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
PAKTANK CORPORATION-LOS ANGELES
(Marine Terminal)

NPDES Permit No.: CA0055247
Public Notice No.: 01-061

FACILITY ADDRESS	FACILITY MAILING ADDRESS
Paktank Corporation – Los Angeles Marine Terminal Berths 187-188, Port of Los Angeles Wilmington, CA 90744	Paktank Corporation – Los Angeles 401 Canal Street Wilmington, CA 90744

Contact: Richard Sandell
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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 above-referenced facility. As an initial step in the WDR process, 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 28, 2002.

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 28, 2002
Time: 9:00 a.m.
Location: Metrolpolitan Water District of Southern California
700 North Alameda Street, Board Room
Los Angeles, 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.

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
P.O. Box 100
Sacramento, CA 95812

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 8:00 a.m. and 5:00 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

Paktank Corporation-Los Angeles (hereinafter Paktank or Discharger) discharges treated wastes from its Marine Terminal under WDRs contained in Order No. 94-036 adopted by the Regional Board on May 9, 1994. Order 94-036 serves as a National Pollutant Discharge Elimination System (NPDES) permit (CA0055247) for the facility.

Paktank has filed a ROWD and has applied for renewal of its WDRs and NPDES permit. Upon request for additional information from the Regional Board, the Discharger provided additional information on September 21, 2000, to complete the NPDES application form. A site visit was conducted on August 21, 2001, to observe operations and collect additional data to develop permit limits and conditions.

The facility is divided into two portions, one of which is covered under this NPDES permit, and the other, under the NPDES General Permit No. CAS000001 Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities. According to the facility's 1993 *Storm Water Pollution Prevention Plan* (SWPPP*),* storm water runoff generated from the following activities is covered under the General NPDES Permit:

- Loading and unloading of oil from ships and barges along berths 187, 188, and 189;
- Loading and unloading of concrete from ships and barges along berths 190 and 191;
- Loading tank trucks with concrete;
- Storage of cement in a covered building; and
- General truck traffic throughout the facility.

According to the SWPPP, activities that are covered under this NPDES permit include:

- Loading and unloading tank trucks of oil and caustic (sodium hydroxide) in contained areas adjacent to tank blocks;
- Storage of oil and caustic in contained tank blocks; and
- Truck traffic in areas internal to the tank blocks.

III. Description of Facility and Waste Discharge

As stated in the NPDES permit application, the Marine Terminal, an oil transfer and bulk storage facility, is located at Berths 187-188, Port of Los Angeles, Wilmington, California. The facility consists of 61 bulk storage tanks, vehicle loading and off-loading areas, and a wastewater treatment system. Storage tanks hold petroleum products (diesel oil, fuel oil, and lube oil), volatile organic compounds, vegetable oils, caustic soda, and caustic potash.

The facility's Storm Water Monitoring Plan (August 1997) states that storm water generated in the tank farms, loading and unloading stations, some of the internal roads and all of the internal rail tracks and wastewaters are directed to an internal drainage system that drains to the on-site wastewater treatment system. Wastewaters include external tank truck wash water, steam condensate and boiler blowdown. The areas previously designated as truck loading, off-loading, and external tank truck wash stations are now only used as truck loading and off-loading areas. Before the trucks leave the loading station, the outside of the tank trucks are rinsed with water to remove any caustic soda that may have incidentally dripped outside the loading hatch, during the loading process. Truck rinsing is conducted on an individual basis and is isolated to the area of the truck around the loading hatch; it is not the entire vehicle that is rinsed nor is it a continuous process. Tank truck rinse water is a small contribution to the waste stream. The loading and off-loading areas will be cleaned by sweeping and steam cleaning.

The wastewaters and storm water are collected and directed to an on-site wastewater treatment system. The water is then pumped out through a series of monitors to the publicly owned treatment works (POTW) at a rate of approximately 200 gallons per minute (gpm). Water is collected via isolated drains throughout the facility and pumped into four holding/settling tanks placed in series. These four tanks have a combined capacity of 537,600 gallons. These tanks are piped together in series, but are capable of being isolated should the need arise. These tanks are used as holding tanks for excess storm water in the event that the POTW cannot handle the flow of water or a large rain event threatens to inundate the facility. From these tanks, wastewater is pumped into a 12-stage, weir-type clarifier. The clarifier consists of two banks of six cells. Wastewater flows in series through all 12 cells. From the last bank, water is pumped through four carbon canisters in series to provide polishing of the wastewater. In an emergency situation, if the aforementioned holding tanks are insufficient, Paktank will divert the treated water to the NPDES discharge point via a storm drain at Matsonia Way to Los Angeles Inner Harbor, Slip 5, at Berth 187. The point of discharge is located at Latitude 33º, 45', 59" and Longitude 118º, 15', 16".

Over the past 20 years, there has been no discharge through the NPDES discharge point; however, the NPDES permit is maintained in the event that storm water runoff levels exceed the storage capacity and the flow parameter of the sewer system. The volume of storm water discharge will be variable, depending on rainfall intensity, duration, and flooding conditions on site. Flow data collected over the last 5 years shows that the Marine Terminal discharged an average of 0.003 million gallons per day (mgd) of treated storm water runoff to POTW. Figure 1 shows a schematic diagram of the wastewater flow.

The Regional Board and the United States Environmental Protection Agency (USEPA) have classified the Paktank Marine Terminal as a minor discharge.

Effluent limits contained in the existing permit for Paktank and representative monitoring data from the previous permit term are presented in the following table:

Constituent (units)	Effluent Limit (Daily Maximum)	Monitoring Data
Oil and Grease (mg/L)	15	N/A*
Oil and Grease (lbs/day)	8.76	N/A*
BOD_5 (mg/L)	30	N/A*
BOD_5 (lbs/day)	17.52	N/A*
Suspended Solids (mg/L)	150	N/A*
Suspended Solids (lbs/day)	87.6	N/A*
Turbidity (TU)	75	N/A*
Sulfides (mg/L)	1.0	N/A*
Sulfides (lbs/day)	0.584	N/A*
Phenols (mg/L)	1.0	N/A*
Phenols (lbs/day)	0.584	N/A*
Benzene (µg/L)	1.0	N/A*
Toluene (µg/L)	10.0	N/A*
Xylene (µg/L)	10.0	N/A*
Ethylbenzene (µg/L)	10.0	N/A*

Constituent (units)	Effluent Limit (Daily Maximum)	Monitoring Data
Arsenic (mg/L)	0.05	N/A*
Cadmium (mg/L)	0.01	N/A*
Chromium (mg/L)	0.05	N/A*
Copper (mg/L)	1.0	N/A*
Lead (mg/L)	0.05	N/A*
Mercury (mg/L)	0.002	N/A*
Selenium (mg/L)	0.01	N/A*
Silver (mg/L)	0.05	N/A*
Zinc (mg/L)	5.0	N/A*
Effluent Toxicity (% survival)	**	N/A*

*N/A – Not Available. The facility has not discharged via the NPDES outfall for the past 20 years.
**Average survival in effluent for any three consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test producing less than 70% survival.

IV. Applicable Plans, Policies, and Regulations

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

1. The federal Clean Water Act (CWA).

2. Code of Regulations, Title 40 (40CFR) – Protection of Environment, Chapter 1, Environmental Protection Agency, Subchapter D, Water Programs, Parts 122-125 and Subchapter N, Effluent Guidelines. These regulations provide effluent limits for conventional pollutants discharged.

3. 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 beneficial uses and water quality objectives for the Los Angeles Inner Harbor.

   Existing: industrial water supply, navigation, non-contact water recreation, preservation of rare and endangered species, commercial and sport fishing, and marine habitat.

   Potential: contact water recreation and shellfish harvesting.

4. 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 Los Angeles Inner Harbor.

5. In May 1974, the State Board adopted a *Water Quality Control Policy for the Enclosed Bays and Estuaries of California* (Policy). The Policy contains narrative and numerical water quality objectives that were designed to prevent water quality degradation and protect beneficial uses in enclosed bays and estuaries. The Policy also lists principles of management that include the State Board's goal to phase out all discharges (excluding cooling waters), particularly industrial process water, to enclosed bays and estuaries as soon as practicable. The wastes discharged to Los Angeles Inner Harbor described above are not considered industrial process wastewater for purposes of the Policy.

6. On May 18, 2000, the U.S. Environmental Protection Agency (USEPA) promulgated numeric criteria for priority pollutants for the State of California [known as the *California Toxics Rule* (CTR) and codified as 40 CFR section 131.38]. In the CTR, USEPA promulgated criteria that protects 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 issuance for a point source discharge if the Discharger demonstrates that it is infeasible to promptly comply with the CTR criteria.

7. 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 USEPA 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 USEPA 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 USEPA through the CTR. The SIP does not apply to discharges comprised solely of storm water, but some of the protocols identified in the SIP provide a rationale approach for determining reasonable potential and represent the best available science with respect to minimum levels for all surface water discharges. The SIP requires the dischargers' submittal of data sufficient to conduct the determination of priority pollutants requiring 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 Order to protect the beneficial uses of the Los Angeles Inner Harbor.

8. 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 section 402(o) of the CWA and in the Title 40 of the Code of Federal Regulations (40 CFR), section 122.44(i). Those provisions require a reissued permit to be as stringent as the previous permit with some exceptions where effluent limitations may be relaxed.

9. Effluent limitations are established in accordance with sections 301, 304, 306, and 307 of the federal Water Pollution Control Act, and amendments thereto. These requirements, as they are met, will maintain and protect the beneficial uses of the Los Angeles Inner Harbor.

10. Existing waste discharge requirements contained in Board Order No. 94-036, adopted by the Regional Board on May 9, 1994. In some cases, permit conditions (effluent limits 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 water quality-based effluent limitations (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 controls:

- 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.
- 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.
- 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.
- 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 cause or contribute to an exceedance of 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 not composed entirely of storm water, such as the potential Paktank 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 USEPA through the CTR and NTR, as well as the Basin Plan. With respect to a reasonable potential analysis, the SIP identifies a appropriate step-wise approach that can be used to determine whether a discharge has a reasonable potential. The approach used in the SIP is equally valid for determining the reasonable potential for discharges comprised entirely of storm water discharges.

There are several other specific factors affecting the development of limitations and requirements in the proposed Order. 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.

   Effluent limitations in the current permit were established for sulfides, phenols, benzene, toluene, ethylbenzene, and xylenes because they are typical components of the petroleum products stored on-site, specifically fuel oil and cutter stock. Because the Discharger stores vegetable oil and caustic on-site, oil and grease as well as pH are likely to impact the discharge and thus effluent limits were established for these parameters. General truck traffic, truck wash, sweep cleaning operations, steam condensate, and boiler blowdown may contribute solids and metals to the discharge; therefore, limits were set for turbidity, suspended solids, and metals.

2. **Technology-Based Effluent Limits**

   The existing permit for the Paktank facility requires the Discharger to develop and implement a *Storm Water Pollution Prevention Plan* (SWPPP). The SWPPP outlines site-specific management processes for minimizing storm water runoff contamination and for preventing contaminated storm water runoff from being discharged directly into surface waters. Due to the fact that when discharges do occur at the Paktank facility, they are composed primarily of storm water, this permit will require that Paktank update and continue to implement their SWPPP.

3. **Water Quality-Based Effluent Limits**

As specified in 40 CFR 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 USEPA water quality criteria contained in the CTR and NTR). The specific procedures for determining reasonable potential, and if necessary for calculating WQBELs, are contained in the SIP for non-storm water discharges. Because of the potential for Paktank's discharge to include non-storm water waste the SIP's approach is appropriate. Further, in the best professional judgment of the Regional Board staff the SIP identifies an appropriate, rational step-wise approach that can be used to determine whether storm water discharges have a reasonable potential.

The CTR contains both saltwater and freshwater criteria. According to 40 CFR 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 Order to protect the beneficial uses of the Los Angeles Inner Harbor.

(a) Reasonable Potential Analysis (RPA)

In accordance with Section 1.3 of the SIP, the Regional Board conducts 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 analyzes 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 constituent, based on data provided by the Discharger.

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

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

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

3) 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.

(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:

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

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

3) 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 USEPA 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 1998 303(d) list and have been scheduled for TMDL development.

The Los Angeles/Long Beach Harbors are located in the southern portion of the Los Angeles Basin in the greater San Pedro Bay. Together with the Dominguez Channel, these harbors receive discharges from highly industrialized areas. The 1998 State Board's California 303(d) List classifies the Los Angeles Inner Harbor and several water bodies within the Harbor as impaired. These water bodies include: Consolidated Slip, Southwest Slip, a portion of Main Channel, Fish Harbor, Cabrillo Pier, and breakwater. The pollutants of concern, detected in the water column, in the sediment, and in the fish tissue, include: copper, lead, ammonia, coliform, chromium, zinc, DDT, PAHs, sediment toxicity, aldrin, benthic community effects, Chem A [refers to the sum of aldrin, dieldrin,

chlordane, endrin, heptachlor, heptachlor epoxide, HCH (including lindane), endosulfan, and toxaphene], chlordane, PCBs, and tributyltin.

(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 a 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 contains acute toxicity limitations to implement requirements of the Basin Plan. Specifically, the 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.

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.

The discharges at the Marine Terminal occur only after a significant storm event; they are not continuous. Intermittent discharges are likely to have short-term toxic effects; therefore at this facility, Paktank will be required to continue to conduct acute toxicity testing in accordance with the existing permit requirements.

4. **Specific Rationale for Each Numerical Effluent Limitation**

As described earlier in Section III, no discharge has occurred from this Paktank facility for 20 years, so no data exists to perform a reasonable potential analysis for the toxic parameters. In such circumstance, the SIP recommends that additional data is gathered prior to permit issuance, or that additional data is gathered during the term of the permit. Monitoring requirements are discussed in greater detail in Section 5, Monitoring Requirements.

Section 402(o) of the Clean Water Act and 40 CFR 122.44(l) require that effluent limits standards or conditions in re-issued permits are at least as stringent as in the existing permit. The following constituent limits are based on the existing permit requirements.

Constituent (units)	Daily Maximum Discharge Concentration Limitations	Rationale[2]
BOD_5 @ 20°C	30 mg/L	E
Oil and Grease	15 mg/L	E
Total Suspended Solids	150 mg/L	E
Turbidity	75 TU	E
Sulfides	1.0 mg/L	E
Phenols	1.0 mg/L	E
Benzene	1.0 µg/L	E
Toluene	10.0 µg/L	E
Xylene	10.0 µg/L	E
Ethylbenzene	10.0 µg/L	E
Arsenic[3]	0.05 mg/L	E
Cadmium[3]	0.01 mg/L	E
Chromium[3]	0.05 mg/L	E
Copper[3]	1.0 mg/L	E
Lead[3]	0.05 mg/L	E
Mercury[3]	0.002 mg/L	E
Selenium[3]	0.01 mg/L	E
Silver[3]	0.05 mg/L	E
Zinc[3]	5.0 mg/L	E

[2] E = Existing Permit
[3] Discharge limitations for these metals are expressed as total recoverable.

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5. **Monitoring Requirements**

For regulated parameters, the previous permit for Paktank required monitoring once per discharge event for conventional, certain nonconventional pollutants (turbidity, sulfides), and certain toxic pollutants (phenols, benzene, toluene, xylene, and ethylbenzene); monitoring requirements for metals and toxicity were annually. The existing permit also required that priority pollutants be monitored once during the lifetime of the permit. Since no discharge occurred over the previous permit term, these data are not available and thus are insufficient to perform the RPA prescribed in the SIP. According to Section 1.3 of the SIP, if data are unavailable or insufficient to conduct the RPA, the Regional Board must establish interim requirements that require additional monitoring for the pollutants in place of a WQBEL. Upon completion of the required monitoring, the Regional Board must use the gathered data to conduct the RPA and determine if a WQBEL is required. As prescribed in the Monitoring and Reporting Program, the Regional Board shall require periodic monitoring for pollutants for which criteria or objectives apply and for which no effluent limitations have been established.

Effluent data from Paktank operations is limited because discharges via the NPDES outfall are rare (the site has not discharged via the outfall for the past 20 years). In order to ensure that adequate data is provided to the Regional Board to evaluate reasonable potential, the Regional Board will require the Discharger to monitor the effluent directed to the POTW to provide data for the reasonable potential analysis should no discharge occur through the NPDES permitted outfall. As stated previously, all wastewaters and storm water at the Paktank facility is collected and treated. The treated wastes are directed to the POTW, but in the event the additional holding tanks provide insufficient storage, and the flow is too great, treated water is diverted to the NPDES outfall point. It is expected that the water discharged via the NPDES outfall point will be similar in characteristics to what is directed to the POTW, as all collected water is processed through the wastewater treatment system before being discharged (to the POTW or directly to the Los Angeles Inner Harbor).

(a) Effluent Monitoring

To demonstrate compliance with effluent limitations established in the permit, the monitoring requirements from the existing permit will be applied to the reissued permit. It should be noted that the existing permit allowed for reduction of the monitoring frequency for metals if the results from the first test met the effluent limitations. In order to ensure that sufficient data is collected to allow for a determination of reasonable potential, an opportunity for reduction in frequency is not provided in the reissued permit (i.e., annual monitoring for metals is required regardless of whether the first sample indicates compliance with effluent limitations).

Methyl Tertiary Butyl Ether (MTBE) is a compound added to gasoline to enhance octane and to comply with Clean Air Act mandates. MTBE has a high solubility in water and is slow to biodegrade, and with the high percentage found in gasoline, it is a source of contamination to local water supplies. Primary sources of MTBE include underground storage tanks, above ground storage tanks, pipelines, and fuel spills. In response to an Executive Order the Regional Board is requiring MTBE monitoring at the Paktank facility because it stores and distributes gasoline products.

The following shall constitute the effluent monitoring program for the outfall identified in the NPDES application:

Constituent	Units	Type of Sample	Sampling Frequency
Flow	gal/day	----	once per discharge event[1/]
Oil and Grease	mg/L	grab	once per discharge event[1/]
BOD5 20°C	mg/L	grab	once per discharge event[1/]
Total suspended solids	mg/L	grab	once per discharge event[1/]
Turbidity	TU	grab	once per discharge event[1/]
Sulfides	mg/L	grab	once per discharge event[1/]
Phenols	mg/L	grab	once per discharge event[1/]
Benzene	µg/L	grab	once per discharge event[1/]
Toluene	µg/L	grab	once per discharge event[1/]
Xylene	µg/L	grab	once per discharge event[1/]
Ethylbenzene	µg/L	grab	once per discharge event[1/]
Arsenic	µg/L	grab	annually
Cadmium	µg/L	grab	annually
Chromium	µg/L	grab	annually
Copper	µg/L	grab	annually
Lead	µg/L	grab	annually
Mercury	µg/L	grab	annually
Selenium	µg/L	grab	annually
Silver	µg/L	grab	annually
Zinc	µg/L	grab	annually
Methyl Tertiary Butyl Ether	µg/L	grab	annually
Toxicity-acute	% survival	grab	annually

1/ During periods of extended rainfall, no more than one sample per week need to be taken. Sampling shall be during the first hour of discharge. If, for safety reasons, a sample cannot be obtained during the first hour of discharge, a sample shall be obtained at the first safe opportunity, and the reason for the delay shall be included in the report.

(b) Effluent Monitoring for Reasonable Potential Determination

In compliance with the SIP, the Discharger is required to submit data sufficient for: (1) determining if WQBELs for priority pollutants are required, and (2) calculating effluent limitations, if required. Further, the SIP requires that the data be provided no later than May 2003. Therefore, the Discharger will be required to conduct an interim monitoring program for all CTR priority pollutants until April 2003. As described in the Monitoring and Reporting Program, monitoring reports must be submitted quarterly. The Discharger will be required to sample semiannually for calendar year 2002 and at least once in calendar year 2003, the results of which will

be reported in the first quarter report (due April 15).

This interim monitoring shall occur at the following locations:

- Effluent discharge point.
- Receiving water. The monitoring stations shall be at 50 feet upstream from the discharge point.

The required monitoring frequency and type of sample of the effluent and the receiving water for toxic pollutants are listed below:

Constituent	Units	Type of Sample	Monitoring Frequency
pH	Standard Units	grab	once per discharge event[1/]
Hardness (as $CaCO_3$)	mg/L	grab	once per discharge event[1/]
PAHs	µg/L	grab	semiannually[2/]
Antimony	µg/L	grab	semiannually[2/]
Nickel	µg/L	grab	semiannually[2/]
Thallium	µg/L	grab	semiannually[2/]
Cyanide	µg/L	grab	semiannually[2/]
Acenaphthene	µg/L	grab	semiannually[2/]
Anthracene	µg/L	grab	semiannually[2/]
Benzo (a) Anthracene	µg/L	grab	semiannually[2/]
Benzo (a) Pyrene	µg/L	grab	semiannually[2/]
Benzo (b) Fluoranthene	µg/L	grab	semiannually[2/]
Benzo (k) Flouranthene	µg/L	grab	semiannually[2/]
Chrysene	µg/L	grab	semiannually[2/]
Dibenzo (a,h) Anthracene	µg/L	grab	semiannually[2/]
Fluoranthene	µg/L	grab	semiannually[2/]
Fluorene	µg/L	grab	semiannually[2/]
Indeno (1,2,3-cd) Pyrene	µg/L	grab	semiannually[2/]
Pyrene	µg/L	grab	semiannually[2/]
Aldrin	µg/L	grab	semiannually[2/]
alpha-BHC	µg/L	grab	semiannually[2/]
beta-BHC	µg/L	grab	semiannually[2/]
Chlordane	µg/L	grab	semiannually[2/]
Dieldrin	µg/L	grab	semiannually[2/]
alpha-Endosulfan	µg/L	grab	semiannually[2/]
beta-Endosulfan	µg/L	grab	semiannually[2/]
Heptachlor	µg/L	grab	semiannually[2/]
Heptachlor Epoxide	µg/L	grab	semiannually[2/]
4,4-DDT	µg/L	grab	semiannually[2/]
4,4-DDE	µg/L	grab	semiannually[2/]
4,4-DDD	µg/L	grab	semiannually[2/]
Arochlor 1242	µg/L	grab	semiannually[2/]
Arochlor 1254	µg/L	grab	semiannually[2/]
Arochlor 1221	µg/L	grab	semiannually[2/]
Arochlor 1232	µg/L	grab	semiannually[2/]
Arochlor 1248	µg/L	grab	semiannually[2/]
Arochlor 1260	µg/L	grab	semiannually[2/]
Arochlor 1016	µg/L	grab	semiannually[2/]

Constituent	Units	Type of Sample	Monitoring Frequency
Toxaphene	µg/L	grab	semiannually[2l]
Beryllium	µg/L	grab	semiannually[2l]
Asbestos	Fibers/L	grab	semiannually[2l]
Acrolein	µg/L	grab	semiannually[2l]
Acrylonitrile	µg/L	grab	semiannually[2l]
Benzene	µg/L	grab	semiannually[2l]
Bromoform	µg/L	grab	semiannually[2l]
Carbon tetrachloride	µg/L	grab	semiannually[2l]
Chlorobenzene	µg/L	grab	semiannually[2l]
Chlorodibromomethane	µg/L	grab	semiannually[2l]
Chloroethane	µg/L	grab	semiannually[2l]
2-Chloroethylvinyl ether	µg/L	grab	semiannually[2l]
Chloroform	µg/L	grab	semiannually[2l]
Dichlorobromomethane	µg/L	grab	semiannually[2l]
1,1-Dichloroethane	µg/L	grab	semiannually[2l]
1,2-Dichloroethane	µg/L	grab	semiannually[2l]
1,1-Dichloroethylene	µg/L	grab	semiannually[2l]
1,2-Dichloropropane	µg/L	grab	semiannually[2l]
1,3-Dichloropropylene	µg/L	grab	semiannually[2l]
Ethylbenzene	µg/L	grab	semiannually[2l]
Methyl bromide	µg/L	grab	semiannually[2l]
Methyl chloride	µg/L	grab	semiannually[2l]
Methylene chloride	µg/L	grab	semiannually[2l]
1,1,2,2-Tetrachloroethane	µg/L	grab	semiannually[2l]
Tetrachloroethylene	µg/L	grab	semiannually[2l]
Toluene	µg/L	grab	semiannually[2l]
1,2-Trans-dichloroethylene	µg/L	grab	semiannually[2l]
1,1,1-Trichloroethane	µg/L	grab	semiannually[2l]
1,1,2-Trichloroethane	µg/L	grab	semiannually[2l]
Trichloroethylene	µg/L	grab	semiannually[2l]
Vinyl chloride	µg/L	grab	semiannually[2l]
2-Chlorophenol	µg/L	grab	semiannually[2l]
2,4-Dichlorophenol	µg/L	grab	semiannually[2l]
2,4-Dimethylphenol	µg/L	grab	semiannually[2l]
2-Methyl-4,6-Dinitrophenol	µg/L	grab	semiannually[2l]
2,4-Dinitrophenol	µg/L	grab	semiannually[2l]
2-Nitrophenol	µg/L	grab	semiannually[2l]
4-Nitrophenol	µg/L	grab	semiannually[2l]
3-Methyl-4-Chlorophenol	µg/L	grab	semiannually[2l]
Pentachlorophenol	µg/L	grab	semiannually[2l]
2,4,6-Trichlorophenol	µg/L	grab	semiannually[2l]
Acenaphthylene	µg/L	grab	semiannually[2l]
Benzidine	µg/L	grab	semiannually[2l]
Benzo (g,h,i) Perylene	µg/L	grab	semiannually[2l]
Bis (2-Chloroethoxy) Methane	µg/L	grab	semiannually[2l]
Bis (2-Chloroethyl) Ether	µg/L	grab	semiannually[2l]
Bis (2-Chloroisopropyl) Ether	µg/L	grab	semiannually[2l]
Bis (2-Ethylhexyl) Phthalate	µg/L	grab	semiannually[2l]
4-Bromophenyl Phenyl Ether	µg/L	grab	semiannually[2l]
Butylbenzyl Phthalate	µg/L	grab	semiannually[2l]
2-Chloronapthalene	µg/L	grab	semiannually[2l]

Constituent	Units	Type of Sample	Monitoring Frequency
4-Chlorophenyl Phenyl Ether	µg/L	grab	semiannually[2/]
1,2-Dichlorobenzene	µg/L	grab	semiannually[2/]
1,3-Dichlorobenzene	µg/L	grab	semiannually[2/]
1,4-Dichlorobenzene	µg/L	grab	semiannually[2/]
3,3-Dichlorobenzidine	µg/L	grab	semiannually[2/]
Diethyl Phthalate	µg/L	grab	semiannually[2/]
Dimethyl Phthalate	µg/L	grab	semiannually[2/]
Di-n-Butyl Phthalate	µg/L	grab	semiannually[2/]
2,4-Dinitrotoluene	µg/L	grab	semiannually[2/]
2,6-Dinitrotoluene	µg/L	grab	semiannually[2/]
Di-n-Octyl Phthalate	µg/L	grab	semiannually[2/]
1,2-Diphenylhydrazine	µg/L	grab	semiannually[2/]
Hexachlorobenzene	µg/L	grab	semiannually[2/]
Hexachlorobutadiene	µg/L	grab	semiannually[2/]
Hexachlorocyclopentadiene	µg/L	grab	semiannually[2/]
Hexachloroethane	µg/L	grab	semiannually[2/]
Isophorone	µg/L	grab	semiannually[2/]
Napthalene	µg/L	grab	semiannually[2/]
Nitrobenzene	µg/L	grab	semiannually[2/]
N-Nitrosodimethylamine	µg/L	grab	semiannually[2/]
N-Nitrosodi-n-Propylamine	µg/L	grab	semiannually[2/]
N-Nitrosodiphenylamine	µg/L	grab	semiannually[2/]
Phenanthrene	µg/L	grab	semiannually[2/]
1,2,4-Trichlorobenzene	µg/L	grab	semiannually[2/]
gamma-BHC	µg/L	grab	semiannually[2/]
delta-BHC	µg/L	grab	semiannually[2/]
Endosulfan Sulfate	µg/L	grab	semiannually[2/]
Endrin	µg/L	grab	semiannually[2/]
Endrin Aldehyde	µg/L	grab	semiannually[2/]

1/ During periods of extended rainfall, no more than one sample per week need to be taken. Sampling shall be during the first hour of discharge. If, for safety reasons, a sample cannot be obtained during the first hour of discharge, a sample shall be obtained at the first safe opportunity, and the reason for the delay shall be included in the report.

2/ Sampling shall be done during the first hour of discharge. For the dry seasons, if a sample cannot be obtained during this period, a sample shall be obtained at the next opportunity of sampling and the reason for the delay shall be included in the report to satisfy the semiannual monitoring requirement.

In accordance with Section 3 of the SIP, the Discharger is also required to conduct effluent/receiving water monitoring for the presence of the 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD or Dioxin) congeners. The monitoring shall be a grab sample with a minimum frequency of once during dry weather and once during wet weather for 1 year. 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 below.

Congeners	TEF
2,3,7,8-tetra CDD	1.0
1,2,3,7,8-penta CDD	1.0
1,2,3,4,7,8-hexa CDD	0.1
1,2,3,6,7,8-hexa CDD	0.1
1,2,3,7,8,9-hexa CDD	0.1
1,2,3,4,6,7,8-hepta CDD	0.01
Octa CDD	0.0001
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
1,2,3,4,7,8-hexa CDF	0.1
1,2,3,6,7,8-hexa CDF	0.1
1,2,3,7,8,9-hexa CDF	0.1
2,3,4,6,7,8-hexa CDF	0.1
1,2,3,4,6,7,8-hepta CDF	0.01
1,2,3,4,7,8,9-hepta CDF	0.01
Octa CDF	0.0001

(c) Receiving Water Monitoring

In addition to the requirements for monitoring the receiving water described in (b) above, Paktank will be required to perform general observations of the receiving water when discharges occur and report the observations in the quarterly monitoring report. The Regional Board in assessing potential impacts of future discharges will use data from these observations. If no discharge occurred during the observation period, this shall be reported. Observations shall be descriptive where applicable, such that colors, approximate amounts, or types of materials are apparent. The following observations are required:

- Tidal stage, time, and date of monitoring;
- Weather conditions;
- Color of water;
- Appearance of oil films or grease, or floatable materials;
- Extent of visible turbidity or color patches;
- Direction of tidal flow;
- Description of odor, if any, of the receiving water; and
- Presence and activity of California Least Tern and California Brown Pelican.