California Regional Water Quality Control Board

Los Angeles Region

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ORDER NO. R4-2007-0001
NPDES NO. CA0064246

WASTE DISCHARGE REQUIREMENTS FOR THE
WEST BASIN MUNICIPAL WATER DISTRICT
(Carson Regional Water Recycling Plant)
DISCHARGE TO THE PACIFIC OCEAN

The following Discharger is authorized to discharge in accordance with the conditions set forth in this Order:

Discharger	**West Basin Municipal Water District**
Name of Facility	**Carson Regional Water Recycling Plant, Carson**
Facility Address	**21029 South Wilmington Avenue**
	Carson, CA 90810
	Los Angeles County

The Discharger is authorized to discharge from the following discharge point as set forth below:

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

* Discharge Points 001 through 004 in the Order correspond to the Discharge Serial Nos. 001 through 004 in the Los Angeles County Sanitation Districts' Joint Water Pollution Control Plant NPDES permit (CA0053813) reissued in April 2006.

This Order was adopted by the Regional Water Board on:	**January 11, 2007**
This Order shall become effective on:	**February 10, 2007**
This Order shall expire on:	**December 10, 2011**
The U.S. Environmental Protection Agency (USEPA) and the Regional Water Board have classified this discharge as a major discharge.	
The Discharger shall file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, not later than 180 days in advance of the Order expiration date as application for issuance of new waste discharge requirements.	

IT IS HEREBY ORDERED, that Order No. 99-014 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in Division 7 of the California Water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 (CWC) and regulations adopted therein, and the provisions of the federal Clean Water Act (CWA), and regulations and guidelines adopted therein, the Discharger shall comply with the requirements in this Order.

Order No. 99-014, adopted by this Regional Water Board on April 22, 1999 is hereby rescinded, except for enforcement purposes. This rescission is dependent upon and relative to the issuance and enforceability of this Order. To the extent any provisions, limitations, or requirements set forth in this Order that supersede analogous provisions, limitations, or requirements in Order No. 99-014, are stayed or deemed to be unenforceable, the relevant provisions, limitations, or requirements of Order No. 99-014 shall remain enforceable.

I, Jonathan Bishop, Executive Officer, do hereby certify the following is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on January 11, 2007.

Jonathan S. Bishop, Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
REGION 4, LOS ANGELES REGION

ORDER NO. R4-2007-0001
NPDES NO. CA0064246

WASTE DISCHARGE REQUIREMENTS FOR THE WEST BASIN MUNICIPAL WATER DISTRICT (Carson Regional Water Recycling Plant) DISCHARGE TO THE PACIFIC OCEAN

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I. FACILITY INFORMATION

The following Discharger is authorized to discharge in accordance with the conditions set forth in this Order:

Table 1. Facility Information

Discharger	**West Basin Municipal Water District**
Name of Facility	**Carson Regional Water Recycling Plant, Carson**
Facility Address	**21029 South Wilmington Avenue**
	Carson, CA 90810
	Los Angeles County
Facility Contact, Title, and Phone	**Uzi Daniel, Water Quality Analyst, (310) 660-6245**
Mailing Address	**17140 South Avalon Blvd., Carson, CA 90746**
Type of Facility	**Water Recycling Facility**
Facility Design Flow (Phase I)	**0.9 Million Gallons Per Day (MGD) discharge of waste brine.**

II. FINDINGS

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

A. **Background.** West Basin Municipal Water District (hereinafter Discharger or West Basin) is currently discharging under Order No. 99-014 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0064246. The Discharger submitted a Report of Waste Discharge, dated May 13, 2004, and applied for a NPDES permit renewal to discharge up to 0.9 MGD of waste brine from the Carson Regional Water Recycling Plant, hereinafter Facility. The application was deemed complete on August 26, 2004.

West Basin currently owns and operates a water recycling plant at 1935 Hughes Way, El Segundo, California, known as the West Basin Water Recycling Plant (WBWRP). The WBWRP provides additional treatment to a portion of the secondary treated wastewater from the City of Los Angeles Hyperion Treatment Plant to produce Title 22 and high purity (treated by reverse osmosis) recycled water. The waste brine discharge from WBWRP through the Hyperion Treatment Plant's 5-mile outfall is covered by a separate NPDES permit.

B. **Facility Description.** The Discharger also owns and operates the Carson Regional Water Recycling Plant located at 21029 South Wilmington Avenue, Carson, California. The Facility provides advanced treatment to Title 22 recycled water produced by WBWRP and may discharge up to 0.9 MGD of reverse osmosis brine waste from the treatment process to the Pacific Ocean (offshore of Palos Verdes), a water of the United States, via the Joint Water Pollution Control Plant's (JWPCP) ocean outfalls. Brine waste is not treated prior to discharge. Annual effluent flows from JWPCP are approximately 320 MGD.

The Facility consists of two treatment trains. One train, referred to as the micro filtration/reverse osmosis (MF/RO) plant consists of micro filtration, reverse osmosis, post decabonation, 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. 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).

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. The second phase is not currently budgeted for due to lack of extra customer demand. This second phase will increase the MF/RO train capacity by 5 MGD (total MF/RO plant capacity will be 10.9 MGD). West Basin will notify the Regional Water Board when the second phase comes under budget consideration. After completion of Phase II, the Facility will generate approximately 1.8 MGD of waste brine, and the NPDES permit will be revised, accordingly.

Attachments B and C provide a location map of the area around the Facility and a flow schematic of the Facility, respectively.

Discharge Points. The waste brine is discharged through Los Angeles County Sanitation Districts' JWPCP Discharge Serial Nos. 001 to 004 (NPDES Permit No. CA0053813). These four outfalls (Discharge Serial Nos. 001 through 004) are located at Whites Point, off the Palos Verdes Peninsula. Discharge Serial Nos. 001 and 002 are routinely used for discharge of

treated wastewater. Discharge Serial No. 003 is used only during times of heavy rains to provide hydraulic relief for flow in the outfall system. Discharge Serial No. 004 serves as a standby outfall to provide additional hydraulic relief during the very heaviest flows. Discharge Points 001 through 004 in this Order correspond to the Discharge Serial Nos. 001 through 004 in the JWPCP NPDES permit. These four outfalls are described as follows:

Table 2. Descriptions of 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 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 Discharge Serial 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.

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 (Latitude: 33°49'52"; Longitude: 118°15'15"). This permit does not authorize any discharge from Discharge Point 003-B.

C. **Legal Authorities.** This Order is issued pursuant to section 402 of the Federal CWA and implementing regulations adopted by the USEPA and Chapter 5.5, Division 7 of the CWC. It shall serve as a NPDES permit pursuant to section 402 of the Federal CWA 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 of the CWC for discharges that are not subject to regulation under CWA section 402.

D. **Background and Rationale for Requirements**. The Regional Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and through special studies. Attachments A through F, which contain background information and rationale for Order requirements, are hereby incorporated into this Order and, thus, constitute part of the Findings for this Order.

E. **California Environmental Quality Act (CEQA).** This action to adopt a NPDES permit is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21100, et seq.) in accordance with Section 13389 of the CWC.

F. **Technology-based Effluent Limitations.** The Code of Federal Regulations (CFR) at 40 CFR 122.44(a) requires that permits include applicable technology-based limitations and standards. This Order includes technology-based effluent limitations based on Table A of the Ocean Plan and in accordance with 40 CFR 125.3. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet (Attachment F).

G. **Water Quality-based Effluent Limitations.** Section 122.44(d) of 40 CFR requires that permits include water quality-based effluent limitations (WQBELs) to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where numeric water quality objectives have not been established, 40 CFR 122.44(d) specifies that WQBELs may be established using USEPA criteria guidance under CWA section 304(a), proposed State criteria or a State policy interpreting narrative criteria supplemented with other relevant information, or an indicator parameter.

H. **Water Quality Control Plans.** The Regional Water Board adopted a revised *Water Quality Control Plan, Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (hereinafter 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 all waters addressed through the plan. In addition, State Water Resources Control Board (State Water Board) Resolution No. 88-63 requires that, with certain exceptions, the Regional Water Board assigns the municipal and domestic supply use to water bodies that do not have beneficial uses listed in the Basin Plan. Beneficial uses applicable to the Pacific Ocean (Point Vicente Beach, Royal Palms Beach, and Whites Point Beach) in the Palos Verdes Peninsula are as follows:

Table 3. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001, 002, 003, and 004	Point Vicente Beach, Royal Palms Beach, and 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 harvesting (SHELL). Potential: Spawning, reproduction, and/or early development of fish (SPWN).

Discharge Point	Receiving Water Name	Beneficial Use(s)
	Nearshore Zone (The zone bounded by the shoreline and a line 1000 feet from the shoreline or the 30-foot depth contours, whichever is further from the shoreline)	Existing: Industrial service supply (IND), navigation (NAV), contact (REC-1) and non-contact (REC-2) water recreation, commercial and sport fishing (COMM), marine habitat (MAR), wildlife habitat (WILD), preservation of biological habitats (BIOL), preservation of rare, threatened, or endangered species (RARE), migration of aquatic organisms (MIGR), spawning, reproduction, and/or early development of fish (SPWN).and shellfish harvesting (SHELL).
	Offshore Zone	Existing: Industrial service supply (IND), navigation (NAV), contact (REC-1) and non-contact (REC-2) water recreation, commercial and sport fishing (COMM), marine habitat (MAR), wildlife habitat (WILD), preservation of rare, threatened, or endangered species (RARE), migration of aquatic organisms (MIGR), spawning, reproduction, and/or early development of fish (SPWN).and shellfish harvesting (SHELL).

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

On July 25, 2003, USEPA approved the State's 2002 list of impaired waterbodies prepared pursuant to CWA 303(d). The 303(d)list identifies waterbodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations by point sources (water quality-limited waterbodies).

Requirements of this Order specifically implement the applicable Water Quality Control Plans.

I. **California Ocean Plan.** In accordance with legislative policy set forth in Section 13000 of Division 7 of the CWC, and pursuant to the authority contained in Section 13170 and 13170.2, the USEPA approved the 2005 Ocean Plan on February 14, 2006. The 2005 Ocean Plan amendments were previously adopted by the State Water Resources Control Board on January 20, 2005 and April 21, 2005, and by the California Office of Administrative Law on October 12, 2005. The Ocean Plan was amended to address reasonable potential and Areas of Special Biological Significance. The Ocean Plan contains water quality objectives and beneficial uses for the ocean waters of California. The beneficial uses of State ocean waters to be protected are summarized below:

Table 4. Ocean Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001, 002, 003, and 004	Pacific Ocean	Industrial water supply; water contact and non-contact recreation, including aesthetic enjoyment; navigation; commercial and sport fishing; mariculture; preservation and enhancement of designated Area of Special Biological Significance (ASBS); rare and

Discharge Point	Receiving Water Name	Beneficial Use(s)
		endangered species; marine habitat; fish migration; fish spawning and shellfish harvesting.

In order to protect these beneficial uses, the Ocean Plan establishes water quality objectives (for bacterial, physical, chemical, and biological characteristics, and for radioactivity), general requirements for management of waste discharged to the ocean, quality requirements for waste discharges (effluent quality requirements), discharge prohibitions, and general provisions.

J. **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 131.21, 65 FR 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.

K. **Antidegradation Policy.** Section 131.12 of 40 CFR 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, which incorporates the requirements of the federal antidegradation policy. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. As discussed in detail in the Fact Sheet (Attachment F) the permitted discharge is consistent with the antidegradation provision of 40 CFR 131.12 and State Water Board Resolution No. 68-16.

L. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 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. All effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order.

M. **Monitoring and Reporting.** Section 122.48 of 40 CFR requires that all NPDES permits specify requirements for recording and reporting monitoring results. Sections 13267 and 13383 of the CWC authorize the Regional Water Boards to require technical and monitoring reports. The Monitoring and Reporting Program (MRP) establishes monitoring and reporting requirements to implement federal and State requirements. This MRP is provided in Attachment E.

N. **Standard and Special Provisions.** Standard Provisions, which in accordance with 40 CFR §§122.41 and 122.42, apply to all NPDES discharges and must be included in every NPDES permit, are provided in Attachment D. The Regional Water Board, together with USEPA, 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 (Attachment F).

O. **Notification of Interested Parties.** The Regional Water Board and USEPA have notified the Discharger and interested agencies and persons of their intent to prescribe Waste Discharge Requirements and a NPDES permit for the discharge and have provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet (Attachment F) of this Order.

P. **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 (Attachment F) of this Order.

III. DISCHARGE PROHIBITIONS

A. Wastes discharged shall be limited to a maximum of 0.9 MGD of reverse osmosis brine waste as described in the findings. The discharge of wastes from accidental spills or other sources is prohibited.

B. Discharges of water, materials, thermal wastes, elevated temperature wastes, toxic wastes, deleterious substances, or wastes other than those authorized by this Order, to the Pacific Ocean, a storm drain system, or other waters of the State, are prohibited.

C. The discharge of effluent from the Discharger's facilities through Discharge Points 001 to 004 shall comply with the following:

1. Waste management systems that discharge to the Pacific Ocean through Discharge Points 001 to 004 must be designed and operated in a manner that will maintain the indigenous marine life and a healthy and diverse marine community.

2. Waste discharged to the Pacific Ocean through Discharge Points 001 to 004 must be essentially free of:

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

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

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

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

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

3. Waste effluents from the Discharger's Facilities shall be discharged through Discharge Points 001 to 004 in a manner that provides sufficient initial dilution to minimize the concentrations of substances not removed in treatment.

4. The location of waste discharges from the Discharger's Facilities shall assure that:

   a. Pathogenic organisms and viruses are not present in areas where shellfish are harvested for human consumption or in areas used for swimming or other body contact sports.

   b. Natural water quality conditions are not altered in areas designated as being areas of special biological significance or areas that existing marine laboratories use as a source of seawater.

   c. Maximum protection is provided to the marine environment.

5. Waste that contains pathogenic organisms or viruses shall be discharged from the Facility through Discharge Points 001 to 004 a sufficient distance from shellfishing and water contact sports areas to maintain applicable bacterial standards without disinfection. Where conditions are such that an adequate distance cannot be attained, reliable disinfection in conjunction with a reasonable separation of the discharge points from the area of use must be provided. Disinfection procedures that do not increase effluent toxicity and that constitute the least environmental and human hazard shall be used.

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

E. Wastes discharged shall not contain any substances in concentrations toxic to human, animal, plant, or aquatic life.

F. The discharge shall not cause a violation of any applicable federal CWA water quality requirements, or water quality standards for receiving waters adopted by the Regional Water Board or the State Water Resources Control Board as required by the Federal CWA and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal CWA, and amendments thereto, the Regional Water Board and USEPA will revise and modify this Order in accordance with such more stringent standards.

G. The discharge of any radiological, chemical, or biological warfare agent or high level radiological waste is prohibited.

H. Any discharge of wastes at any point(s) other than specifically described in this Order is prohibited, and constitutes a violation of the Order.

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 discharge of reverse osmosis brine waste shall maintain compliance with the following effluent limitations at Discharge Points 001 to 004, with compliance measured at Monitoring Location M-001 as described in the attached MRP (Attachment E):

Table 5. Final Effluent Limitations

Parameter	Units	Effluent Limitations					
		6-Month Average	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Oil and Grease	mg/L	--	25	40	--	--	75
	lbs/day[1]	--	190	300	--	--	560
pH	standard units	--	--	--	--	6.0	9.0
Temperature	°F	--	--	--	100 [2]	--	--
Total Suspended Solids	mg/L	--	60	--	--	--	--
	lbs/day[1]	--	450	--	--	--	--
Settleable Solids	ml/L	--	1.0	1.5	--		3.0

Parameter	Units	Effluent Limitations					
		6-Month Average	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Turbidity	NTU	--	75	100	--	--	225
Aldrin [3]	µg/L	--	0.0037				
	lbs/day[1]	--	2.8×10^{-5}				
Benzidine [3]	µg/L	--	0.012	--	--	--	--
	lbs/day[1]	--	9.0×10^{-5}	--	--	--	--
Chlordane [3,4]	µg/L	--	0.0038	--	--	--	--
	lbs/day[1]	--	2.9×10^{-5}	--	--	--	--
Heptachlor [3]	µg/L	--	0.0084	--	--	--	--
	lbs/day[1]	--	6.3×10^{-5}	--	--	--	--
Heptachlor Epoxide [3]	µg/L	--	0.0033	--	--	--	--
	lbs/day[1]	--	2.5×10^{-5}	--	--	--	--
TCDD Equivalents [3, 5]	pg/L	--	0.65	--	--	--	--
	lbs/day[1]	--	5.0×10^{-9}	--	--	--	--

[1] The mass emission rates are based on the existing plant design flow rate of 0.9 MGD for the brine waste, and are calculated as follows: Flow(MDG) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day. However, the design flow for brine waste will increase to 1.8 MGD after the completion of the Phase II plant construction. At that time the permit will be reopened and the mass-based effluent limitations will be modified accordingly. A reopener has been provided for this purpose.

[2] The temperature of waste discharged shall not exceed 100°F, which takes into account the very large dilution credit based upon BPJ.

[3] Effluent limitations for these constituents are based on Ocean Plan water quality objectives using initial dilution ratio of 166 parts of seawater to 1 part effluent. This dilution ration is applied in the JWPCP permit for Discharge Serial Nos. 001 and 002 (Discharge Points 001 and 002 in this Order). Considering the higher in-pipe dilution (when combining with the JWPCP effluent) during the high flow when Discharge Points 003 and 004 are being used, same dilution ratio of 166:1 is also used for calculations of effluent limitations for Discharge Points 003 and 004 in this Order although Discharge Points 003 and 004 have predetermined dilution ratios of 150:1 and 115:1, respectively, as described in the JWPCP permit. Please refer to the Fact Sheet (Attachment F) for effluent limitation calculations.

[4] *Chlordane* shall mean the sum of *chlordane-alpha, chlordane-gamma, chlordene-alpha, chlordene-gamma, nonachlor-cis, nonachlor-trans* and *oxychlordane*. Discharger may temporarily suspend the monitoring requirements for *alpha* and *gamma chlordene* if standards for these compounds are not available. However, Discharger is required to resume detection and quantification practices as soon as standards for these two compounds become available.

[5] See Attachment A for definition.

V. RECEIVING WATER LIMITATIONS

Unless specifically excepted by this Order, the discharge shall not cause violation of the following water quality objectives. Compliance with these objectives shall be determined by samples collected at stations representative of the area within the waste field where initial dilution is completed. Since the brine waste is discharged through the Los Angeles County Sanitation Districts' JWPCP Outfalls, the receiving water monitoring will only be conducted by the Los Angeles County Sanitation Districts at this time.

A. Bacterial Characteristics

1. Water Contact Standards

a. State/Regional Water Board Water Contact Standards

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

Geometric Mean Limits
(1) Total coliform density shall not exceed 1,000/100 ml.
(2) Fecal coliform density shall not exceed 200/100 ml.
(3) Enterococcus density shall not exceed 35/100 ml.

Single Sample Maximum (SSM)
(1) Total coliform density shall not exceed 10,000/100 ml.
(2) Fecal coliform density shall not exceed 400/100 ml.
(3) Enterococcus density shall not exceed 104/100 ml.
(4) Total coliform density shall not exceed 1,000/100 ml, when the fecal coliform/total coliform ratio exceeds 0.1.

b. Department of Health Services (DHS) Standards

DHS has established minimum protective bacteriological standards for coast water adjacent to public beaches and for public water contact sports areas in ocean waters. These standards are found in the California Code of Regulations, title 17, section 7958, and they are identical to the objectives contained in subsection a. above. When a public beach or public water contact sports area fails to meet these standards, DHS 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 DHS regulations impose more frequent monitoring and more stringent posting and closure requirements on certain high-use public beaches that are located adjacent to a storm drain that flows in the summer.

For beaches not covered under AB 411 regulations, DHS imposes the same standards as contained in Title 17 and requires weekly sampling but allows the county health officer more discretion in making posting and closure decisions.

2. Shellfish Harvesting Standards

At all areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the waste discharged shall not cause the following bacterial standards to be exceeded:

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

3. Implementation Provisions for Bacterial Characteristics

a. If the Discharger is required to conduct receiving water monitoring for bacterial characteristics in the future, then, at a minimum, weekly samples shall be collected from each site. The geometric mean values should be calculated using the five most recent

sample results. If sampling occurs more frequently than weekly, all samples taken during the previous 30-day period shall be used to calculated the geometric mean.

b. If a single sample exceeds any of the single sample maximum (SSM) standards, repeat sampling at that location shall be conducted to determine the extent and persistence of the exceedance. Repeat sampling shall be conducted within 24 hours of receiving analytical results and continued until the sample result is less than the SSM standard or until the Regional Water Board requires the Discharger or appropriate agency to conduct a sanitary survey to determine the source of the high bacterial densities. A sanitary survey shall also be required if three out of four weekly samples exceed any SSM standard, or if 75 percent of the samples from more frequent testing during any 30-day period exceed any SSM standard.

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

c. It is state policy that the geometric mean bacterial objectives are strongly preferred for use in water body assessment decisions, for example, in developing the Clean Water Act section 303(d) list of impaired waters, because the geometric mean objectives are a more reliable measure of long-term water body conditions. In making assessment decisions on bacterial quality, single sample maximum data must be considered together with any available geometric mean data. The use of only single sample maximum bacterial data is generally inappropriate unless there is a limited data set, the water is subject to short-term spikes in bacterial concentrations, or other circumstances justify the use of only single sample maximum data.

B. Physical Characteristics

1. Floating particulates and grease and oil shall not be visible.

2. The discharge of waste shall not cause aesthetically undesirable discoloration of the ocean surface.

3. Natural light shall not be significantly reduced at any point outside the initial dilution zone as the result of the discharge of waste.

4. The rate of deposition of inert solids and the characteristics of inert solids in ocean sediments shall not be changed such that benthic communities are degraded.

C. Chemical Characteristics

1. The dissolved oxygen concentration shall not at any time be depressed more than 10 percent from that which occurs naturally, as the result of the discharge of oxygen demanding waste materials.

2. The pH shall not be changed at any time more than 0.2 units from that which occurs naturally.

3. The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above that present under natural conditions.

4. The concentration of substances set forth in Chapter II, Table B of the Ocean Plan (2005), shall not be increased in marine sediments to levels that would degrade indigenous biota.

5. The concentration of organic materials in marine sediments shall not be increased to levels that would degrade marine life.

6. Nutrient materials shall not cause objectionable aquatic growths or degrade indigenous biota.

7. Numerical water quality objectives established in Chapter II, Table B of the California Ocean Plan (2005) shall not be exceeded outside of the zone of initial dilution as a result of discharges from the Facility.

D. Biological Characteristics

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

2. The natural taste, odor, and color of fish, shellfish, or other marine resources used for human consumption shall not be altered.

3. The concentration of organic materials in fish, shellfish, or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health.

E. Radioactivity

Discharge of radioactive waste shall not degrade marine life.

VI. PROVISIONS

A. Standard Provisions

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

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

   a. This Order may be modified, revoked, reissued, or terminated in accordance with the provisions of 40 CFR 122.44, 122.62, 122.63, 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. 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.

   b. The Discharger must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of storm water to storm drain systems or other water courses under their jurisdiction; including applicable

requirements in municipal storm water management program developed to comply with NPDES permits issued by the Regional Water Board or USEPA to local agencies.

c. 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, 318, 405, and 423 of the Federal CWA and amendments thereto.

d. 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.

e. 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.

f. A copy of these waste discharge specifications shall be maintained at the discharge facility so as to be available at all times to operating personnel.

g. After notice and opportunity for a hearing, this Order may be terminated or modified 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 failure to disclose all relevant facts;
(3) A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

h. 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.

i. The Discharger shall notify the Regional Water Board not later than 120 days in advance of implementation of any plans to alter production capacity of the product line of the manufacturing, producing or processing facility by more than ten percent. Such notification shall include estimates of proposed production rate, the type of process, and projected effects on effluent quality. Notification shall include submittal of a new report of waste discharge appropriate filing fee.

j. The Discharger shall file with the Regional Water Board and USEPA a report of waste discharge at least 120 days before making any material change or proposed change in the character, location or volume of the discharge.

k. All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Regional Water Board as soon as they know or have reason to believe that they have begun or expect to begin to use or manufacture intermediate or final product or byproduct of any toxic pollutant that was not reported on their application.

l. In the event of any change in name, ownership, or control of these waste disposal facilities, the discharger shall notify this 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.

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

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

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

o. 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:

   (1) Name and general composition of the chemical,
   (2) Frequency of use,
   (3) Quantities to be used,
   (4) Proposed discharge concentrations, and
   (5) USEPA registration number, if applicable.

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

b. This Order may be reopened to include effluent limitations for toxic constituents determined to be present in significant amounts in the discharge through a more comprehensive monitoring program included as part of this Order and based on the results of the RPA.

c. This Order may be reopened and modified, to incorporate in accordance with the provisions set forth in 40 CFR parts122 and 124, to include requirements for the implementation of the watershed management approach or to include new MLs.

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

e. 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.

f. This Order may be reopened to include revised mass-based effluent limitations based upon the Phase II design flow of 1.8 MGD, once the Phase II expansion has been completed and is operational.

2. Spill Contingency Plan (SCP)

The Discharger shall maintain a SCP for the Facility and its brine line discharge system (connecting to the JWPCP effluent tunnel/outfall) in an up-to-date condition and shall amend the SCP whenever there is a change (e.g. in the design, construction, operation, or maintenance of the discharge system or the Facility) which materially affects the potential for spills. The Discharger shall review and amend the SCP as appropriate after each spill from the Facility or the discharging line. Upon request of the Regional Water Board, the Discharge shall submit the SCP and any amendments to the Regional Water Board. The Discharger shall ensure that the up-to-date SPC is readily available to the personnel in the facility at all times and that the personnel are familiar with it. The Discharger shall include information on any spills or upsets in the quarterly Self Monitoring Report and the Annual summary report.

3. Best Management Practices and Pollution Prevention

The Discharger shall submit, within 90 days of the effective date of this Order:

a. 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, Order No. 97-03-DWQ (General Permit).

VII. COMPLIANCE DETERMINATION

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

A. General.

Compliance with effluent limitations for reportable pollutants shall be determined using sample reporting protocols defined in the MRP. Dischargers shall be deemed out of compliance with effluent limitations if the concentration of the monitoring sample is greater than the effluent limitation and greater than or equal to the reported Minimum Level (ML).

B. Multiple Sample Data Reduction

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

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

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

C. Average Monthly Effluent Limitation (AMEL).

If the average of daily discharges over a calendar month exceeds the AMEL for a given parameter, an alleged violation will be flagged and the discharger may be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). 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 the calendar month that exceeds the AMEL for a parameter will be considered out of compliance for that month only. If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the discharger will be considered out of compliance for that calendar month. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month with respect to effluent violation determination, and not reporting violations.

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

If the analytical result of any single sample, monitored monthly, quarterly, semiannually, or annually, exceeds the AMEL for any parameter, the Discharger shall collect up to four additional weekly samples. All analytical results shall be reported in the monitoring report for that month, or the subsequent month. The concentration of pollutant (an arithmetic mean or a median) estimated from the "Multiple Sample Data Reduction" Section above, will be used for compliance determination.

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

D. Average Weekly Effluent Limitation (AWEL).

If the average of daily discharges over a calendar week exceeds the AWEL for a given parameter, an alleged violation will be flagged and the discharger may be considered out of

compliance for each day of that week for that parameter, resulting in 7 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 the calendar week that exceeds the AWEL for a parameter will be considered out of compliance for that week only. If only a single sample is taken during the calendar week and the analytical result for that sample exceeds the AWEL, the discharger will be considered out of compliance for that calendar week. For any one calendar week during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar week with respect to effluent violation determination, and not reporting violations.

A calendar week will begin on Sunday and end on Saturday. Partial weeks consisting of four or more days at the end of any month will include the remaining days of the week, which occur in the following month in order to calculate a consecutive seven-day average. This value will be reported as a weekly average or seven-day average on the SMR for the month containing the partial week of four or more days. Partial calendar weeks consisting of less than four days at the end of any month will be carried forward to the succeeding month and reported as a weekly average or a seven-day average for the calendar week that ends with the first Saturday of that month.

E. Maximum Daily Effluent Limitation (MDEL).

If a daily discharge exceeds the MDEL for a given parameter, an alleged violation will be flagged and the discharger may be considered out of compliance for that parameter for that 1 day only within the reporting period. For any 1 day during which no sample is taken, no compliance determination can be made for that day with respect to effluent violation determination, and not reporting violations.

F. Instantaneous Minimum Effluent Limitation.

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

G. Instantaneous Maximum Effluent Limitation.

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

H. Six-month Median Effluent Limitation.

If the median of daily discharges over any 180-day period exceeds the six-month median effluent limitation for a given parameter, an alleged violation will be flagged and the discharger may be considered out of compliance for each day of that 180-day period for that parameter. The next assessment of compliance will occur after the next sample is taken. If only a single sample is taken during a given 180-day period and the analytical result for that sample exceeds

the six-month median, the discharger will be considered out of compliance for the 180-day period. For any 180-day period during which no sample is taken, no compliance determination can be made for the six-month median limitation.

I. Mass and Concentration Limitations

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

K. Compliance with single constituent effluent limitations

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

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

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

M. Mass Emission Rate.

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

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

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

in which 'N' is the number of samples analyzed in any calendar day. 'Qi' and 'Ci' are the flow rate (MGD) and the constituent concentration (mg/L), respectively, which are associated with each of the 'N' grab samples, which may be taken in any calendar day. If a composite sample is taken, 'Ci' is the concentration measured in the composite sample and 'Qi' is the average flow rate occurring during the period over which samples are composited.

The daily concentration of all constituents shall be determined from the flow-weighted average of the same constituents in the combined waste streams as follows:

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

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

N. Bacterial Standards and Analysis.

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

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

   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 methods used for each analysis shall be reported with the results of the analyses.

3. Detection methods used for coliforms (total and fecal) shall be those presented in Table 1A of 40 CFR 136 (revised May 14, 1999), unless alternate methods have been approved by USEPA pursuant to 40 CFR 136, or improved methods have been determined by the Executive Officer and/or USEPA.

4. Detection methods used for enterococcus shall be those presented in the USEPA publication EPA 600/4-85/076, Test Methods for Escherichia coli and Enterococci in Water By Membrane Filter Procedure or any improved method determined by the Executive Officer and/or USEPA to be appropriate.

O. Single Operational Upset

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

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 Provision V.E.2(b) of 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).

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

ATTACHMENT A – DEFINITIONS, ACRONYMS, AND ABBREVIATIONS

DEFINITIONS

Average Monthly Effluent Limitation (AMEL): the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

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

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

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

Composite sample means, for other than flow rate measurement,

a. A combination of at least eight individual portions obtained at equal time intervals for 24 hours, or the duration of the discharge, whichever is shorter. The volume of each individual portion shall be directly proportional to the discharge flow rate at the time of sampling.

OR

b. A combination of at least eight individual portions of equal volume obtained over a 24-hour period. The time interval will vary such that the volume of wastewater discharged between sampling remains constant.

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

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

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

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

DDT (total) shall mean the sum of 4,4'-DDT, 2,4'-DDT, 4,4'-DDE, 2,4'-DDE, 4,4'-DDD and 2,4'-DDD.

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

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

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

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

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

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

Maximum Daily Effluent Limitation (MDEL): the highest allowable daily discharge of a pollutant.

pg/L: picograms per Liter

µg/L: micrograms per Liter

mg/L: milligrams per Liter

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

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

Phenolic Compounds (Chlorinated) shall mean the sum of 2-Chlorophenol, 2,4-Dichlorophenol, 4-Chloro-3-methylphenol, 2,4,6-Trichlorophenol, and Pentachlorophenol.

Phenolic Compounds (Nonchlorinated) shall mean the sum of Phenol, 2,4-Dimethylphenol, 2-Nitrophenol, and 4-Nitrophenol, 2,4-Dinitrophenol and 4,6-Dinitro-2-Methylphenol.

MGD: million gallons per day

Six-month Median Effluent Limitation: the highest allowable moving median of all daily discharges for any 180-day period.

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

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

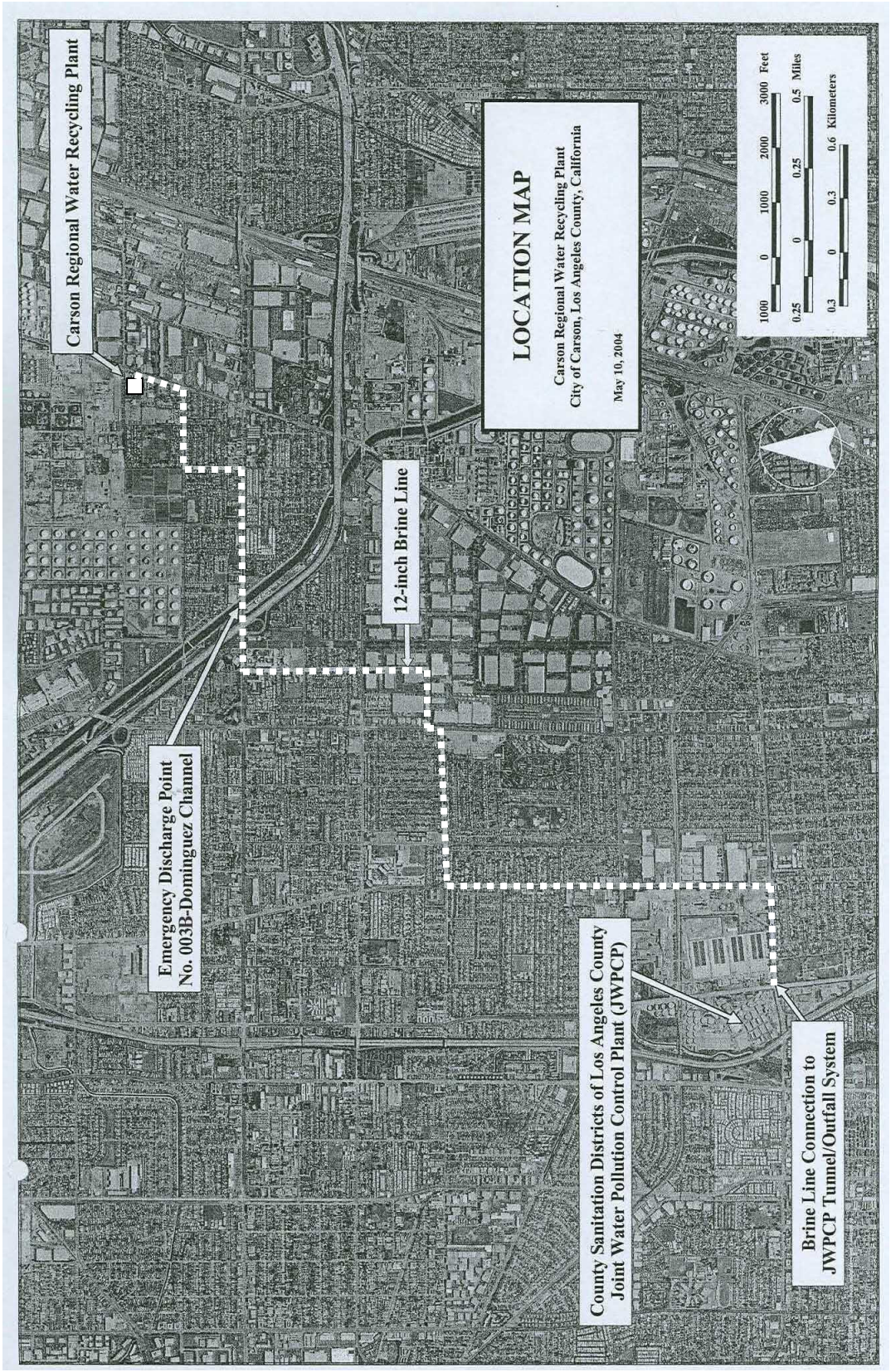
2,3,7,8-tetra CDF	0.1
1,2,3,7,8-penta CDF	0.05
2,3,4,7,8-penta CDF	0.5
2,3,7,8-hexa CDFs	0.1
2,3,7,8-hepta CDFs	0.01
octa CDF	0.001

ACRONYMS AND ABBREVIATIONS

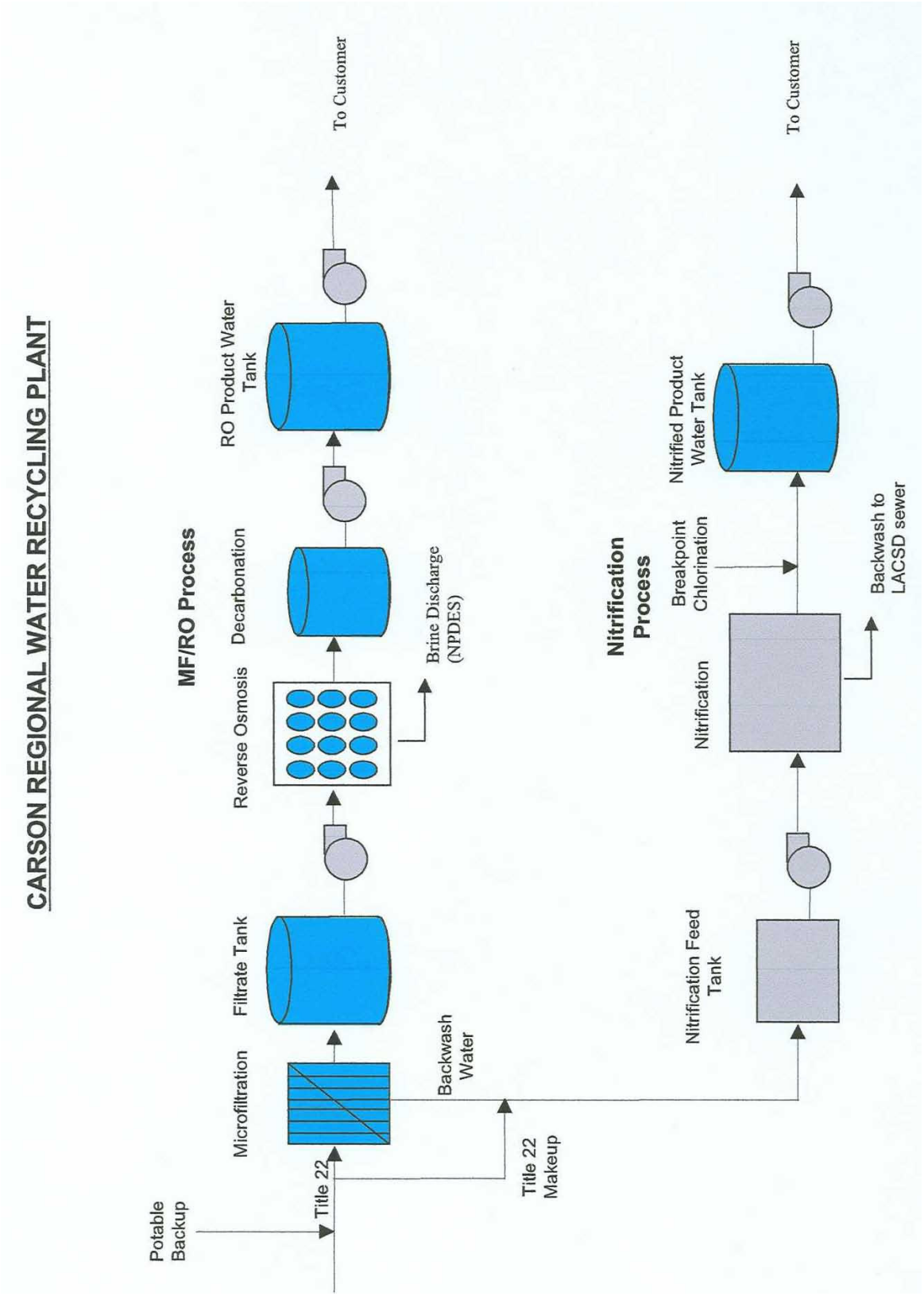
AMEL	Average Monthly Effluent Limitation
AWEL	Average Weekly Effluent Limitation
BAT	Best Available Technology Economically Achievable
Basin Plan	*Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties*
BCT	Best Conventional Pollutant Control Technology
BPJ	Best Professional Judgment
BOD	Biochemical Oxygen Demand 5-day @ 20 ℃
BPT	Best Practicable Treatment Control Technology
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CIWQS	State Water Board's California Integrated Water Quality System
CTR	California Toxics Rule
CWA	Clean Water Act
CWC	California Water Code
Discharger	West Basin Municipal Water District
DMR	Discharge Monitoring Report
DNQ	Detected But Not Quantified
ELAP	California Department of Health Services Environmental Laboratory Accreditation Program
ELG	Effluent Limitations, Guidelines and Standards
Facility	Carson Regional Water Recycling Plant
gpd	gallons per day
IC	Inhibition Coefficient
IC_{15}	Concentration at which the organism is 15% inhibited
IC_{25}	Concentration at which the organism is 25% inhibited
IC_{40}	Concentration at which the organism is 40% inhibited
IC_{50}	Concentration at which the organism is 50% inhibited
IWC	Instream Waste Concentration
JWPCP	Joint Water Pollution Control Plant
LOEC	Lowest Observed Effect Concentration
µg/L	micrograms per Liter
mg/L	milligrams per Liter
MDEL	Maximum Daily Effluent Limitation
MDL	Method Detection Limit
MEC	Maximum Effluent Concentration
MF/RO	Micro Filtration/Reverse Osmosis
MGD	Million Gallons Per Day
ML	Minimum Level
MRP	Monitoring and Reporting Program
MSD	Minimum Significance Difference
ND	Not Detected
NOEC	No Observable Effect Concentration
NPDES	National Pollutant Discharge Elimination System
NSPS	New Source Performance Standards
OAL	Office of Administrative Law
PMSD	Percent Minimum Significance Difference
QA	Quality Assurance

QA/QC	Quality Assurance/Quality Control
Ocean Plan	*Water Quality Control Plan for Ocean Waters of California*
Regional Water Board	California Regional Water Quality Control Board, Los Angeles Region
RPA	Reasonable Potential Analysis
SCP	Spill Contingency Plan
SMR	Self Monitoring Reports
State Water Board	California State Water Resources Control Board
SWPPP	Storm Water Pollution Prevention Plan
TAC	Test Acceptability Criteria
Thermal Plan	*Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California*
TIE	Toxicity Identification Evaluation
TMDL	Total Maximum Daily Load
TOC	Total Organic Carbon
TRE	Toxicity Reduction Evaluation
TSD	Technical Support Document
TSS	Total Suspended Solid
TUa	Acute Toxicity Unit
TUc	Chronic Toxicity Unit
USEPA	United States Environmental Protection Agency
WBWRP	West Basin Water Recycling Plant
WDR	Waste Discharge Requirements
WET	Whole Effluent Toxicity
WLA	Waste Load Allocations
WQBELs	Water Quality-Based Effluent Limitations
WQS	Water Quality Standards
%	Percent

ATTACHMENT B – LOCATION MAP



ATTACHMENT C – WASTEWATER FLOW SCHEMATIC



ATTACHMENT D – FEDERAL STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

1. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the CWA and the CWC and is grounds for enforcement action, for permit termination, revocation and reissuance, or denial of a permit renewal application [*40 CFR 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 been modified to incorporate the requirement [*40 CFR 122.41(a)(1)*].

B. Need to Halt or Reduce Activity Not a Defense

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

C. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge 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 122.41(d)*].

D. Proper Operation and Maintenance

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

E. Property Rights

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

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

F. Inspection and Entry

The Discharger shall allow the Regional Water Board, State Water Resources Board, USEPA, and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to [*40 CFR 122.41(i)*] [*CWC 13383(c)*]:

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 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 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 122.41(i)(3)*];

4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the CWC, any substances or parameters at any location [*40 CFR 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 122.41(m)(1)(i)*].

   b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production [*40 CFR 122.41(m)(1)(ii)*].

2. Bypass not exceeding limitations – The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3 and I.G.5 below [*40 CFR 122.41(m)(2)*].

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

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

   b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to

prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance [*40 CFR 122.41(m)(4)(B)*]; and

c. The Discharger submitted notice to the Regional Water Board and USEPA as required under Standard Provision – Permit Compliance I.G.5 below [*40 CFR 122.41(m)(4)(C)*].

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

5. Notice

a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass [*40 CFR 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 [*40 CFR 122.41(m)(3)(ii)*].

H. Upset

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

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

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

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

b. The permitted facility was, at the time, being properly operated [*40 CFR 122.41(n)(3)(i)*];

c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b [*40 CFR 122.41(n)(3)(iii)*]; and

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

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

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

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

B. Duty to Reapply

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

C. Transfers

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

III. STANDARD PROVISIONS – MONITORING

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

B. Monitoring results must be conducted according to test procedures under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503 unless other test procedures have been specified in this Order [*40 CFR 122.41(j)(4)*] [*40 CFR 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 40 CFR Part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, 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 and USEPA Water Division Director at any time [*40 CFR 122.41(j)(2)*].

B. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements [*40 CFR 122.41(j)(3)(i)*];

2. The individual(s) who performed the sampling or measurements [*40 CFR 122.41(j)(3)(ii)*];

3. The date(s) analyses were performed [*40 CFR 122.41(j)(3)(iii)*];

4. The individual(s) who performed the analyses [*40 CFR 122.41(j)(3)(iv)*];

5. The analytical techniques or methods used [*40 CFR 122.41(j)(3)(v)*]; and

6. The results of such analyses [*40 CFR 122.41(j)(3)(vi)*].

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

1. The name and address of any permit applicant or Discharger [*40 CFR 122.7(b)(1)*]; and

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

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

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

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with paragraph (2.) and (3.) of this provision [*40 CFR 122.41(k)*].

2. All permit applications shall be signed as follows:

   a. For a corporation: By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures [*40 CFR 122.22(a)(1)*];

   b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively [*40 CFR 122.22(a)(2)*]; or

c. For a municipality, State, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA) [*40 CFR 122.22(a)(3)*].

3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in paragraph (b) of this provision, 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 paragraph (2.) of this provision [*40 CFR 122.22(b)(1)*];

   b. The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company (a duly authorized representative may thus be either a named individual or any individual occupying a named position) [*40 CFR 122.22(b)(2)*]; and

   c. The written authorization is submitted to the Regional Water Board, State Water Board, or USEPA [*40 CFR 122.22(b)(3)*].

4. If an authorization under paragraph (3.) of this provision 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 paragraph (3.) of this provision must be submitted to the Regional Water Board, State Water Board, or USEPA prior to or together with any reports, information, or applications, to be signed by an authorized representative [*40 CFR 122.22(c)*].

5. Any person signing a document under paragraph (2.) or (3.) of this provision shall make the following certification:

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

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the MRP in this Order [*40 CFR 122.41(l)(4)*].

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

3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 CFR 136 or, in the case of sludge use or disposal, approved under 40 CFR 136 unless otherwise specified in 40 CFR 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 and USEPA [*40 CFR 122.41(l)(4)(ii)*].

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

D. Compliance Schedules

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

E. Twenty-Four Hour Reporting

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

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

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

   c. Violation of a maximum daily discharge limitation for any of the pollutants listed in this Order to be reported within 24 hours [*40 CFR 122.41(l)(6)(ii)(C)*].

3. The Regional Water Board and USEPA 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 122.41(l)(6)(iii)*].

F. Planned Changes

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

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

2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in this Order nor to notification requirements under 40 CFR Part 122.42(a)(1) (see Additional Provisions—Notification Levels VII.A.1) [*40 CFR 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 122.41(l)(1)(iii)*].

G. Anticipated Noncompliance

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

H. Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting E.3, E.4, and E.5 at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E [*40 CFR 122.41(l)(7)*].

I. Other Information

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

VI. STANDARD PROVISIONS – ENFORCEMENT

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

308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than $250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than $500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than $1,000,000 and can be fined up to $2,000,000 for second or subsequent convictions [*40 CFR 122.41(a)(2)*] [*CWC 13385 and 13387*].

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

C. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than 4 years, or both [*40 CFR 122.41(j)(5)*].

D. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this Order, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than six months per violation, or by both [*40 CFR 122.41(k)(2)*].

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Non-Municipal Facilities

Existing manufacturing, commercial, mining, and silvicultural dischargers shall notify the Regional Water Board and USEPA as soon as they know or have reason to believe [*40 CFR 122.42(a)*]:

1. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" [*40 CFR 122.42(a)(1)*]:

    a. 100 micrograms per liter (µg/L) [*40 CFR 122.42(a)(1)(i)*];

    b. 200 µg/L for acrolein and acrylonitrile; 500 µg/L for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter (mg/L) for antimony [*40 CFR 122.42(a)(1)(ii)*];

c. Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge [*40 CFR 122.42(a)(1)(iii)*]; or

d. The level established by the Regional Water Board and USEPA in accordance with 40 CFR §122.44(f) [*40 CFR 122.42(a)(1)(iv)*].

2. That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" [*40 CFR 122.42(a)(2)*]:

a. 500 micrograms per liter (µg/L) [*40 CFR 122.42(a)(2)(i)*];

b. 1 milligram per liter (mg/L) for antimony [*40 CFR 122.42(a)(2)(ii)*];

c. Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge [*40 CFR 122.42(a)(2)(iii)*]; or

d. The level established by the Regional Water Board and USEPA in accordance with 40 CFR §122.44(f) [*40 CFR 122.42(a)(2)(iv)*].

B. Publicly-Owned Treatment Works (POTWs)

All POTWs shall provide adequate notice to the Regional Water Board of the following [*40 CFR 122.42(b)*]:

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

2. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of adoption of the Order [*40 CFR 122.42(b)(2)*].

Adequate notice shall include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW [*40 CFR 122.42(b)(3)*].

Attachment E – Monitoring and Reporting Program

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM NO. 7972

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

I. GENERAL MONITORING PROVISIONS

A. An effluent sampling station(s) shall be established for the points of discharge and shall be located where representative samples of the effluent can be obtained.

B. Effluent samples shall be taken downstream of any addition to treatment works and prior to mixing with the receiving waters.

C. This Regional Water Board shall be notified in writing of any change in the sampling stations once established or in the methods for determining the quantities of pollutants in the individual waste streams.

D. Pollutants shall be analyzed using the analytical methods described in 40 CFR 136.3, 136.4, and 136.5 (revised May 14, 1999); or, where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board. Laboratories analyzing effluent samples and receiving water samples shall be certified by the California Department of Health Services 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.

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

F. Each monitoring report must affirm in writing that “all analyses were conducted at a laboratory certified for such analyses by the Department of Health Services or approved by the Executive Officer and in accordance with current USEPA guideline procedures or as specified in this MRP”.

G. Water/wastewater samples must be analyzed within allowable holding time limits as specified in 40 CFR 136.3. Laboratory must follow EPA and/or Standard Methods methodologies. All QA/QC items must be run on the same dates the samples were actually analyzed, or as allowed in the approved analytical methods, and the results shall be reported in the Regional Water Board format, when it becomes available. The Discharger shall retain the QA/QC documentation in its files and make available for inspection and/or submit them when requested by the Regional Water Board. Proper chain of custody procedures must be followed, and a copy of this documentation shall be submitted with the report.

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

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

K. 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%.

L. 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:

1. Types of wastes and quantity of each type;

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

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

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

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

II. MONITORING LOCATIONS

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

Table E-1. Monitoring Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
001, 002, 003 and 004	M-001	Representative of the effluent being discharged from the Facility prior to combining with effluent from the Joint Water Pollution Control Plant.

III. INFLUENT MONITORING REQUIREMENTS

[Not Applicable]

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Location M-001

1. The Discharger shall monitor the reverse osmosis brine waste at M-001 as follows:

Table E-2. Monitoring Requirements at M-001

Parameter [1]	Units	Sample Type	Minimum Sampling Frequency
Oil and Grease	mg/L	Grab	Monthly
	lbs/day	Calculated	
PH	Units	Grab	Monthly
Temperature	˚F	Grab	Monthly
Total Suspended Solids	mg/L	Grab	Monthly
	lbs/day	Calculated	
Settleable Solids	ml/L	Grab	Monthly
Turbidity	NTU	Grab	Monthly
Salinity	$^0/_{00}$	Grab	Monthly
Aldrin	µg/L	Grab	Quarterly
	lbs/day	Calculated	
Benzidine	µg/L	Grab	Quarterly
	lbs/day	Calculated	
Chlordane [2]	µg/L	Grab	Quarterly
	lbs/day	Calculated	
Heptachlor	µg/L	Grab	Quarterly
	lbs/day	Calculated	
Heptachlor Epoxide	µg/L	Grab	Quarterly
	lbs/day	Calculated	
TCDD Equivalents	pg/L	Grab	Quarterly
	lbs/day	Calculated	
Remaining Table B Parameters [3]	µg/L	Grab or 24-hour composite	Semiannually

1 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 Appendix II of the Ocean Plan, where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board.

2. *Chlordane* shall mean the sum of *chlordane-alpha, chlordane-gamma, chlordene-alpha, chlordene-gamma, nonachlor-cis, nonachlor-trans and oxychlordane*. Discharger may temporarily suspend the monitoring requirements for *alpha* and *gamma chlordene* if standards for these compounds are not available. However, Discharger is required to resume detection and quantification practices as soon as standards for these two compounds become available.

3. Parameters contained in Table B of the Ocean Plan, not already specified, shall be monitored twice a year, in February and August, respectively. All analyses should be conducted on grab samples except for chronic toxicity testing (using 24-hour composite sample). No monitoring is required for acute toxicity.

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. Chronic Toxicity Testing

1. **Methods and test species**. The Discharger, in coordination with Los Angeles County Sanitation Districts, Joint Water Pollution Control Plant, 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 0.292% Carson Regional Water Recycling Plant brine waste effluent (24-hour composite) and 99.708% JWPCP secondary treated effluent (24-hour composite) collected on the same day. The Regional Water Board has chosen these values because under critical conditions in the JWPCP outfall, 0.292% of the combined effluent flow is from the Carson Plant discharge [0.9 MGD, Carson Plant's design brine waste flow, divided by (307 + 0.9 MGD), lowest monthly average JWPCP effluent flow rate (2000 to 2005) and Carson Plant's design brine waste flow] and the rest of combined effluent flow is from JWPCP discharge (100% - 0.292%). Pursuant to the 2005 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**

   Screening - The Discharger shall conduct the first chronic toxicity test screening for three consecutive months in 2007. Re-screening is required every 24 months. The Discharger shall re-screen with a marine vertebrate species, a marine invertebrate species, and a marine alga species and continue to monitor with the most sensitive species. If the first suite of re-screening tests demonstrate that the same species is the most sensitive, then the re-screening does not need to include more than one suite of tests. If a different species is the most sensitive or if there is ambiguity, then the Discharger shall proceed with suites of screening tests for a minimum of three, but not to exceed five, suites.

   Regular toxicity tests - After the screening period, monitoring shall be conducted semiannually 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).

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 through 004 is 0.5988% combined effluent (1 divided by (166+1)).

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 chronic toxicity test result exceeds 167 TUc, maximum daily limitation in the JWPCP permit for Discharge Serial Nos. 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 do not exceed the limitation of 167 TUc, the Discharger may resume regular monthly testing.

2. If the result of any of the six additional tests exceeds the limitation of 167 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 monthly testing.

3. If the results of any two of the six tests (any two tests in a 12-week period) exceed the limitation of 167 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 Toxicity Reduction Evaluation (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) as guidance, or most current version. 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, if any, and good housekeeping practices, and a list of all chemicals used in the operation of the facility; and,

3. If a toxicity identification evaluation (TIE) is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor). See MRP Section V.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.

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

   a. Step 1 includes basic data collection.

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

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

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

e. Step 5 evaluates in-plant treatment options.

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

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

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

1. The full report shall be received by the Regional Water Board with the SMR for the month in which the test is conducted (refer to Reporting Schedule table in section VII).

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:

   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., EPA Interpolation Model).

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

   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 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 chronic 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 – SURFACE WATER

The receiving water monitoring program is not prescribed in this Order as it is covered under the JWPCP NPDES permit, Monitoring and Reporting Program CI-1758. However, when a regional monitoring program is developed, the Executive Officer may require the Discharger to participate in the regional monitoring and/or revise the existing monitoring program.

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 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 Waste Discharge Requirements.

4. The Discharger shall report with each sample result the applicable Minimum Level (ML) and the current Method Detection Limit (MDL), as determined by the procedure in 40 CFR 136.

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

6. Semiannual effluent analyses shall be performed during the months of February and August. Quarterly effluent analyses shall be performed during the months of February, May, August, and November. Should there be instances when monitoring could not be done during these specified months, the Discharger must notify the Regional Water Board, state the reason why the monitoring could not be conducted, and obtain approval from the Executive Officer for an alternate schedule. Results of monthly, quarterly, and semiannual analyses shall be reported in the quarterly monitoring report as specified in Table E-3 below.

7. If the Discharger samples and performs analyses (other than for process/operational control, startup, research, or equipment testing) on any influent, effluent, or receiving water constituent

more frequently than required by this 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.

8. The Discharger shall inform the Regional Water Board well in advance of any proposed construction activity that could potentially affect compliance with applicable requirements.

9. 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.

B. Self Monitoring Reports (SMRs)

1. At any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit Self-Monitoring Reports (SMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (http://www.waterboards.ca.gov/ciwqs/index.html). Until such notification is given, the Discharger shall submit hard copy SMRs 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 submit quarterly SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. Quarterly reports shall be due on May 15, August 15, November 15, and February 15 following each calendar quarter.

3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Table E-3. Reporting Schedule

Sampling Frequency	Monitoring Period Begins On	Monitoring Period	SMR Due Date
Monthly	**March 1, 2007** (First day of calendar month following permit effective date)	1st day of calendar month through last day of calendar month	Submit with quarterly SMRs that are due on May 15 (1st Quarter) August 15 (2nd Quarter) November 15 (3rd Quarter) February 15 (4th Quarter)
Quarterly	**April 1, 2007** (Closest of January 1, April 1, July 1, or October 1 following [or on] permit effective date)	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31	May 15 (1st Quarter) August 15 (2nd Quarter) November 15 (3rd Quarter) February 15 (4th Quarter)
Semiannually	**July 1, 2007** (Closest of January 1, or July 1 following [or on] permit effective date)	January 1 through June 30 July 1 through December 31	August 15 February 15

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

For each numeric effluent limitation identified in Table B of the 2005 Ocean Plan, the Discharger shall select one or more Minimum Levels (ML) and their associated analytical methods from Appendix II of the 2005 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).

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

   For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration" (may be shortened to "Est. Conc."). 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 when required by subsection B.1 above in accordance with the following requirements:

   a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations.

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

c. 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-7972** for the Regional Water Board submittals to facilitate routing to the appropriate staff and file.)

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

C. Discharge Monitoring Reports (DMRs)

1. As described in SectionVIII.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 Report (DMRs). Until such notification is given, the Discharger shall submit DMRs in accordance with the requirements described below.

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

State Water Resources Control Board
Discharge Monitoring Report Processing Center
Post Office Box 671
Sacramento, CA 95812

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 or modified cannot be accepted.

D. Other Reports

1. **Annual Summary Report**

By April 1 of each year, the Discharger shall submit an annual report to the Regional Water Board. The report shall contain the following:

a. Both tabular and graphical summaries of the monitoring data obtained during the previous year,

b. A discussion on the compliance record and the corrective actions taken or planned to bring the discharge into full compliance with the waste discharge requirements,

c. A report discussing the following: 1) operation/maintenance problems; 2) changes to the facility operations and activities; 3) potential discharge of the pollutants associated with the changes and how these changes are addressed; 3) calibration of flow meters or other equipment/device used to demonstrate compliance with effluent limitations of this Order.

2. As discussed in Section VII.A.9 of the MRP, Attachment E, 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.

3. If the Discharger wishes to participate in a coordinated receiving water, biomonitoring, and sediment monitoring program with other dischargers to the Pacific Ocean, then the Discharger shall submit a report seeking approval of the Regional Water Board.

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

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

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

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

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

   This Regional Water Board, after review of the technical report, may establish conditions which it deems necessary to control accidental discharges and to minimize the effects of such events. Such conditions may be incorporated as part of this Order, upon notice to the Discharger.

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.

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table F-1. Facility Information

WDID	**4B190137004**
Discharger	**West Basin Municipal Water District**
Name of Facility	**Carson Regional Water Recycling Plant, Carson**
Facility Address	**21029 South Wilmington Avenue**
	Carson, CA 90810
	Los Angeles County
Facility Contact, Title and Phone	**Uzi Daniel, Water Quality Analyst, (310) 660-6245**
Authorized Person to Sign and Submit Reports	**Richard Nagel, Water Quality Manager**
Mailing Address	**17140 South Avalon Blvd., Carson, CA 90746**
Billing Address	**17140 South Avalon Blvd., Carson, CA 90746**
Type of Facility	**Water Recycling Facility**
Major or Minor Facility	**Minor**
Threat to Water Quality	**3**
Complexity	**C**
Pretreatment Program	**No**
Reclamation Requirements	**N/A**
Facility Permitted Flow (Phase I)	**0.9 million gallons per day (MGD) discharge of waste brine**
Facility Design Flow (Phase I)	**0.9 MGD**
Watershed	**Santa Monica Bay**
Receiving Water	**Pacific Ocean**
Receiving Water Type	**Ocean**

A. West Basin Municipal Water District (hereinafter Discharger) is the owner and operator of the Carson Regional Water Recycling Plant (hereinafter Facility).

B. The Facility discharges reverse osmosis brine waste to the Pacific Ocean, a water of the United States and is currently regulated by Order No. 99-014 which was adopted on April 22, 1999 and expired on April 10, 2004. The terms of the existing Order automatically continued in effect after the permit expiration date.

C. The Discharger filed a Report of Waste Discharge and submitted an application for renewal of its WDRs and NPDES permit on May 13, 2004. Supplemental revisions were received on July 7, 2004, July 27, 2004, August 3, 2004 and August 6, 2004. The application was deemed complete on August 26, 2004. A site visit was conducted on October 25, 2006, to observe operations and collect additional data to develop permit limitations and conditions.

II. FACILITY DESCRIPTION

The Discharger owns and operates the Carson Regional Water Recycling Plant located at 21029 South Wilmington Avenue, Carson, California. The Facility provides advanced treatment to Title 22 recycled water produced by West Basin Water Recycling Plant that is also owned and operated by the Discharger. The Facility may discharge up to 0.9 MGD of reverse osmosis brine waste from the treatment process to the Pacific Ocean (offshore of Palos Verdes), a water of the United States. Brine waste is not treated prior to discharge.

The brine waste from the Facility first combines with effluent from JWPCP 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 320 MGD. The deep ocean outfalls (Discharge Serial Nos. 001 and 002) of JWPCP provide an initial dilution of 166 parts seawater to 1 part effluent (166:1).

A. Description of Wastewater and Biosolids Treatment or Controls

The Facility consists of two treatment trains. One train, referred to as the micro filtration/reverse osmosis (MF/RO) plant consists of micro filtration, reverse osmosis, post decabonation, 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. 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).

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. The second phase is not currently budgeted for due to lack of extra customer demand. This second phase will increase the MF/RO train capacity by 5 MGD (total MF/RO plant capacity will be 10.9 MGD). West Basin will notify the Regional Water Board when the second phase comes under budget consideration. After completion of Phase II, the Facility will generate approximately 1.8 MGD of waste brine, and the NPDES permit will be revised, accordingly.

A flow diagram of the existing treatment process is provided in Attachment C of this Order.

B. Discharge Points and Receiving Waters

Reverse osmosis brine waste from the Facility is routinely discharged through Discharge Points 001 and 002, to the Pacific Ocean, that corresponds to the JWPCP Discharge Serial Nos. 001 and 002. Discharge Point 003 (Discharge Serial No. 003 in the JWPCP permit) is used only during times of heavy rains to provide hydraulic relief for flow in the outfall system. (Discharge Point 004 (Discharge Serial No. 004 in the JWPCP permit) serves as a standby outfall to provide additional hydraulic relief during the very heaviest flows.

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. However, this permit does not authorize any discharge from Discharge Point 003-B. A location map of the Facility is provided in Attachment B of this Order.

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

Numerical effluent limitations are not contained in the previous Order for discharges from Discharge Points 001 and 002. The previous Order required that wastes discharged shall be limited to brine waste generated from the operation of reverse osmosis processes at Carson Regional Water Recycling Plant.

Parameters detected in the effluent (Monitoring Location M-001) from the term of the previous Order (2000 to 2005) are summarized in Table F-2.

Table F-2. Summary of SMR Data

Parameter	Unit	Highest Reported Value
Arsenic	µg/L	47.3
Cadmium	µg/L	4.5
Chromium (VI)	µg/L	1.1
Copper	µg/L	72.6
Lead	µg/L	41
Mercury	µg/L	1.3
Nickel	µg/L	235
Selenium	µg/L	56.1
Silver	µg/L	2.62
Zinc	µg/L	246
Cyanide	mg/L	0.206
Total Chlorine Residual	mg/L	6.8
Ammonia (as N)	mg/L	530
HCH (sum of isomers)	µg/L	0.17
Acrolein	µg/L	11.5
Antimony	µg/L	19.1
Chlorebenzene	µg/L	0.58
Chromium (III)	µg/L	161
Di-n-butyl phthalate	µg/L	2.3
Dichlorobenzene (total)	µg/L	11.2
Dimethyl phthalate	µg/L	2.70
Ethyl benzene	µg/L	0.56
Nitrobenzene	µg/L	0.66
Thallium	µg/L	1.71
Toluene	µg/L	8.9
Tributyltin	µg/L	0.2
Aldrin	µg/L	0.04
Benzene	µg/L	0.22
Diethylhexyl phthalate	µg/L	17
Carbon tetrachloride	µg/L	1.10

Parameter	Unit	Highest Reported Value
Chlordane (total)	µg/L	0.03
Dibromochloromethane	µg/L	19
Chloroform	µg/L	53
DDT (total)	µg/L	0.2
1,4-Dichlorobenzene	µg/L	13
1,2-Dichlorobenzene	µg/L	0.41
Bromodichloromethane	µg/L	22
Methylene chloride	µg/L	7.6
1,2-diphenylhydrazine	µg/L	0.96
Halomethanes (total)	µg/L	11.6
Bromoform	µg/L	8.2
Bromomethane	µg/L	4.45
Chloromethane	µg/L	4.0
Heptachlor (total)	µg/L	0.04
Isophorone	µg/L	0.80
N-Nitrosodimethylamine	µg/L	15
TCDD equivalents	pg/L	778
Tetrachloroethylene	µg/L	130
Trichloroethylene	µg/L	0.66
2,4,6-Trichlorophenol	µg/L	0.57
alpha-BHC	µg/L	0.09
beta-BHC	µg/L	0.07
gamma-BHC	µg/L	0.10
delta-BHC	µg/L	1.10
pH	pH unit	7.6
Suspended Solids	mg/L	40
Temperature	Deg. C	30
Oil and Grease	mg/L	33.8
BOD_5 @ 20 deg. C	mg/L	25
Turbidity	NTU	6.8
Settleable Solids	ml/L	<0.1

D. Compliance Summary

The Facility is not subject to effluent limitations under Order No. 99-014. No effluent exceedances were identified.

E. Planned Changes

The Facility was designed to be developed in two phases, depending on market volume for this recycled water. The second phase is not currently budgeted for due to lack of extra customer demand. West Basin will notify the Regional Water Board when the second phase comes under budget consideration.

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 USEPA and Chapter 5.5, Division 7 of the CWC. It shall serve as a NPDES permit for point source discharges from this Facility to surface waters. This Order also serves as WDRs pursuant to Article 4, Chapter 4 of the CWC.

B. California Environmental Quality Act (CEQA)

This action to adopt a NPDES permit is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21100, et seq.) in accordance with Section 13389 of the CWC.

C. State and Federal Regulations, Policies, and Plans

1. **Water Quality Control Plans.** The Regional Water Board adopted a revised *Water Quality Control Plan, Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (hereinafter 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 all waters addressed through the plan. In addition, State Water Resources Control Board (State Water Board) Resolution No. 88-63 requires that, with certain exceptions, the Regional Water Board assigns the municipal and domestic supply use to water bodies that do not have beneficial uses listed in the Basin Plan. Beneficial uses applicable to the Pacific Ocean (Point Vicente Beach, Royal Palms Beach, and Whites Point Beach) in the Palos Verdes Peninsula are as follows:

Table F-3. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001, 002, 003, and 004	Point Vicente Beach, Royal Palms Beach, and 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 harvesting (SHELL). Potential: Spawning, reproduction, and/or early development of fish (SPWN).
	Nearshore Zone (The zone bounded by the shoreline and a line 1000 feet from the shoreline or the 30-foot depth contours, whichever is further from the shoreline)	Existing: Industrial service supply (IND), navigation (NAV), contact (REC-1) and non-contact (REC-2) water recreation, commercial and sport fishing (COMM), marine habitat (MAR), wildlife habitat (WILD), preservation of biological habitats (BIOL), preservation of rare, threatened, or endangered species (RARE), migration of aquatic organisms (MIGR), spawning, reproduction, and/or early development of fish (SPWN).and shellfish harvesting (SHELL).

Discharge Point	Receiving Water Name	Beneficial Use(s)
	Offshore Zone	Existing: Industrial service supply (IND), navigation (NAV), contact (REC-1) and non-contact (REC-2) water recreation, commercial and sport fishing (COMM), marine habitat (MAR), wildlife habitat (WILD), preservation of rare, threatened, or endangered species (RARE), migration of aquatic organisms (MIGR), spawning, reproduction, and/or early development of fish (SPWN).and shellfish harvesting (SHELL).

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

2. **California Ocean Plan.** In accordance with legislative policy set forth in Section 13000 of Division 7 of the CWC, and pursuant to the authority contained in Section 13170 and 13170.2, the USEPA approved the 2005 Ocean Plan on February 14, 2006. The 2005 Ocean Plan amendments were previously adopted by the State Water Resources Control Board on January 20, 2005 and April 21, 2005, and by the California Office of Administrative Law on October 12, 2005. The Ocean Plan was amended to address reasonable potential and Areas of Special Biological Significance. The Ocean Plan contains water quality objectives and beneficial uses for the ocean waters of California. The beneficial uses of State ocean waters to be protected are summarized below:

Table F-4. Beneficial Uses of the Pacific Ocean

Discharge Point	Receiving Water Name	Beneficial Use(s)
001, 002, 003, and 004	Pacific Ocean	Industrial water supply; water contact and non-contact recreation, including aesthetic enjoyment; navigation; commercial and sport fishing; mariculture; preservation and enhancement of designated Area of Special Biological Significance (ASBS); rare and endangered species; marine habitat; fish migration; fish spawning and shellfish harvesting.

In order to protect these beneficial uses, the Ocean Plan establishes water quality objectives (for bacterial, physical, chemical, and biological characteristics, and for radioactivity), general requirements for management of waste discharged to the ocean, quality requirements for waste discharges (effluent quality requirements), discharge prohibitions, and general provisions.

3. **Thermal Plan.** The State Water Board adopted a *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of*

California (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for coastal waters.

4. **Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised State and Tribal water quality standards become effective for CWA purposes (40 CFR §§131.21, 65 FR 24641, April 27, 2000). Under USEPA's new regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved 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 restrictions on individual pollutants that are no more stringent than required by the federal CWA. Individual pollutant restrictions consist of technology-based restrictions and water quality-based effluent limitations. The technology-based effluent limitations consist of restrictions on biochemical oxygen demand (BOD), total suspended solids (TSS), and hydrogen ion concentration (pH). Restrictions on BOD, TSS and pH are specified in federal regulations as discussed in Finding F, and the permit's technology-based pollutant restrictions are no more stringent than required by the CWA. 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 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 131.21(c)(1). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the technology-based requirements of the CWA and the applicable water quality standards for purposes of the CWA.

6. **Antidegradation Policy.** Section 131.12 of 40 CFR 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, which incorporates the requirements of the federal antidegradation policy. Resolution No. 68-16 requires that existing water quality is maintained unless degradation is justified based on specific findings. As discussed in detail in this Fact Sheet, the permitted discharge is consistent with the antidegradation provision of 40 CFR 131.12 and State Water Board Resolution No. 68-16.

7. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and 40 CFR §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. All effluent limitations in the Order are at least as stringent as the effluent limitations in the previous Order.

8. **Monitoring and Reporting Requirements.** Section 122.48 of 40 CFR requires that all NPDES permits specify requirements for recording and reporting monitoring results. Sections 13267 and 13383 of the CWC authorize the Regional Water Boards to require technical and monitoring reports. The MRP establishes monitoring and reporting

requirements to implement federal and State requirements. This MRP is provided in Attachment E.

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

On July 25, 2003, USEPA approved the State's 2002 list of impaired waterbodies prepared pursuant to CWA 303(d). The 303(d) list identifies waterbodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations by point sources (water quality-limited waterbodies).

Santa Monica Bay (Offshore and Nearshore) is on the 303(d) list for the following pollutants/stressors, from point and non-point sources: chlordane (sediment), DDT (tissue & sediment, centered on Palos Verdes Shelf), PAHs (sediment), PCBs (tissue & sediment), debris, sediment toxicity, and fish consumption advisory. The 303(d) list also includes the Pacific Ocean shoreline (Point Vicente Beach, Royal Palms Beach, and Whites Point Beach) within the Palos Verdes Hydrologic Subarea as impaired for beach closures. Both DDT (Fish consumption advisory for DDT) and PCBs (Fish consumption advisory for PCBs) are also listed as impairments for Royal Palms Beach, and Whites Point Beach. TMDLs for DDT, PCBs and PAHs have not been scheduled. A TMDL for chlordane is scheduled for 2006.

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source discharges to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations; and other requirements in NPDES permits. There are two principal bases for effluent limitations: 40 CFR 122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 CFR 122.44(d) requires that permits include WQBELs to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where numeric water quality objectives have not been established. Three options exist to protect water quality: 1) 40 CFR 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 a 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.

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 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 discharge prohibitions are based on the requirements of the Ocean Plan, CWC, 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

The CWA requires that technology-based effluent limitations be established 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 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 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 125.3.

2. Applicable Technology-Based Effluent Limitations

At the time of drafting of this permit, no ELGs applicable to the Discharger have been developed. Technology-based effluent limitations in this Order are established in accordance with 40 CFR 125.3 and based on Table A of the Ocean Plan. Technology-based effluent limitations 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.

The effluent limitations contained in Section III.B, Table A of the 2005 Ocean Plan serve as the technology-based effluent limitations, in order to carry out the purposes and intent of the CWA.

Table F-5. Summary of Technology-based Effluent Limitations for Discharge Points 001 to 004

Parameter	Units	Effluent Limitations[1]				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Oil and Grease	mg/L	25	40	--	75	--
pH	Units	--	--	--	6.0	9.0
Suspended Solids	mg/L	60[2]	--	--	--	--
Settleable Solids	ml/L	1.0	1.5	--	3.0	--
Turbidity	NTU	75	100	--	225	--

[1] Based on the requirements specified in Table A of the Ocean Plan

[2] 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.

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

As specified in 40 CFR 122.44(d)(1)(i), permits are required to include WQBELs for pollutants (including toxicity) that are or may be discharged at levels that cause, have reasonable potential to cause, or contribute to an excursion above any state water quality 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 the Ocean Plan (as amended in 2005).

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

As noted in Section III.C.2 of this Fact Sheet, the State Water Board adopted an Ocean Plan that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the Ocean Plan. The beneficial uses applicable to the Pacific Ocean are summarized in Section III.C.2 of this Fact Sheet. The Ocean Plan includes both narrative and numeric water quality objectives applicable to the receiving water.

Table B of the Ocean Plan includes the following water quality objectives for toxic pollutants and whole effluent toxicity:

a. 6-month median, daily maximum, and instantaneous maximum water quality objectives for 21 chemicals and chemical characteristics, 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.

3. Determining the Need for WQBELs

Order No. 99-014 did not contain effluent limitations for non-conventional and toxic pollutant parameters in Table B of the Ocean. For this Order, the Regional Water Board re-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 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 the one-sided, upper 95 percent confidence bound for the 95th percentile of the effluent distribution after complete mixing ($UCB_{95/95}$). This estimated effluent value is based on a lognormal distribution of daily effluent values. Projected receiving water values ($UCB_{95/95}$), 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.

Based on the RPA Procedure and Best Professional Judgement (BPJ), aldrin, benzidine, chlordane, heptachlor, heptachlor epoxide, and TCDD equivalents demonstrated reasonable potential to exceed water quality objectives contained in the Ocean Plan; therefore, effluent limitations for these parameters are established in this Order. The following specifies two stages of RPA used in this Order.

First Stage RPA Screen

Regional Water Board staff conducted a conservative initial RPA screen for all parameters in Table B of the Ocean Plan. Regional Water Board staff 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 2000 through December 2005, and the dilution ratio applicable to the JWPCP ocean outfalls (166:1) to conduct the initial RPA screen. The initial screen is more conservative than a full RPA because it only considers the dilution applicable to the outfalls and does not consider the dilution applicable to the combining JWPCP effluent. A parameter that did not indicate reasonable potential during the initial screen would not demonstrate reasonable potential during a full RPA that considered additional dilution provided by the combining JWPCP effluent waste stream. The initial screen identified ammonia (as N), aldrin, chlordane, heptachlor, heptachlor epoxide, DDT(total), and TCDD equivalents as possibly demonstrating reasonable potential to exceed water quality objectives. Since monitoring data for heptachlor and heptachlor epoxide were not separately reported, the total heptachlor concentration (heptachlor plus heptachlor epoxide) was assumed as the concentration for individual parameter in the RPA evaluations. The screens also identified several parameters in which the analytical detection levels were higher than the calculated effluent limitations based on Ocean Plan water quality objectives; thus the RPAs were inconclusive and additional monitorings are required for dieldrin, hexachlorobenzene, PAHs, PCBs and toxaphene. Data were not available for all parameters listed in Table B of the Ocean Plan. Monitoring requirements have been established for all Table B parameters to assess reasonable potential in the future.

Second Stage RPA

Regional Water Board staff then conducted a full and complete RPA for parameters identified in the initial RPA to determine reasonable potential. The full RPA, described as follows, considered the dilution available with the combining JWPCP waste stream.

JWPCP effluent data for the period from November 2002 (starting full secondary treatment at JWPCP) through December 2005 were reviewed and the lowest monthly average flow value was identified as the worst case flow scenario (the low flow offers the least amount of dilution). The lowest monthly average flow at JWPCP for the period from November 2002 through December 2005 was 307 MGD (December 2005). As noted in Section II of

this Fact Sheet, the capacity of the Carson Regional Water Recycling Plant is designed to be developed in two phases that will result in an ultimate brine waste discharge volume from the Facility of 1.8 MGD. However, the existing Phase I Facility generates up to 0.9 MGD of waste brine. A ratio of the JWPCP effluent (lowest monthly average) to the Carson Plant effluent (maximum discharge capacity) results in a conservative dilution ratio which addresses simultaneous low-flow conditions from JWPCP and maximum flow conditions from Carson Plant. The expected dilution (307 MGD: 0.9 MGD) results in a dilution factor of 341.

Regional Water Board staff used same RPcalc 2.0 software tool developed by the State Water Board for conducting second stage RPAs, effluent data submitted to the Regional Water Board for the period from January 2000 through December 2005, and the dilution ratio of 341 as described above to conduct the second stage RPA. The water quality objectives used in the calculation are the concentrations expected to be met in the JWPCP effluent without dilution. The background concentrations are assumed to be one-sided, 95 percent confidence bound for the 95th population percentile (for ammonia only), or method detection limits listed in the 2004 JWPCP annual report.

After conducting the second stage RPAs, Regional Water Board staff determined that effluent from Carson Regional Water Recycling Plant, when discharged through Discharge Points 001 and 002, does demonstrate reasonable potential to exceed Ocean Plan water quality objectives for aldrin, chlordane, heptachlor, heptachlor epoxide, and TCDD equivalents.

Additional analyses for parameters with no monitoring data

Under Order No. 99-014, the Discharger is not required to report data for chlorinated phenolics (total), non-chlorinated phenolics (total), benzidine, heptachlor, heptachlor epoxide, and n-nitrosodi-N-propylamine. Among them, the sum of heptachlor and heptachlor epoxide was reported and has been used in the RPA evaluations as mentioned above. In order to evaluate RPs for other parameters, relevant monitoring data for Title 22 recycled water (influent to the Carson Plant), the Hyperion effluent (influent to the West Basin Water Recycling Plant that produces Title 22 recycled water), and the JWPCP effluent (mixed with brine waste) were reviewed. For chlorinated phenolics (total), non-chlorinated phenolics (total), and n-nitrosodi-N-propylamine, the available monitoring data reported after starting full secondary treatment in both Hyperion Treatment Plant and JWPCP, respectively, were consistently below the respectively reported detection limits that are much lower than the respective calculated effluent limitations: 5010 ug/L for chlorinated phenolics (total), 167 ug/L for non-chlorinated phenolics (total), and 63.5 ug/L for n-nitrosodi-N-propylamine. In addition, the in-stream dilution that occurs when waste brine mixes with the JWPCP effluent, will provide an additional dilution of 341:1. Based on the above considerations, Regional Water Board staff conclude that there is no reasonable potential for chlorinated phenolics (total), non-chlorinated phenolics (total), and n-nitrosodi-N-propylamine in the waste brine discharged from the Carson Plant to exceed water quality objectives. For benzidine, available monitoring data were also consistently below the reported detection limits. However, the reported detection limits, ranging from 0.04 ug/L to 47 ug/L, were much larger than the calculated effluent limitation of 0.012 ug/L for benzidine. Furthermore, benzidine is a pollutant of concern in the JWPCP effluent and there is an effluent limitation for benzidine in the NPDES permit for JWPCP. Based on this information, Regional Water Board staff conclude that a conservative reasonable potential decision is warranted for benzidine.

All other parameters contained in Table B of the Ocean Plan (with the exception of dieldrin, hexachlorobenzene, PAHs, PCBs and toxaphene) did not demonstrate reasonable potential to cause, contribute to, or deviate from water quality objectives. Thus, numerical effluent limitations for these parameters are not prescribed. Instead, a narrative limit statement to comply with all Ocean Plan objectives requirement is provided.

Considering the higher in-pipe dilution (when combining with the JWPCP effluent) during the high flow when JWPCP Discharge Serial Nos. 003 and 004 (Discharge Points 003 and 004 in this Order) are being used, same dilution ratio of 166:1 is also used for Discharge Points 003 and 004 in the first stage RPA although Discharge Points 003 and 004 have predetermined dilution ratios of 150:1 and 115:1, respectively, as described in the JWPCP permit.

Taking into consideration the very large dilution credit of Discharge Points 001 and 002 (166:1), the temperature of waste discharged was set at 100°F based on BPJ.

4. **WQBEL Calculations**

Effluent from Carson Regional Water Recycling Plant undergoes two mixing events during discharge into the Pacific Ocean. The first mixing event occurs when the effluent from Carson Plant combines with effluent from JWPCP. 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 were considered when determining reasonable potential. However, In the calculation of effluent limitations for parameters showing reasonable potential (aldrin, chlordane, and TCDD equivalents), Regional Water Board staff did not consider the in-stream dilution of 341 although the JWPCP monitoring results for those parameters are consistently below the respective detection limits. Since the detection limits reported by JWPCP for those parameters are much larger than the effluent limitations calculated with an outfall dilution ration of 166:1, the assimilative capacity of JWPCP effluent for any of those parameters has not been demonstrated.

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:

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

where:
Ce = the effluent limitation (µg/L)
Co = the water quality objective to be met at the completion of initial dilution (µg/L)
Cs = background seawater concentration (µg/L)
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:

$$Ce = Co + (0.1) Dm (Co)$$

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 of Order No. 99-014, the State Water Board had determined the minimum initial dilution factor, Dm, for the JWPCP Discharge Serial Nos. 001 and 002 to be 166 to 1. 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.

Site-specific water quality data are not available; therefore, 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-6. Background Seawater Concentrations

Pollutant	Background Seawater Concentration
Arsenic	3 µg/L
Copper	2 µg/L
Mercury	0.0005 µg/L
Silver	0.16 µg/L
Zinc	8 µg/L

WQBEL based only on the dilution provided by the final outfall diffuser for TCDD equivalents is determined as follows:

Water quality objectives from the Ocean Plan are:

Table F-7. Ocean Plan Water Quality Objectives for Aldrin, Benzidine, Chlordane, Heptachlor, Heptachlor Epoxide, and TCDD equivalents

Pollutant	30-day Average
Aldrin	0.000022 µg/L
Benzidine	0.000069 µg/L
Chlordane	0.000023 µg/L
Heptachlor	0.00005 µg/L
Heptachlor epoxide	0.00002 µg/L
TCDD equivalents	0.0039 pg/L

As an example, the WQBEL for TCDD equivalents is calculated as follows:

No background concentration of TCDD equivalents is credited for receiving water. Using the equation, Ce = Co + Dm (Co – Cs), water quality effluent limitation (based only on the dilution offered by the outfall diffuser) is calculated as follows:

TCDD equivalents

Ce = 0.0039 + 166 (0.0039 – 0) = 0.6513 pg/L (Average Monthly)

5. **Final WQBELs**

Final WQBELs were calculated based on the water quality objectives contained in the Ocean Plan and only considered the dilution from the final outfall diffuser (166:1). Summaries of the WQBELs are described below in Table F-8.

Table F-8. Summary of WQBELs for Discharge Points 001 through 004

Parameter	Units	Average Monthly
Aldrin	µg/L	0.0037
Benzidine	µg/L	0.012
Chlordane	µg/L	0.0038
Heptachlor	µg/L	0.0084
Heptachlor epoxide	µg/L	0.0033
TCDD equivalents	pg/L	0.65

D. Final Effluent Limitations

Section 402(o) of the CWA and 40 CFR 122.44(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, suspended solids, settleable solids, turbidity, and pH have been established to reflect technology-based effluent limits contained in the Ocean Plan. In addition, the effluent limitations for aldrin, benzidine, chlordane, heptachlor, heptachlor epoxide, and TCDD equivalents have been added to this Order because the Facility demonstrates reasonable potential to exceed water quality objectives contained in the 2005 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 are established using the following formula:

Mass (lbs/day) = flow rate (MGD) x 8.34 x effluent limitation (mg/L)
where: Mass = mass limitation for a pollutant (lbs/day)
Effluent limitation = concentration limit for a pollutant (mg/L)
Flow rate = discharge flow rate (MGD)

Table F-9. Summary of Final Effluent Limitations for Discharge Points 001 to 004

Parameter	Units	Effluent Limitations						Basis
		6-Month Average	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Oil and Grease	mg/L	--	25	40	--	--	75	OP [1]
	lbs/day [2]	--	190	300	--	--	560	
pH	standard units	--	--	--	--	6.0	9.0	OP [1]
Total Suspended Solids	mg/L	--	60 [3]	--	--	--	--	OP [1]
	lbs/day [2]	--	450	--	--	--	--	
Settleable Solids	ml/L	--	1.0	1.5	--	--	3.0	OP [1]
Turbidity	NTU	--	75	100	--	--	225	OP [1]
Temperature	°F	--	--	--	100 [5]	--	--	OP
Aldrin	µg/L	--	0.0037	--	--	--	--	OP [4]
	lbs/day [2]	--	2.8×10^{-5}	--	--	--	--	
Benzidine	µg/L	--	0.012	--	--	--	--	OP [4]
	lbs/day [2]	--	9.0×10^{-5}	--	--	--	--	
Chlordane [6]	µg/L	--	0.0038	--	--	--	--	OP [4]
	lbs/day [2]	--	2.9×10^{-5}	--	--	--	--	
Heptachlor	µg/L	--	0.0084	--	--	--	--	OP [4]
	lbs/day [2]	--	6.3×10^{-5}	--	--	--	--	
Heptachlor Epoxide	µg/L	--	0.0033	--	--	--	--	OP [4]
	lbs/day [2]	--	2.5×10^{-5}	--	--	--	--	
TCDD equivalents [6]	pg/L	--	0.65	--	--	--	--	OP [4]
	lbs/day [2]	--	5.0×10^{-9}	--	--	--	--	

[1] Based on the requirements specified in Table A of the Ocean Plan
[2] Based on a maximum flow of 0.9 MGD.
[3] Table A of the Ocean Plan states, "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.
[4] Based on the water quality objectives specified in Table B of the Ocean Plan.
[5] The temperature of waste discharged shall not exceed 100°F, which takes into account the very large dilution credit based upon BPJ.
[6] See Attachment A for definitions.

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

The Ocean Plan contains numeric and narrative water quality objectives applicable to the territorial marine waters of the State to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. Water quality objectives include an objective to maintain the high quality waters pursuant to federal regulations (40 CFR 131.12) and State Water Board Resolution No. 68-16. Receiving water limitations in this Order are included to ensure protection of beneficial uses of the receiving water and are based on the water quality objectives contained in the Ocean Plan.

VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

Section 122.48 of 40 CFR requires all NPDES permits to specify recording and reporting of monitoring results. Sections 13267 and 13383 of the CWC authorize the Water Boards to require technical and monitoring reports. The MRP, Attachment E of this Order, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this Facility.

A. Influent Monitoring

[Not Applicable]

B. Effluent Monitoring

To determine compliance with effluent limitations, determine compliance with Ocean Plan requirements, and collect data for future permit renewal, the proposed monitoring plan carries forward monitoring requirements from Order No. 99-014 with some modifications. Monitoring for pollutants in the final effluent prior to discharge from Discharge Points 001 and 002, is required to determine compliance with effluent limitations contained is Section IV.A.1.a of the permit. However, for parameters in which the data submitted to the Regional Water Board indicate that the discharge did not demonstrate reasonable potential to exceed water quality objectives, the monitoring frequencies have been reduced. Semi-annual monitoring requirements for all Table B parameters is established to determine reasonable potential to exceed water quality objectives contained in the Ocean Plan. During the term of Order No. 99-014, the Discharger did not submit data for chlorinated phenolics (total), non-chlorinated phenolics (total), benzidine, heptachlor, heptachlor epoxide, and n-nitrosodi-N-propylamine. These parameters are included in Table B of the Ocean Plan and shall be monitored at least semi-annually as required in the MRP (Attachment E).

The type of sample required for monthly sampling has been revised from a 24-hour composite to grab. 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.

C. Whole Effluent Toxicity Testing Requirements

Section III.C.4.c of the Ocean Plan, Implementing Provisions for Table B, requires chronic toxicity monitoring for ocean discharges with minimum initial dilution factors of <100:1. No chronic toxicity data is currently available for the combination of brine waste and disinfected secondary treated effluent discharged from the JWPCP outfalls. The brine waste effluent is subject to two mixing events and this overall dilution may be considered when evaluating chronic toxicity for the Carson Regional Water Recycling Plant discharge. A review of chronic toxicity levels in the JWPCP effluent suggests that there are potential assimilative capacity and dilution of the brine waste under discharge conditions. Consequently, the Regional Water Board requires the Discharger, in coordination with the JWPCP, to conduct chronic toxicity test on the combined Carson Regional Water Recycling Plant and the JWPCP effluents semiannually. Chronic toxicity data collected will be used to assess reasonable potential in the future.

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-1758) 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.

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

1. Federal Standard Provisions

Standard Provisions, which in accordance with 40 CFR 122.41 and 122.42, apply to all NPDES discharges and must be included in every NPDES permit, are provided in Attachment D to the Order.

2. Regional Water Board Standard Provisions

Regional Water Board Standard Provisions are based on the CWA, USEPA regulations, and the CWC.

B. Special Provisions

1. Reopener Provisions

These provisions are based on 40 CFR Part 123 and the previous Order. The Regional Water Board may reopen the permit to modify permit conditions and requirements.

Causes for modifications include, but are not limited to, the promulgation of new federal regulations, modification in toxicity requirements, or adoption of new regulations by the State Water Board or Regional Water Board, including revisions to the Ocean Plan.

2. **Spill Contingency Plan (SCP)**

Since spill or overflow may occur in the Facility and its discharging line, this Order requires the Discharger to review and update, if necessary, SCP after each incident. The Discharger shall ensure that the up-to-date SPC is readily available to the Plant personnel at all times and that the Plant personnel are familiar with it.

3. **Best Management Practices and Pollution Prevention**

The previous Order required the Discharger to develop and implement a *Storm Water Pollution Prevention Plan* (SWPPP) and a storm water monitoring plan as specified under the statewide General Permit for Discharges of Storm Water Associated with Industrial Activities, Order No. 97-03-DWQ (General Permit). This Order will require the Discharger to update and continue to implement, as specified in the existing Order requirements, a SWPPP and monitoring program, consistent with the General Permit. The SWPPP will outline site-specific management processes for minimizing storm water runoff contamination and for preventing contaminated storm water runoff from being discharged directly into the storm drain. At a minimum, the management practices should ensure that raw materials and chemicals do not come into contact with storm water in the undiked areas, and that all contaminated storm water within the diked areas is not discharged to a receiving water or storm drain.

This provision is based on 40 CFR 122.44(k) and Requirements and Provisions D.7 of Order No. 99-014 and specifies the requirement to develop and maintain a SWPPP.

VIII. PUBLIC PARTICIPATION

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

A. Notification of Interested Parties

The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements and a federal NPDES permit for the discharge and have provided them with an opportunity to submit their written comments and recommendations. Notification was provided through the local newspaper, Long Beach Press-Telegram, on October 27, 2006.

B. Written Comments

The Regional Water Board staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments should be submitted either in person or by mail to the Executive Office at the Regional Water Board at the following address:

EXECUTIVE OFFICER
California Regional Water Quality Control Board, Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

To be fully responded to by staff and considered by the Regional Water Board, written comments should be received at the Regional Water Board offices by 5:00 p.m. on November 27, 2006. Written comments pertaining to the changes made to the revised tentative are due by close of business at the Regional Water Board on December 20, 2006.

C. Public Hearing

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

Date: January 11, 2007
Time: 9:00 am
Location: The Metropolitan Water District of Southern California, Board Room
700 N. Alameda Street
Los Angeles, California

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. Waste Discharge Requirements Petitions

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

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100
Attn: Elizabeth Miller Jennings, Senior Staff Counsel

E. Information and Copying

The Report of Waste Discharge (RWD), 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.

F. Register of Interested Persons

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

G. Additional Information

Requests for additional information or questions regarding this Order should be directed to Jau Ren Chen at (213) 576-6656.