STATE OF CALIFORNIA

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION
320 W. 4th Street, Suite 200, Los Angeles

FACT SHEET
WASTE DISCHARGE REQUIREMENTS
for
CITY OF REDONDO BEACH
(SEASIDE LAGOON)

NPDES Permit No.: CA0064297
Public Notice No.: 05-004

FACILITY ADDRESS	FACILITY MAILING ADDRESS
200 Portofino Way	302 Knob Hill
Redondo Beach, CA 90277	Redondo Beach, CA 90277
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I. Public Participation

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board) is considering the issuance of Waste Discharge Requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for the Seaside Lagoon Facility (Seaside Lagoon or Facility) . As an initial step in the WDR process, the Regional Board staff has developed tentative WDRs. The Regional Board encourages public participation in the WDR adoption process.

A. Written Comments

The 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:

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

To be fully responded to by staff and considered by the Regional Board, written comments should be received at the Regional Board offices by 5:00 p.m. on February February 11, 2005.

B. Public Hearing

The Regional 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:	March 3, 2005
Time:	9:00 a.m.
Location:	The City of Simi Valley Council Chambers, 2929 Tapo Canyon Road, Simi Valley, California.

Interested persons are invited to attend. At the public hearing, the Regional 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.

C. Waste Discharge Requirements Appeals

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

State Water Resources Control Board, Office of Chief Counsel
ATTN: Elizabeth Miller Jennings, Senior Staff Counsel
1001 I Street, 22nd Floor
Sacramento, CA 95814

D. Information and Copying

The Report of Waste Discharge (ROWD), related documents, tentative effluent limitations and special conditions, comments received, and other information are on file and may be inspected at 320 West 4th Street, Suite 200, Los Angeles, California 90013, at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Los Angeles Regional Board by calling (213) 576-6600.

E. 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 Board, reference this facility,

and provide a name, address, and phone number.

II. Introduction

The City of Redondo Beach (hereinafter, the City or Discharger) discharges dechlorinated water from the Seaside Lagoon to King Harbor, a water of the United States. Wastes discharged from Seaside Lagoon by the City are regulated by WDRs and a NPDES permit contained in Board Order No. 99-057 (NPDES Permit No. CA0064297). Order No. 99-057 expired on June 10, 2004.

The City filed a Report of Waste Discharge and applied for renewal of its NPDES permit on April 9, 2004. The tentative permit is the reissuance of the WDRs and NPDES permit for discharges from Seaside Lagoon. A NPDES permit compliance evaluation inspection (CEI) was conducted on March 31, 2004, to observe operations and collect additional data to develop permit limitations and conditions.

III. Description of Facility and Waste Discharge

Seaside Lagoon, located at 200 Portofino Way, Redondo Beach, California, is owned and operated by the City. The Facility is a city park and consists of a 1.4 million gallon man-made saltwater lagoon, artificial beaches, children's play area, snack bar facilities, and other recreational areas. The Seaside Lagoon was constructed in 1962 and has since been open to the public for swimming from Memorial Day to Labor Day each year. At other times, the City may allow the use of the Lagoon and nearby facilities for social functions which may result in discharges into the receiving water outside the designated operational season. The surface area of the water in the Lagoon is approximately 1.2 acres with a maximum depth of 7 feet.

Water for Seaside Lagoon comes from a nearby steam generating plant (AES Redondo Beach, L.L.C., Power Plant) where seawater is used to cool turbines. The Power Plant is located at 1100 Harbor Drive, Redondo Beach. When operated at design capacity, the AES Power Plant discharges up to 898 million gallons per day (mgd) of once-through cooling water combined with small volumes of metal cleaning and low-volume wastes into the Pacific Ocean at Santa Monica Bay. This discharge is regulated under separate waste discharge requirements contained in Board Order No. 00-085. Approximately 3,200 gallons per minute (gpm), which is equivalent to 2.3 mgd (constitute approximately 0.26 % of total Power plant cooling water), of once-through cooling water is directed to the Seaside Lagoon.

To maintain the water level in the Lagoon, the City discharges roughly 3,200 gpm (approximately 2.3 mgd) of dechlorinated saltwater to King Harbor when the Lagoon is in use. The water is discharged through three overflow structures located along the northwest edge of the lagoon. The water then flows by gravity to a manhole, then to a conduit that empties into King Harbor at the shoreline (Latitude 33° 50' 38"N and Longitude 118° 23' 47"

W) embankment, Discharge Serial 001. During periods when the Lagoon is not open for public use, the Lagoon water is flushed periodically.

The water supply system is equipped with both chlorination and de-chlorination facilities. The chlorination system consists of one, 1,000-gallon storage tank, which holds 17% sodium hypochlorite, dual chemical feed pumps with manual controls, and related piping. The de-chlorination system consists of one, 1,000-gallon storage tank which holds 38% bi-sulfate, dual chemical feed pumps with manual controls, and related piping. The de-chlorination piping terminates at the overflow structures at which point the bi-sulfite solution is added to the effluent. Bi-sulfite is added at all three overflow structures.

The Discharger described a proposed Facility modification in the permit renewal application: to construct a re-circulation pipe at the overflow collector pipe (prior to the discharge vault) to direct lagoon water back to the Lagoon. A valve will be installed in the vault to stop all flow from being discharged. The de-chlorination system will be shut down and a chlorination feed pipe connected the re-circulation piping would allow chlorinated water to circulate in the lagoon and collector pipe. The modification will reduce the amount of bacteria in the discharge.

In the renewal application, the Discharger also requested that the residual chlorine effluent limitation be relaxed. It should be noted that the available effluent data indicated that the Discharger has exceeded the effluent limitation for residual chlorine on various occasions.

The Regional Board and the U.S. EPA have classified the Seaside Lagoon facility as a minor discharge.

Available Discharge Monitoring Reports (DMRs) submitted to the Regional Board include all monitoring reports for the years 1999, 2000, 2001, 2002, and 2003. The available DMR data are summarized in the following Table:

Pollutant	Units	Monthly Average Effluent Limitations	Daily Maximum Effluent Limitations	Range of Reported Values
Flow	MGD	--	--	2.5
Temperature	°F	--	100	66 – 81
pH	S.U.	--	6.0 – 9.0	6.29 – 8.0
Total Suspended Solids (TSS)	mg/L	50	150	1.7 – 84
5-Day Biochemical Oxygen Demand (BOD_5 20°C)	mg/L	20	30	<1 – 9

Pollutant	Units	Monthly Average Effluent Limitations	Daily Maximum Effluent Limitations	Range of Reported Values
Oil and Grease	mg/L	10	15	<0.1 – 2.4[4]
Turbidity	NTU	50	150	0.25 – 20
Total Coliform	mpn/100 ml	1,000[1]	10,000[1]	<1 – 900
Fecal Coliform	mpn/100 ml	200[2]	--	<1 – 280
Enterococcus	mpn/100 ml	24[3]	--	<1 – >1,600
Residual Chlorine	µg/L	2	8	<10 – 1,800

1. The density of total coliform organisms shall be less than 1,000 per 100 ml (10 per ml): provided that not more than 20 percent of the samples, in any 30-day period, may exceed 1,000 per 100 ml (10 per ml), and provided further that no single sample when verified by a repeat sample taken within 48 hours shall exceed 10,000 per 100 ml (100 per ml).

2. The fecal coliform density for any 30-day period, shall not exceed a geometric mean of 200 per 100 ml nor shall more than 10 percent of the total samples during any 60-day period exceed 400 per 100 ml.

3. The geometric mean enterococcus density of the discharge shall not exceed 24 organisms per 100 ml for a 30-day period or 12 organisms per 100 ml for a 6-month period.

4. Value of <6 also reported.

A review of effluent monitoring data indicates that the Discharger may have exceeded the effluent limitation for Enterococcus in June 2002 and June 2003. Further, the available effluent monitoring data indicate that the Discharger has had multiple exceedances of the existing effluent limitations for total suspended solids (TSS) and total residual chlorine. The Regional Board issued a Notice of Violation (NOV) on May 4, 2001, addressing violations of effluent limitations for BOD and residual chlorine, for the period from July 1999 through August 2000. The City responded to the NOV in correspondence dated July 16, 2001. In the July 16, 2001, response, the City states that several laboratories were unable to detect residual chlorine accurately below 0.01 mg/L (the existing residual chlorine monthly average effluent limitation is 2 µg/L, or 0.002 mg/L) and that the monitoring location established in Order No. 99-057 is inappropriate for this facility. Further, the City requested that the residual chlorine effluent limitation be revised to 0.01 mg/L, and that the NOV be rescinded.

An Administrative Civil Liability (ACL) was issued to the City on March 29, 2002, in the amount of $51,000 for violation of the residual chlorine effluent limitation. The City responded on April 10, 2002, and submitted payment to the Regional Board and committed the preparation of a Supplemental Environmental Project, subject to Regional Board approval.

Effluent characteristics as stated by the Discharger in the permit renewal application are summarized below:

Pollutant	Units	Maximum Daily Value	Average Daily Value
Discharge Flow	mgd	2.3	2.3
pH	Std. units	6.3 – 6.6	--
Temperature	• C	27	22
$BOD_5$20°C	mg/L	<2.0	<20
	lbs/day	<38	<38
TSS	mg/L	84	75
	lbs/day	1,611	1,438
Fecal Coliform	mpn/100 ml	280	27
Residual Chlorine	µg/L	<10	<10
	lbs/day	0.2	0.2
Oil and Grease	mg/L	<6	<6
	lbs/day	<115	<115

It should be noted that the detection limits for residual chlorine presented in the renewal application are greater than the existing effluent limitation for residual chlorine.

IV. Applicable Plans, Policies, and Regulations

The requirements contained in the proposed permit are based on the requirements and authorities contained in the following:

A. The federal Clean Water Act (CWA). The federal Clean Water Act requires that any point source discharges of pollutants to a water of the United States must be done in conformance with an NPDES permit. NPDES permits establish effluent limitations that incorporate various requirements of the CWA designed to protect water quality.

B. Code of Regulations, Title 40 (40 CFR) – Protection of Environment, Chapter I, Environmental Protection Agency, Subchapter D, Water Programs, Parts 122-125 and Subchapter N, Effluent Guidelines. These CWA regulations provide effluent limitations for certain dischargers and establish procedures for NPDES permitting, including how to establish effluent limitations for certain pollutants discharged from Seaside Lagoon.

C. On June 13, 1994, the Regional Board adopted a revised *Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan). The Basin Plan contains water quality objectives and beneficial uses for inland surface waters and for the Pacific Ocean. The Basin Plan contains beneficial uses and water

quality objectives for King Harbor (H.U. 405.12), an inland surface waterbody.

Existing uses: Industrial service supply; navigation; water contact recreation; non-contact water recreation; commercial and sport fishing; marine habitat; wildlife habitat; rare, threatened, or endangered species.

D. The State Water Resources Control Board (State 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 inland surface waters.

E. On May 18, 2000, the U.S. Environmental Protection Agency (U.S. EPA) promulgated numeric criteria for priority pollutants for the State of California [known as the *California Toxics Rule* (CTR) and codified as 40 CFR § 131.38]. In the CTR, U.S. EPA promulgated criteria that protect the general population at an incremental cancer risk level of one in a million (10^{-6}), for all priority toxic pollutants regulated as carcinogens. The CTR also provides a schedule of compliance not to exceed 5 years from the date of permit renewal for an existing discharger if the Discharger demonstrates that it is infeasible to promptly comply with effluent limitations derived from the CTR criteria.

F. On March 2, 2000, State Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP*).* The SIP was effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the U.S. EPA through National Toxics Rule (NTR) and to the priority pollutant objectives established by the Regional Boards in their basin plans, with the exception of the provision on alternate test procedures for individual discharges that have been approved by the U.S. EPA Regional Administrator. The alternate test procedures provision was effective on May 22, 2000. The SIP was effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the U.S. EPA through the CTR. The SIP requires the dischargers' submittal of data sufficient to conduct the determination of priority pollutants requiring water quality-based effluent limitations (WQBELs) and to calculate the effluent limitations. The CTR criteria for saltwater or human health for consumption of organisms, whichever is more stringent, are used to develop the effluent limitations in this permit to protect the beneficial uses of the King Harbor.

G. 40 CFR section 122.44(d)(1)(vi)(A) requires the establishment of numeric effluent limitations to attain and maintain applicable narrative water quality criteria to protect the designated beneficial uses. Where numeric water quality objectives have not been established in the Basin Plan, 40 CFR section 122.44(d) specifies that WQBELs may be set based on U.S. EPA criteria and supplemented, where necessary, by other

relevant information to attain and maintain narrative water quality criteria to fully protect designated beneficial uses.

H. State and Federal antibacksliding and antidegradation policies require that Regional Board actions to protect the water quality of a water body and to ensure that the waterbody will not be further degraded. The antibacksliding provisions are specified in sections 402(o) and 303(d)(4) of the CWA and in the Title 40 of the Code of Federal Regulations (40 CFR), section 122.44(l). Those provisions require a reissued permit to be as stringent as the previous permit with some exceptions where effluent limitations may be relaxed.

I. Effluent limitations are established in accordance with sections 301, 304, 306, and 307 of the federal CWA, and amendments thereto. These requirements, as they are met, will maintain and protect the beneficial uses of King Harbor.

J. Existing waste discharge requirements contained in Board Order No. 99-057, adopted by the Regional Board on June 30, 1999. In some cases, permit conditions (effluent limitations and other special conditions) established in the existing waste discharge requirements have been carried over to this permit.

V. Regulatory Basis for Effluent Limitations

The CWA requires point source discharges to control the amount of conventional, nonconventional, and toxic pollutants that are discharged into the waters of the United States. The control of the discharge of pollutants is established through NPDES permits that contain effluent limitations and standards. The CWA establishes two principal bases for effluent limitations. First, dischargers are required to meet technology-based effluent limitations that reflect the best controls available considering costs and economic impact. Second, they are required to meet WQBELs that are developed to protect applicable designated uses of the receiving water.

The CWA requires that technology-based effluent limitations be established based on several levels of control:

A. Best practicable treatment control technology (BPT) is based on 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) is a standard for 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) that 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 EPA to develop effluent limitations, guidelines and standards (ELGs) representing application of BPT, BCT, BAT, 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.

If a reasonable potential exists for pollutants in a discharge to exceed water quality standards, WQBELs are also required under 40 CFR 122.44(d)(1)(i). WQBELs are established after determining that technology-based limitations are not stringent enough to ensure that state water quality standards are met for the receiving water. WQBELs are based on the designated use of the receiving water, water quality criteria necessary to support the designated uses, and the state's antidegradation policy. For discharges to inland surface waters, enclosed bays, and estuaries, the SIP establishes specific implementation procedures for determining reasonable potential and establishing WQBELs for priority pollutant criteria promulgated by U.S. EPA through the CTR and NTR, as well as the Basin Plan.

There are several other specific factors affecting the development of limitations and requirements in the proposed permit. These are discussed as follows:

1. Pollutants of Concern

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

   Seaside Lagoon is a saltwater public swimming facility that is fed with non-contact cooling water from a nearby power plant. Effluent limitations for Discharge Serial No. 001 in the previous permit (No. 99-057) were established for temperature, pH, fecal coliform, total coliform, enterococcus, TSS, turbidity, BOD, oil and grease, and total residual chlorine. Lagoon water (dechlorinated saltwater from the swimming area)

may contribute solids and affect turbidity of the receiving water. Water discharged from swimming areas may contain substances that affect the biochemical oxygen demand and contribute oil and grease to the receiving water. Further, chlorine is added to the source water (i.e., non-contact cooling water from the AES power plant) prior to entering Seaside Lagoon. Although lagoon water is dechlorinated prior to discharge to King Harbor, chlorine may be present in residual concentrations in the lagoon water at the point of discharge. Coliform may be present in lagoon water due to the nature of the activity at Seaside Lagoon (i.e., humans swimming in, and animals in the vicinity of, the swimming area). Therefore, coliform bacteria is considered a pollutant of concern.

In addition, discharges of certain wastewaters may cause changes in the pH and temperature of the receiving water. Discharges of swimming lagoon water may affect the pH of receiving waters. Further, although temperature may not be a pollutant of concern in this discharge, consistent with Basin Plan requirements, the proposed permit also establishes effluent limitations for temperature.

2. Technology-Based Effluent Limitations

Due to the lack of national ELGs for discharges of water from swimming facilities and the absence of data available to apply BPJ to develop numeric effluent limitations, and pursuant to 40 CFR 122.44(k), the Regional Board will require the Discharger to develop and implement a *Best Management Practices Plan* (BMPP) which should include measures to prevent pollutants from entering the lagoon. The combination of the BMPP and existing permit limitations based on past performance and reflecting BPJ will serve as the equivalent of technology-based effluent limitations, in the absence of established ELGs, in order to carry out the purposes and intent of the CWA.

3. Water Quality-Based Effluent Limitations

As specified in 40 CFR section 122.44(d)(1)(i), permits are required to include WQBELs for toxic pollutants (including toxicity) that are or may be discharged at levels which 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 is intended to protect the designated uses for the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria (that are contained in other state plans and policies, or U.S. EPA water quality criteria contained in the CTR and NTR). The procedures for determining reasonable potential, and if necessary for calculating WQBELs, are contained in the SIP.

The CTR contains both saltwater and freshwater criteria. According to 40 CFR section 131.38(c)(3), freshwater criteria apply at salinities of 1 part per thousand (ppt) and below at locations where this occurs 95 percent or more of the time; saltwater

criteria apply at salinities of 10 ppt and above at locations where this occurs 95 percent or more of the time; and at salinities between 1 and 10 ppt the more stringent of the two apply. The CTR criteria for saltwater or human health for consumption of organisms, whichever is more stringent, are used to prescribe the effluent limitations in this permit to protect the beneficial uses of the King Harbor.

a. Reasonable Potential Analysis (RPA)

The Regional Board will conduct a reasonable potential analysis for each priority pollutant with an applicable criterion or objective to determine if a WQBEL is required in the permit. The Regional Board would analyze effluent data to determine if a pollutant in a discharge has a reasonable potential to cause or contribute to an excursion above a state water quality standard. For all parameters that have a reasonable potential, numeric WQBELs are required. The RPA considers water quality objectives outlined in the CTR, NTR, as well as the Basin Plan. To conduct the RPA, the Regional Board must identify the maximum observed effluent concentration (MEC) for each pollutant, based on data provided by the Discharger.

Section 1.3 of the SIP provides the procedures for determining reasonable potential to exceed applicable water quality criteria and objectives. The SIP specifies three triggers to complete a RPA:

i. Trigger 1 – If the MEC is greater than or equal to the CTR water quality criteria or applicable objective (C), a limitation is needed.

ii. Trigger 2 – If MEC<C and background water quality (B) > C, a limitation is needed.

iii. Trigger 3 – If other related information such as CWA 303(d) listing for a pollutant, discharge type, compliance history, etc. indicates that a WQBEL is required.

Sufficient effluent and ambient data are needed to conduct a complete RPA. If data are not sufficient, the Discharger will be required to gather the appropriate data for the Regional Board to conduct the RPA. Upon review of the data, and if the Regional Board determines that WQBELs are needed to protect the beneficial uses, the permit will be reopened for appropriate modification.

The Discharger reports that no CTR sampling has been conducted and there were no priority pollutant monitoring data available for review. Based on a lack of data to conduct an RPA, the Discharger is required to gather the appropriate CTR data to conduct an RPA as described in the proposed *MRP* CI-8034. The Regional Board reserves the right to reopen the permit at anytime for

amendment based on the analysis of these data.

b. Calculating WQBELs

If a reasonable potential exists to exceed applicable water quality criteria or objectives, then a WQBEL must be established in accordance with one of three procedures contained in Section 1.4 of the SIP. These procedures include:

i. If applicable and available, use of the wasteload allocation (WLA) established as part of a total maximum daily load (TMDL).

ii. Use of a steady-state model to derive maximum daily effluent limitations (MDELs) and average monthly effluent limitations (AMELs).

iii. Where sufficient effluent and receiving water data exist, use of a dynamic model which has been approved by the Regional Board.

c. Impaired Water Bodies in 303 (d) List

Section 303(d) of the CWA requires states to identify specific water bodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations on point sources. For all 303(d)-listed water bodies and pollutants, the Regional Board plans to develop and adopt TMDLs that will specify WLAs for point sources and load allocations (LAs) for non-point sources, as appropriate.

The U. S. EPA has approved the State's 303(d) list of impaired water bodies. Certain receiving waters in the Los Angeles and Ventura County watersheds do not fully support beneficial uses and therefore have been classified as impaired on the 2002 303(d) list and have been scheduled for TMDL development. However, the 2002 State Board's California 303(d) List does not classify King Harbor as impaired.

d. Whole Effluent Toxicity

Whole effluent toxicity (WET) protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. WET tests measure the degree of response of exposed aquatic test organisms to an effluent. The WET approach allows for protection of the narrative "no toxics in toxic amounts" criterion while implementing numeric criteria for toxicity. There are two types of WET tests: acute and chronic. An acute toxicity test is conducted over short time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and measures mortality, reproduction, and growth.

The Basin Plan specifies a narrative objective for toxicity, requiring that all waters be maintained free of toxic substances in concentrations that are lethal to or produce other detrimental response on aquatic organisms. Detrimental response includes but is not limited to decreased growth rate, decreased reproductive success of resident or indicator species, and/or significant alterations in population, community ecology, or receiving water biota. The existing permit does not contain acute toxicity limitations or monitoring requirements.

In accordance with the Basin Plan, acute toxicity limitations dictate that the average survival in undiluted effluent for any three consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test having less than 70% survival. Consistent with Basin Plan requirements, this permit establishes acute toxicity limitations.

In addition to the Basin Plan requirements, Section 4 of the SIP states that a chronic toxicity effluent limitation is required in permits for all discharges that will cause, have the reasonable potential to cause, or contribute to chronic toxicity in receiving waters. Based on the fact that the discharge is dechlorinated once-through, non-contact cooling water originating from the lagoon, and chlorine dissipates rapidly, the Regional Board does not believe the lagoon water discharge will contribute to chronic toxicity. Thus, no chronic toxicity limitations or monitoring requirements have been established in this proposed permit, and the Discharger is required to comply with acute toxicity limitations established in the proposed permit.

4. Specific Rationale for Each Numerical Effluent Limitation

Section 402(o) of the Clean Water Act and 40 CFR section 122.44(l) require that effluent limitations standards or conditions in reissued permits be at least as stringent as those in the existing permit. The Regional Board has determined that reasonable potential exists for the conventional and nonconventional pollutants that are regulated under the current permit; therefore, effluent limitations have been established for these pollutants. The requirements in the proposed permit for TSS, BOD, oil and grease, turbidity, Fecal Coliform, Total Coliform, Enterococcus, and total residual chlorine (shown in the table below) are based on limitations specified in the City's existing permit. The effluent limitations for pH and acute toxicity are based on the Basin Plan. The effluent limitation for temperature is based on the Thermal Plan.

Because there are no data to perform the RPA and calculate WQBELs for the priority pollutants, this permit does not establish effluent limitations for priority pollutants.

Effluent limitations are established in this permit, which are applicable to discharges of lagoon water from the NPDES Discharge Serial No. 001 (Latitude 33° 50' 38" N; Longitude 118° 23' 47" W) into King Harbor.

Pollutant	Units	Monthly Average Effluent Limitations	Daily Maximum Effluent Limitations	Rationale[1]
Temperature	°F	86		TP
pH	S.U.	6.5 – 8.5		BP
Total Suspended Solids	mg/L	50	75	E
BOD_5@20°C	mg/L	20	30	E
Oil and Grease	mg/L	10	15	E
Turbidity	NTU	50	75	E
Total Coliform	mpn/100 ml	1000	10,000	E, BP
Fecal Coliform	mpn/100 ml	200	400	E, BP
Enterococcus	mpn/100 ml	35	104	BP
Total Residual Chlorine [6]	µg/L	2	8	E
Acute Toxicity	% Survival	[2]		BP

1. TP – Thermal Plan; BP – Limitations are established in the Basin Plan; CTR, SIP – Water quality-based effluent limitations established based on the procedures in the SIP; E – Existing permit limitation.

2. For any three consecutive 96-hour static or continuous flow bioassay tests must be at least 90%, with no single test producing less than 70% survival (more information can be found in Section I.B.3.a. of the tentative permit.)

5. Monitoring Requirements

The previous *MRP* No. CI-8034 for Seaside Lagoon, required daily monitoring for total flow; weekly monitoring for residual chlorine, fecal coliform, total coliform, and enterococcus; monthly monitoring for TSS and turbidity; and annual monitoring for temperature, pH, oil and grease, and BOD during the period of operation from June through September.

Monitoring requirements are discussed in greater detail in Section III of the *MRP* No. CI-8034. As described in the *MRP*, monitoring reports must be submitted quarterly.

A Effluent Monitoring

To demonstrate compliance with effluent limitations established in the permit, and to assess the impact of the discharge to the beneficial uses of the receiving waters, this permit carries over the existing monitoring requirements for most parameters. Monitoring will include daily monitoring for total flow; weekly

monitoring for residual chlorine, Fecal Coliform, Total Coliform, and Enterococcus; monthly monitoring for TSS and turbidity; and annual monitoring for temperature, pH, oil and grease, and BOD.

The proposed permit also establishes annual monitoring for acute toxicity. Further, to provide sufficient data to conduct an RPA in the future, annual monitoring requirements for priority pollutants have been established in this permit.

The effluent monitoring program for the discharge of lagoon water (dechlorinated saltwater) from Discharge Serial No. 001 (Latitude 33° 50' 38"N and Longitude 118° 23' 47"W) is provided in Section III of the *MRP*.

b. Receiving Water Monitoring

The Discharger is required to monitor the receiving water for the CTR priority pollutants, to determine reasonable potential. Pursuant to the California Water Code, section 13267, the Discharger is required to submit data sufficient for: (1) determining if WQBELs for priority pollutants are required, and (2) to calculate effluent limitations, if required. The SIP requires that the data be provided. Therefore, the Discharger shall conduct the following monitoring program for the receiving water for all CTR priority pollutants. The results of monitoring for reasonable potential determination shall be submitted in accordance with Section I.A of the *MRP*. Receiving water sampling shall be conducted at the same time as the effluent sampling. The receiving water monitoring location shall be outside the influence of the discharge in the receiving water (King Harbor).

Monitoring requirements for receiving water are discussed in greater detail in Section V and VI of the *MRP*.

c. Monitoring for Reasonable Potential Determination

The SIP states that the Regional Board will require periodic monitoring for pollutants for which criteria or objectives apply and for which no effluent limitations have been established.

The Regional Board is requiring, as part of the *MRP*, that the Discharger conduct annual effluent monitoring for the priority pollutants (except for 2,3,7,8-TCDD) for which there are no effluent limitations established in the permit. In addition, the Regional Board is requiring that the Discharger conduct receiving water monitoring for the priority pollutants, annually, and at the same time effluent samples are collected. Further, the Discharger must analyze pH, salinity, and hardness of the receiving water concurrent with the analysis for the priority pollutants.

This monitoring shall occur at the following locations:

- Effluent discharge point (Discharge Serial No. 001) prior to entry into receiving water (King Harbor); and
- Receiving water. The monitoring station shall be 50 feet from the discharge point into the receiving water, outside the influence of the discharge.

The required monitoring frequency and type of sample for pH, hardness, salinity, and toxic pollutants are listed in Section VIII of the *MRP*.

The Regional Board is requiring, as part of the *MRP*, that the Discharger conduct effluent and receiving water monitoring for 2,3,7,8 TCDD, twice during the permit term (once during the 2nd year of the permit and once during the 4th year) of the permit term. The SIP requires monitoring for 2,3,7,8-TCDD and the 17 congeners listed in the table provided in the *MRP*. The Discharger is required to calculate Toxic Equivalence (TEQ) for each congener by multiplying its analytical concentration by the appropriate Toxicity Equivalence Factors (TEF) provided in the *MRP*.