Plan for Ocean Waters[8] of California (Ocean Plan) for protection of the beneficial uses of the State ocean waters[8]. The Basin Plan, however, may contain additional water quality objectives applicable to the Discharger.

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

b. **Integrated Report.** The State Water Board proposed the California 2010 Integrated Report from compilation of the draft Regional Water Boards' 2008 Integrated Reports containing 303(d) List of Impaired Waters and 305(b) Reports following recommendations from the Regional Water Boards and information solicited from the public and other interested parties. The Regional Water Boards' 2008 Integrated Reports were used to revise their 2006 303 (d) List. On August 4, 2010, the State Water Board adopted the California's 2010 Integrated Report. On November 12, 2010, the USEPA approved California's 2010 Integrated Report Section 303(d) List of Impaired Waters for the Los Angeles Region. The Santa Monica Bay and nearby locations are on the 303(d) list for the following pollutants:

   i. Point Vicente Beach – Calwater Watershed No. 40511000

      Pollutant – Indicator bacteria[9]

   ii. Royal Palms Beach – Calwater Watershed No. 40511000

[9] A TMDL has been approved for this pollutant and is being addressed by USEPA.

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Pollutants – Fish consumption advisory for dichloro-diphenyl-trichloroethane[10] (DDT[8]); indicator bacteria[9]; and fish consumption advisory for polychlorinated biphenyls[10] (PCBs[8])

iii. Santa Monica Bay Offshore & Nearshore – Calwater Watershed No. 40513000

Pollutants –DDT[8] (tissue & sediment)[10]; debris[10], fish consumption advisory[10], PCBs[8] (tissue & sediment)[10]; and sediment toxicity[10] (centered on Palos Verdes Shelf)

iv. Santa Monica Bay Beaches – Calwater Watershed No. 40513000

Pollutants – Indicator bacteria

v. Whites Point Beaches – Calwater Watershed No. 40511000

Pollutants – Fish consumption advisory for DDT[8,10]; indicator bacteria[9]; and PCBs[8,10]

c. **Total Maximum Daily Load (TMDL).** A TMDL is a determination of the amount of a pollutant, from point, nonpoint, and natural background sources, including a margin of safety, which may be discharged to a water quality-limited water body. Section 303(d) of the CWA established the TMDL process. The statutory requirements are codified at 40 CFR 130.7. TMDLs must be developed for the pollutants of concern, which impact the water quality of water bodies on the 303(d) list. A 13-year schedule for development of TMDLs in the Los Angeles Region was established in a consent decree approved on March 22, 1999 (Heal the Bay Inc., et al. v. Browner, et al. C 98-4825 SBA) (United States District Court, Northern District of California, 1999). In compliance with the consent decree, a TMDL for bacterial indicators at Santa Monica Bay Beaches became effective on July 15, 2003. A TMDL for debris was adopted by the Regional Water Board on November 4, 2010, and will become effective upon approval by the State Water Board, Office of Administrative Law, and USEPA. TMDLs for listings of ~~DDT,~~ debris, fish consumption advisory, ~~PCBs,~~ and sediment toxicity for the Santa Monica Bay Offshore and Nearshore are expected to be completed by January 1, 2019. Because all waste load allocations applicable to the JWPCP outfalls have been incorporated into JWPCP's 2011 Order, they do not need to be incorporated into this Order.

Santa Monica Bay TMDLs for DDTs and PCBs. Consistent with 40 CFR 130.2 and 130.7, section 303(d) of the CWA and USEPA guidance for developing TMDLs in California (USEPA, 2000a), the USEPA issued the *Santa Monica Bay TMDLs for DDTs and PCBs* on March 26, 2012, including WLAs for DDT and PCBs for point sources, including the

[10] This pollutant requires TMDL.

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Hyperion Treatment Plant (HTP), JWPCP, the Little WRP and the Carson WRP.

According to footnote 3 of table 6-2 of the TMDL, the effluent limitations for DDT and PCBs for the Carson WRP are supposed to be calculated according to the following formula:

$$\text{Carson WRP WLA} = C_{HTP} (Q_{HTP \text{ to Carson}}) + C_{JWPCP} (Q_{JWPCP \text{ to Carson}})$$

Where:

C_{HTP} is the concentration-based WLA (10.1 ng/L for DDT and 0.271 ng/L for PCBs) for the Hyperion effluent.
C_{JWPCP} is the concentration-based WLA (15.8 ng/L for DDT and 0.351 ng/L for PCBs) for the JWPCP effluent.
$Q_{HTP \text{ to Carson}}$ and $Q_{JWPCP \text{ to Carson}}$ are the flows diverted from Hyperion and JWPCP to the Carson WRP.

However, this formula presumes that the water coming into the Carson WRP is from HTP. Because the Little WRP is actually the source of incoming water, the following formula is more accurate and was used to calculate the effluent limitations in this permit:

$$\text{Carson WRP WLA} = C_{HTP} (Q_{\text{Little WRP to Carson}})$$

The *Santa Monica Bay TMDLs for DDTs and PCBs* requires that all discharges with WLAs identified in table 6-2 be considered by NPDES permit writers to have reasonable potential under 40 CFR 122.44(d); that the concentration-based WLAs for DDT and PCBs be implemented as monthly average WQBELs in permits for plants discharging to the ocean; that permit writers should not further adjust the WLAs for dilution or background seawater concentration when calculating WQBELs; that the mass-based WLAs be directly implemented as annual average WQBELs in permits.; and that the annual mass emissions (in g/year) for DDT and PCBs discharges be calculated and reported as the sum of monthly emissions on a calendar year basis according to the following formula:

Annual Mass Emission (g/year) = $\sum$ [Monthly Mass Emission Rates (g/month)] = $\sum$ [Monthly Average Effluent Concentration (ng/L) $\times$ Total Monthly Brine Flow (million gallons) $\times$ 0.00378 (conversion factor)]

2. **California Ocean Plan.** The State Water Board adopted the California Ocean Plan in 1972 and the most recent amendments to the Ocean Plan on September 15, 2009. The Office of Administration Law approved it on March 10, 2010. On October 8, 2010, USEPA approved the 2009 Ocean Plan. The Ocean Plan is applicable, in its entirety, to the ocean waters of the State. The Ocean Plan identifies beneficial uses of ocean waters of the State to be protected as summarized below:

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Table F-7. Ocean Plan Beneficial Uses

Discharge Points	Receiving Water	Beneficial Use(s)
001	Pacific Ocean	IND, REC1 and REC2 including aesthetic enjoyment, NAV, COMM, mariculture[7]; preservation and enhancement of designated Area of Special Biological Significance[7, 11] (ASBS), RARE[7], MAR[7], MIGR[7], SPWN[7], and SHELL.

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

3. **Santa Monica Bay Restoration Plan.** This permit authorizes the discharge of brine waste to Santa Monica Bay, one of the most heavily used recreational areas in California. Recognizing the importance of Santa Monica 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) and the development of the Bay Restoration Plan (BRP), which serves as a blueprint for restoring and enhancing Santa Monica Bay. The Regional Water Board plays a lead role in 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 JWPCP, and implementation of the mass emission approach for discharges of pollutants to Santa Monica Bay.

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

5. **Stringency of Requirements for Individual Pollutants.** This Order contains both technology-based effluent limitations (TBELs) and water quality-based effluent limitations (WQBELs) for individual pollutants. The TBELs consist of restrictions on biological oxygen demand[7] (BOD), total suspended solids[7] (TSS), oil and grease, settleable solids, turbidity, pH, and percent removal of BOD and TSS. Restrictions on BOD, TSS, oil and grease, settleable solids, turbidity, and pH are discussed in Section IV.B.2 of the Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements. In addition, this Order

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[11] There are no ASBS in the vicinity of this discharge.

contains effluent limitations more stringent than the minimum, federal technology-based requirements that are carried over from the previous permit.

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

6. **Antidegradation Policy.** Part 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. The permitted discharge is consistent with the antidegradation provision of Part 131.12 and State Water Board Resolution No. 68-16.

7. **Recycled Water Policy.** On February 9, 2009, the State Water Board adopted Resolution No. 2009-0011, the State Board Recycled Water Policy. The Policy was approved by OAL on May 14, 2012. This Recycled Water Policy is intended to support the State Water Board's Strategic Plan to promote sustainable local water supplies. Increasing the acceptance and promoting the use of recycled water is a means towards achieving sustainable local water supplies and can result in reduction in greenhouse gases, a significant driver of climate change. The Recycled Water Policy is also intended to **encourage** beneficial use of, rather than solely disposal of, recycled water generated from municipal wastewater sources in a manner that fully implements state and federal water quality laws.

   Pursuant to Water Code sections 13550 *et seq.,* the State Water Board declared: "[I]t is a waste and unreasonable use of water for water agencies not to use recycled water when recycled water of adequate quality is available and is not being put to beneficial use…"

   As a part of the Recycled Water Policy, the State Water Board adopted the follo wing four goals for California:

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a. Increase the use of recycled water over 2002 levels by at least one million acre-feet by 2020 and by at least two million acre-feet by 2030;

b. Increase the use of storm water over use in 2007 by at least 500,000 acre-feet by 2020 and by at least one million acre-feet by 2030;

c. Increase the amount of water conserved in urban and industrial uses by comparison to 2007 by at least 20% by 2020; and,

d. Included in these goals is the substitution of as much recycled water for potable water as possible by 2030.

The Recycled Water Policy does not require or establish the authority to allow the Regional Water Boards to require recycling or any certain percentage of recycling. The Recycled Water Policy simply directs the Regional Water Boards to **encourage** the use of recycled water. The Los Angeles Regional Water Board has been working closely with other agencies and interested parties to encourage and promote the use of recycled water.

Recycled water provides the following benefits:

a. A more cost-effective water supply in the long term;

b. A local water source, safe and more reliable than purchasing imported water; and,

c. A preservation of the limited resources, such as groundwater and imported water.

8. Anti-Backsliding Requirements. Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40, Code of Federal Regulations[12], Part 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed.

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 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, anti-backsliding 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 will be

[12] All further statutory references are to title 40 of the Code of Federal Regulations (40 CFR) unless otherwise indicated. Also see Attachment A for definition of terms.

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reopened to incorporate WQBELs. Such an approach ensures that the discharge will adequately protect water quality standards for designated beneficial uses and conform to antidegradation policies and anti-backsliding provisions.

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

10. **Monitoring and Reporting.** 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 establishes monitoring and reporting requirements to implement federal and State requirements. This Monitoring and Reporting Program is provided in Attachment E.

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

See Sections III.C.1.b. and III.C.1.c. of the Fact Sheet.

E. Other Plans, Polices and Regulations

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

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

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The Discharger developed and currently implements a Storm Water Pollution Prevention Plan (SWPPP), to comply with the State Water Board's (Order No. 97-03-DWQ).

3. **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* (EPA841-R-95-003, August 1995). The objective is to provide a comprehensive and integrated strategy resulting in water resource protection, enhancement and restoration, while balancing economic and environmental impacts within a hydrologically defined drainage basin or watershed. The 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 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. Information about the Ventura Coastal Stream Watershed Management Area and other watersheds in the region can be obtained from the Regional Water Board's web site at http://www.waterboards.ca.gov/losangeles and clicking on the word "Watersheds".

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the Code of Federal Regulations: part 122.44(a) requires that permits include applicable technology-based limitations and standards; and 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. Three options exist to protect water quality: 1) 40 CFR part 122.44(d) specifies that WQBELs may be established using USEPA criteria guidance under CWA section 304(a); 2) proposed State criteria or a State policy interpreting narrative criteria supplemented with other relevant information may be used; or 3) an indicator parameter may be established.

The CWA requires that any pollutant that may be discharged by a point source in quantities of concern must be regulated through an NPDES permit. Further, the NPDES regulations require regulation of any pollutant that (1) causes; (2) has the reasonable potential to cause; or (3) contributes to the exceedance of a receiving water quality criteria or objective.

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Mass-based effluent limitations are established to ensure that proper treatment, and not dilution, is employed to comply with the final effluent concentration limitations. 40 CFR part 122.45(f)(1) requires that all permit limitations, standards or prohibitions be expressed in terms of mass units except under the following conditions: (1) for pH, temperature, radiation or other pollutants that cannot appropriately be expressed by mass limitations; (2) when applicable standards or limitations are expressed in terms of other units of measure; or (3) if in establishing technology-based permit limitation on a case-by-case basis limitation based on mass are infeasible because the mass or pollutant cannot be related to a measure of production. The limitations, however, must ensure that dilution will not be used as a substitute for treatment.

A. Discharge Prohibitions

The Order authorizes the discharge of brine waste through Discharge Points 001 to 004 (JWPCP Outfall Nos. 001 to 004). The discharge prohibitions are based on the requirements of the Ocean Plan, California Water Code, and previous permit provisions, and are consistent with the requirements set for other discharges regulated by NPDES permit to the Pacific Ocean.

B. Technology-Based Effluent Limitations

1. Scope and Authority

Section 301(b) of the CWA and implementing USEPA permit regulations at part 122.44, title 40 of the Code of Federal Regulations[13] require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on several levels of controls:

a. Best practicable treatment control technology (BPT) represents the average of the best performance by plants within an industrial category or subcategory. BPT standards apply to toxic, conventional, and nonconventional pollutants.

b. Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and nonconventional pollutants.

c. Best conventional pollutant control technology (BCT) represents the control from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering the "cost reasonableness" of the relationship between the cost of attaining a reduction in effluent discharge

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[13] All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.

and the benefits that would result, and also the cost effectiveness of additional industrial treatment beyond BPT.

d. New source performance standards (NSPS) represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

The CWA requires USEPA to develop effluent limitations, guidelines and standards (ELGs) representing application of BPT, BAT, BCT, and NSPS. Section 402(a)(1) of the CWA and 40 CFR part 125.3 of the NPDES regulations authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern. Where BPJ is used, the permit writer must consider specific factors outlined in 40 CFR part 125.3.

2. Applicable Technology-Based Effluent Limitations (TBELs)

At the time of drafting of this permit, no ELGs applicable to the Discharger have been developed. TBELs in this Order are established in accordance with 40 CFR part 125.3 and based on Table A of the Ocean Plan. TBELs contained in Table A of the Ocean Plan are applied directly to the Discharger's total effluent. Effluent limitations for oil and grease, suspended solids, settleable solids, turbidity, and pH are established in Table A of the Ocean Plan (see Table 8).

The effluent limitations contained in Section III.B, Table A of the 2009 Ocean Plan serve as the technology-based effluent limitations, in order to carry out the purposes and intent of the CWA.

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

Table F-8. Summary of Technology-based Effluent Limitations for POTWs established by the Ocean Plan (2009)

Constituent	Effluent Limitations				
	Average Monthly[4]	Average Weekly[4]	Maximum Daily	Instantaneous Minimum[4]	Instantaneous Maximum[4]
Oil & Grease	25 mg/L	40 mg/L	--	75 mg/L	--
TSS	60[14] mg/L	--	--	--	--
Settleable Solids	1.0 ml/L	1.5 ml/L	--	3.0 ml/L	--
Turbidity	75 NTU	100 NTU	--	225 NTU	--
pH	--	--	--	6.0	9.0

[14] Notes for Table A of the Ocean Plan state, "Suspended Solids: Discharger shall, as a 30-day average, remove 75% of suspended solids 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. Because the monthly effluent limitation for suspended solids has been established at 60 mg/L, the Discharger is not required to remove 75% of suspended solids from the influent stream before discharging wastewaters to the ocean.

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C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

Section 301(b) of the CWA and part 122.44(d) of tilte 40 of the CFR require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards. Part 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants (including toxicity) that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard.

The process for determining reasonable potential and calculating WQBELs when necessary, as required in Section III.C.2 of the Ocean Plan, is intended to protect the designated uses of the receiving water and achieve applicable water quality objectives and criteria as specified in the Ocean Plan. The specific procedures for determining reasonable potential for discharges from the Facility and if necessary for calculating WQBELs, are contained in Appendix VI of the Ocean Plan (as amended in 2009).

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

The Basin Plan and the Ocean Plan establish the beneficial uses for ocean waters of the State. The beneficial uses of the receiving waters affected by the discharge have been described previously in this Fact Sheet. The Ocean Plan also contains water quality objectives for bacterial characteristics, physical characteristics, chemical characteristics, biological characteristics, and radioactivity. The Basin Plan also contains the bacteria objectives for water bodies designated for water contact recreation that was amended by Resolution No. 01-018. These water quality objective from the Ocean Plan with consideration of the bacteria objective in the Basin Plan were included as receiving water limitations in this Order.

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

a. 6-month median, daily maximum, and instantaneous maximum objectives for 21 chemicals and chemical characteristics, including total residual chlorine, acute and chronic toxicity, for the protection of marine aquatic life.

b. 30-day average objectives for 20 non-carcinogenic chemicals for the protection of human health.

c. 30-day average objectives for 42 carcinogenic chemicals for the protection of human health.

d. Daily maximum objectives for acute and chronic toxicity.

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3. Determining the Need for WQBELs

For Order No. R4-2007-0001, the Regional Water Board evaluated the need for WQBELs based on water quality objectives contained in Section II.D.7.b, Table B of the Ocean Plan in accordance with 40 CFR part 122.44(d) and guidance for statistically determining the "reasonable potential" for a discharged pollutant to exceed an objective, as outlined in Appendix VI of the Ocean Plan. The statistical approach combines knowledge of effluent variability (as estimated by a coefficient of variation) with the uncertainty due to a limited amount of effluent data to estimate a maximum effluent value at a high level of confidence. This estimated maximum effluent value is based on a lognormal distribution of daily effluent values. Projected receiving water values (based on the estimated maximum effluent value or the reported maximum effluent value and minimum probable initial dilution), can then be compared to the appropriate water quality objective to determine the potential for an exceedance of that objective and the need for an effluent limitation. According to the RPA Procedure (Appendix VI) of the Ocean Plan, the RPA can yield three endpoints:

a. Endpoint 1, an effluent limitation is required and monitoring is required;

b. Endpoint 2, an effluent limitation is not required and the Regional Water Board may require monitoring; and,

c. Endpoint 3, the RPA is inconclusive, monitoring is required, and an existing effluent limitation may be retained or a permit reopener clause may be included to allow inclusion of an effluent limitation if future monitoring warrants the inclusion.

Order No. R4-2012-XXXX uses the same protocol specified in Order No. R4-2007-0001 to develop WQBELs. The Regional Water Board conducted a conservative initial RPA screen for all parameters in Table B of the Ocean Plan. The Regional Water Board used the RPcalc 2.0 software tool developed by the State Water Board for conducting RPAs, effluent data submitted to the Regional Water Board for the period from January 2007 through December 2011, and the dilution credits applicable to the JWPCP's Outfalls 001 and 002 (166:1), Outfall 003 (150:1), and Outfall 004 (115:1) to conduct the initial RPA screen. The initial screen is more conservative because it does not consider the dilution applicable to the combining JWPCP effluent. A parameter that does not indicate reasonable potential during the initial screen would not demonstrate reasonable potential during a full RPA that accounts for additional dilution provided by combining the effluent with the effluent from JWPCP. The initial dilution RPA showed that only ammonia and residual chlorine may have reasonable potential to exceed Ocean Plan water quality objectives. However, the second dilution RPA showed no reasonable potential for either parameter.

The RPAs identified 18 parameters (HCH, tributyltin, acrylonitrile, aldrin, benzidine, beryllium, bis(2-chloroethyl)ether, chlordane, DDT, 3,3-dichlorobenzidine, dieldrin, heptachlor, heptachlor epoxide,

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hexachlorobenzene, PAHs, PCBs, TCDD and toxaphene) for which the analytical detection levels were higher than the water quality objectives. Additional monitoring is required for these parameters. Also data were not available for all parameters listed in Table B of the Ocean Plan. Monitoring requirements have been established all Table B parameters to assess reasonable potential in the future.

4. WQBEL Calculations

Effluent from the Carson Regional Water Recycling Plant undergoes two mixing events during discharge into the Pacific Ocean. The first mixing event occurs when the effluent from the Facility combines with effluent from the JWPCP Treatment Plant. The second mixing event occurs during the actual discharge to the Pacific Ocean through the diffuser on the ocean outfall. Because the effluent from the Carson Regional Water Recycling Plant undergoes two mixing events during its discharge, both mixing events must be considered when determining reasonable potential and developing an effluent limitation.

The first step in determining reasonable potential and calculating an effluent limitation is determining the WQBELs for the dilution offered by the JWPCP Outfalls 001 and 002 (166:1), Outfall 003 (150:1), and Outfall 004 (115:1).

Effluent limitations for all pollutants, except for acute toxicity (if applicable) and radioactivity are calculated in accordance with the following equation and are based on the water quality objectives contained in Section II.D.7.b of the Ocean Plan, Table B:

$$\mathbf{Ce = Co + Dm \times (Co - Cs)}$$

where
Ce = the effluent limitation (µg/L)
Co = the water quality objective to be met at the completion of initial dilution (µg/L)
Cs = background seawater concentration (µg/L) (see Table F-9 below)
Dm = minimum probable initial dilution expressed as parts seawater per part wastewater

The effluent limitation for acute toxicity is calculated according to the following equation:

$$\mathbf{Ce = Co + (0.1) \times Dm \times (Co)}$$

where all variables are as indicated above. This equation applies only when Dm > 24.

The Dm is based on observed waste flow characteristics, receiving water density structure, and the assumption that no currents of sufficient strength to influence the initial dilution process flow across the discharge structure. Prior to issuance

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of previous Orders[15], the State Water Board had determined the minimum initial dilution factor, Dm, for the JWPCP Outfalls 001 and 002, 003, and 004 to be 166 to 1, 150 to 1, and 115 to 1, 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 are not available, in accordance with Section III.C, Table C, Implementation Provisions for Table B Water Quality Objectives, Cs equals zero for all pollutants, except the following:

Table F-9. Pollutants with Background Seawater Concentrations

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

D. Final Effluent Limitations

Section 402(o) of the CWA and 40 CFR part122.44(l) require that effluent limitations or conditions in reissued Orders be at least as stringent as those in the existing Orders. The previous Order did not contain any numerical effluent limitations. Effluent limitations for oil and grease, total suspended solids, settleable solids, turbidity, and pH have been established to reflect technology-based effluent limits contained in the Ocean Plan. An effluent limitation for temperature has been established based on the requirements of the Thermal Plan.

1. Mass-based Effluent Limitations

Mass-based effluent limitations were established for all pollutants (except for DDT and PCBs) according to footnote 16. Mass-based effluent limitations were established for DDT and PCBs according to footnote 17.

[15] The previous Orders included 91-112, 97-070, R4-2006-0042, and R4-2011-0151, adopted by this Regional Water Board on October 28, 1991, June 16, 1997, April 6, 2006, and September, 1, 2011, respectively.

Table F-10. Summary of Final Effluent Limitations Discharge Points 001 to 004

Parameter	Units	Effluent Limitations						Basis
		Average Annually[6]	Average Monthly[6]	Average Weekly[6]	Maximum Daily[6]	Instan-taneous Minimum[6]	Instan-taneous Maximum[6]	
Discharge Points 001, 002, 003, and 004								
Oil and Grease	mg/L	--	25	40	--	--	75	Ocean Plan
	lbs/day[16]	--	250	40	--	--	750	
Total Suspended Solids	mg/L	--	60	--	--	--	--	Ocean Plan
	lbs/day[16]	--	600	--	--	--	--	
	% removal	--	75	--	--	--	--	
Settleable Solids	ml/L	--	1.0	1.5	--	--	3.0	Ocean Plan
Turbidity	NTU	--	75	100	--	--	225	Ocean Plan
pH	standard units	--	--	--	--	6.0	9.0	Ocean Plan
Temperature	°F	--	--	--	100	--	--	Ocean Plan
DDT (individual WQBEL)	g/year[17]	110	110	--	--	--	--	DDT/PCBs TMDL
DDT (group WQBEL)	g/year	14,567[18]	--	--	--	--	--	DDT/PCBs TMDL
PCBs (individual WQBEL, as arochlors[4])	g/year[17]	3.0	3.0	--	--	--	--	DDT/PCBs TMDL
PCBs (group WQBEL, as arochlors[4])	g/year	351[18]	--	--	--	--	--	DDT/PCBs TMDL

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V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

The Basin Plan and the Ocean Plan contain numeric and narrative water quality objectives applicable to all surface waters within the Los Angeles Region. Water quality objectives include an objective 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 tentative Order are included to ensure protection of beneficial uses of the receiving water and are based on the water quality objectives contained in the Basin Plan and Ocean Plan.

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[16] The mass emission rates are based on the existing plant design flow rate of 1.2 MGD for the brine waste, and are calculated as follows: Flow (MDG) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day.

[17] The mass emission rates are based on the incoming flow rate of 8 MGD for the upgraded Plant design and the concentration-based WLAs for Hyperion in the *Santa Monica Bay TMDL for DDTs and PCBs* of 10.1 ng/L and 0.271 ng/L for DDT and PCBs, respectively. The mass emission rates are calculated as follows: Flow (MDG) x Concentration (ng/L) x 1.38 (conversion factor) = g/year.

[18] The total mass load for DDT and PCB from JWPCP, Hyperion Treatment Plant, and West Basin's WRPs shall not be more than 14,567 g/yr for DDT and 351 g/yr for PCB. The Discharger is deemed in compliance with these group WQBELs for DDT and PCBs if it is in compliance with the individual mass-based WQBELs for DDT and PCBs in Table 7 Effluent Limitations.

VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

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

A. Influent Monitoring

Not applicable.

B. Effluent Monitoring

The Discharger is required to conduct monitoring of the permitted discharges in order to evaluate compliance with permit conditions. Monitoring requirements are given in the proposed Monitoring and Reporting Program (Attachment E). This provision requires compliance with the Monitoring and Reporting Program, and is based on 40 CFR parts 122.44(i), 122.62,122.63, and 124.5. The Monitoring and Reporting Program is a standard requirement in almost all NPDES permits (including the proposed Order) issued by the Regional Water Board. In addition to containing definition of terms, it specifies general sampling/analytical protocols and the requirements of reporting spills, violation, and routine monitoring data in accordance with NPDES regulations, the California Water Code, and Regional Water Board 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.

Table F-11 compares the effluent monitoring frequency of Order Nos. R4-2007-0001 and R4-2012-XXXX. On May 19, 2010, Regional Water Board staff wrote a memo to Regional Water Board members regarding the determination of POTWs' effluent monitoring frequency for priority pollutants, pesticides, and radioactive pollutants. Regional Water Board staff used a matrix of criteria, based on Best Professional Judgment, to set the effluent and receiving monitoring frequencies. The monitoring frequencies for these pollutants, which vary from monthly, quarterly, to semiannually, are generally set based on the following three criteria:

Criterion 1: Monitoring frequency will be monthly, for those pollutants with reasonable potential to exceed water quality objectives (i.e. monitoring has shown exceedances of the objectives); or,

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Criterion 2: Monitoring frequency will be quarterly, for those pollutants in which some or all of the historic effluent monitoring data detected the pollutants, but without reasonable potential to exceed water quality objectives; or,

Criterion 3: Monitoring frequency will be semiannually, for those pollutants in which all of the historic effluent monitoring data have had non-detected concentrations of the pollutants and without current reasonable potential to exceed water quality objectives.

Table F-11. Monitoring Frequency Comparisons

Parameter	Monitoring Frequency (2007 Permit, Order No. R4-2007-0001)	Monitoring Frequency (2012 Permit, Order No. R4-2012-XXXX)	Change of Monitoring Frequency
Total brine waste flow	Continuous	Continuous	No
Turbidity	Monthly	Monthly	No
Temperature	Monthly	Monthly	No
pH	Monthly	Monthly	No
Settleable solids	Monthly	Monthly	No
Suspended solids	Monthly	Monthly	No
Oil and grease	Monthly	Monthly	No
Salinity	Monthly	Monthly	No
Total residual chlorine	Semiannually	Monthly	Increased
Ammonia	Semiannually	Quarterly	Increased
All metals	Semiannually	Quarterly	Increased
Cyanide	Semiannually	Quarterly	Increased
Phenolic compounds	Semiannually	Quarterly	Increased
Diethyl phthalate	Semiannually	Quarterly	Increased
Dimethyl phthalate	Semiannually	Quarterly	Increased
4,6-dinitro-2-methylphenol	Semiannually	Quarterly	Increased
2,4-dinitrophenol	Semiannually	Quarterly	Increased
Nitrobenzene	Semiannually	Quarterly	Increased
Toluene	Semiannually	Quarterly	Increased
Aldrin	Quarterly	Semiannually	Decreased
Benzidine	Quarterly	Semiannually	Decreased
Bis(2-ethylhexyl)phthalate	Semiannually	Quarterly	Increased
chlordane	Quarterly	Semiannually	Decreased
Chlorodibromomethane	Semiannually	Quarterly	Increased
Chloroform	Semiannually	Quarterly	Increased
DDT	Semiannually	Semiannually ~~19~~	No
1,4-dichlorobenzene	Semiannually	Quarterly	Increased
Dichlorobromomethane	Semiannually	Quarterly	Increased
Dichloromethane	Semiannually	Quarterly	Increased
Halomethanes	Semiannually	Quarterly	Increased
Heptachlor	Quarterly	Semiannually	Decreased

~~19~~ ~~According to the *Santa Monica Bay TMDL for DDTs and PCBs*, all dischargers with WLAs identified in table 6-2 of the TMDL are to be considered by NPDES permit writers to have reasonable potential under 40 CFR 122.44(d) and require WQBELs following the TMDL.~~

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Parameter	Monitoring Frequency (2007 Permit, Order No. R4-2007-0001)	Monitoring Frequency (2012 Permit, Order No. R4-2012-XXXX)	Change of Monitoring Frequency
Heptachlor epoxide	Quarterly	Semiannually	Decreased
Isophorone	Semiannually	Quarterly	Increased
N-nitrosodimethylamine	Semiannually	Quarterly	Increased
N-nitrosodi-N-propylamine	Semiannually	Quarterly	Increased
PCBs (as arochlors)	Semiannually	Semiannually [19]	No
PCBs (as individual congeners)	N.A.	Annually	Increased
TCDD Equivalents	Quarterly	Quarterly	~~Increased~~No
Tetrachloroethylene	Semiannually	Quarterly	Increased
Remaining pollutants in Table B of Ocean Plan (except acute toxicity)	Semiannually	Semiannually	No

C. Whole Effluent Toxicity Testing Requirements

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

D. Receiving Water Monitoring

1. Surface Water

Site-specific receiving water monitoring requirements have not been established in the Monitoring and Reporting Program. Receiving water monitoring is currently being conducted by JWPCP (CI-1785) for the receiving water around the outfall diffuser, and data to determine compliance with receiving water limitations will continue to be readily available. The Discharger is encouraged to participate and contribute to the receiving water monitoring conducted by JWPCP.

Ocean-specific Regional Monitoring requirements may be required by the Discharger if determined by the Executive Officer.

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VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

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

40 CFR 122.41(a)(1) and (b) through (n) establish conditions that apply to all state-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. 40 CFR 123.25(a)(12) allows the state to omit or modify conditions to impose more stringent requirements. In accordance with 40 CFR 123.25, this Order omits federal conditions that address enforcement authority specified in 40 CFR 122.41, subsections (j)(5) and (k)(2), because the enforcement authority under the California Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference California Water Code section 13387(e).

B. Special Provisions

1. Reopener Provisions

This provision is based on 40 CFR part 123. The Regional Water Board may reopen the permit to modify permit conditions and requirements. Causes for modifications include the promulgation of new regulations, or adoption of new regulations by the State Water Board or Regional Water Board, including revisions to the Basin Plan and the Ocean Plan.

e. Special Studies and Additional Monitoring Requirements

a. Toxicity Reduction Requirements

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

3. Best Management Practices and Pollution Prevention

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

Since spill or overflow is a common event in the treatment plant service areas, this Order requires the Discharger to review and update, if necessary, 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.

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b. **Pollutant Minimization Program.**

This provision is based on the requirements of Section 2.4.5 of the SIP.

4. Construction, Operation, and Maintenance Specifications

This provision is based on the requirements of 40 CFR 122.41(e) and the previous Order.

VIII. PUBLIC PARTICIPATION

The Regional Water Board is considering the issuance of WDRs that will serve as a NPDES permit for Juanita Millender-McDonald Carson Regional Water Recycling Plant. As a step in the WDRs adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDRs adoption process.

A. Notification of Interested Parties

The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Notification was provided by posting a notice in a local newspaper and by posting a notice at the Plant, Carson, California.

B. Written Comments

Regional Water Board staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs and draft NPDES permit. Comments must be submitted either in person or by mail to the Executive Office at the Regional Water Board at the address above on the cover page of this Order.

To be fully responded to by Regional Water Board staff and considered by the Regional Water Board, written comments on the tentative Order must be received at the Regional Water Board offices by 12:00 p.m. (noon) on **September 24, 2012**.

C. Public Hearing

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

Date: ~~November 8~~March 7, ~~2012~~2013
Time: 9:00 a.m.
Location: Metropolitan Water District of Southern California, Board Room
700 North Alameda Street
Los Angeles, California

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

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

D. Nature of Hearing

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

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

E. Parties to the Hearing

The following are the parties to this proceeding:

1. The applicant/permittee

2. Regional Water Board Staff

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

F. Public Comments and Submittal of Evidence

Persons wishing to comment upon or object to the tentative waste discharge requirements, or submit evidence for the Board to consider, are invited to submit them in writing to the above address. To be evaluated and responded to by staff, included in the Board's agenda folder, and fully considered by the Board, written comments must be received no later than close of business **September 24, 2012**.

Comments or evidence received after that date will be submitted, ex agenda, to the Regional Water Board for consideration, but only included in administrative record with express approval of the Chair during the hearing. Additionally, if the Regional Water Board receives only supportive comments, the permit may be placed on the Regional Water Board's consent calendar, and approved without an oral testimony.

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G. Hearing Procedure

The Regional Water Board meeting, of which the hearing is a part, will start at **9:00 a.m**. Interested persons are invited to attend. When the agenda item is called, Regional Water Board staff will present the matter under consideration, after which oral statements from parties or interested persons will be heard. For accuracy of the record, all important testimony should be in writing. The Regional Water Board will include in the administrative record written transcriptions of oral testimony that is actually presented at the hearing. Oral testimony may be limited to three minutes or less for each interested person, depending on the number of interested persons wishing to be heard.

Parties or interested persons with similar concerns or opinions are encouraged to choose one representative to speak and are encouraged to coordinate their presentations with each other. Parties will be advised after the receipt of public comments, but prior to the date of the hearing, of the amount of time each is allocated for presentations. That decision will be based upon the complexity and number of issues under consideration, the extent to which the parties have coordinated, the number of parties and interested persons anticipated, and the time available for the hearing. The parties are invited to contact staff not later than ~~October 25, 2012~~**February 21, 2013**, (two weeks prior to the hearing) to discuss how much time they believe is necessary for their presentations, and staff will endeavor to accommodate reasonable requests. At the conclusion of testimony, the Regional Water Board will deliberate in open or close session, and render a decision.

The Regional Water Board does not generally require the prior identification of witnesses, the cross examination of witnesses, or other procedures not specified in this notice. Parties or persons with special procedural requests or requests for alternative hearing procedures should contact staff, who will endeavor to accommodate reasonable requests. Objections to any procedure to be used during this hearing must be submitted in writing no later than close of business 15 business days prior to the date of the hearing. (Any objections related to the amount of time allocated for parties' presentations must be submitted within two business days of notice thereof, if that date is less than 15 business days before the hearing.) Absent such objections, any procedure not specified in this hearing notice will be waived pursuant to section 648(d) of title 23 of the CCR. Procedural objections will not be entertained at the hearing.

If there should not be a quorum on the scheduled date of this meeting, all cases will be automatically continued to the next scheduled meeting on ~~**December 6, 2012**~~**April 4, 2013**. A continuance will not extend any time set forth herein.

H. Waste Discharge Requirements Petitions

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

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

I. Information and Copying

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

J. Register of Interested Persons

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

K. Additional Information

Requests for additional information or questions regarding this order should be directed to Don Tsai at (213) 576-6665.

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ATTACHMENT G – GENERIC TOXICITY REDUCTION EVALUATION (TRE) WORKPLAN (POTW)

Any sludge requirements in this Attachment G are not applied for the Juanita Millender-McDonald Carson Regional Water recycling Plant.

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 and SS removal
   (2) Activated sludge - Food-to-microorganism (F/M) ratio, mean cell residence time (MCRT), mixed liquor suspended solids (MLSS), sludge yield, and BOD and COD removal
   (3) Secondary clarification - hydraulic and solids loading capacity, sludge volume index and sludge blanket depth

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)

ii. Information on IUs with categorical standards or local limits and other significant non-categorical IUs
iii. Number of IUs
iv. Discharge flow
v. Standard Industrial Classification (SIC) code
vi. 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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