State of California CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, LOS ANGELES REGION

ORDER NO. R4-2005-0007 NPDES PERMIT NO. CA0064165

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT AND WASTE DISCHARGE REQUIREMENTS FOR VOPAK TERMINAL LONG BEACH, INCORPORATED

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

Background

- The Vopak Terminal Long Beach, Incorporated (hereinafter Vopak or Discharger) facility, formerly owned and operated by the Dow Chemical Company (hereinafter Dow) discharges compressor condensate, fire system testing water, and storm water under waste discharge requirements (WDRs) and a National Pollutant Discharge Elimination System (NPDES) permit contained in Order No. 98-019 (NPDES Permit No. CA0064165) adopted by the Regional Board on March 2, 1998. Order No. 98-019 expired on February 10, 2003.
- 2. Dow filed a Report of Waste Discharge (ROWD) and applied for renewal of the WDRs and NPDES permit. The notification of the transfer of the NPDES permit from Dow to Vopak was submitted on June 19, 2003. Vopak submitted application supplemental information during the development of the tentative Order for discharges from Vopak.

Purpose of Order

3. The purpose of this NPDES permit is to renew the WDRs for the Vopak facility. This NPDES permit regulates the discharge of compressor condensate, fire system testing water, and storm water, through Discharge Serial No. 001, a storm drain which then conveys the discharge to Cerritos Channel Outfall, Long Beach Inner Harbor, within the Estuary, a water of the United States. Discharge Serial No. 001 is located at Latitude 33° 45' 00" and Longitude 118° 14' 06".

Facility Description

4. Vopak is the owner and operator of a 10-acre, bulk chemical storage and transfer facility located at 3601 Dock Street, San Pedro, California. Figure 1 provides a facility location map. The facility receives shipments of bulk chemicals by ship and railcar, and stores raw products on site in 56 aboveground storage tanks. Products stored onsite include chlorinated solvents, nonhalogenated solvents, caustics, organic liquids, and hydrochloric acid. Tanker trucks are filled with the final products in a truck scale area and are distributed to businesses. Figure 2 provides a site map.

Discharge Description

- 5. Storm water is collected from the valved tank farm via a collection system and then flows by gravity to a centralized sump pump. The system has been active since 1998. The treatment system previously consisted of two, 10-micron pre-filters, and four, 2,000-pound granular activated carbon (GAC) vessels. The improvements included changing out the vessels and replacing them with four, new 2000-pound high-pressure GAC beds. The beds have been configured into two parallel systems of two beds in series with pre-filtration. The flow is split between the two parallel series of GAC beds. Recently, a 100-micron pre-filter has been added to the system. The system can treat a maximum of 200 gallons per minute (288,000 gallons per day).
- 6. The facility also has a valve network which isolates portions of the tank farms. This network includes a series of internal dikes that provide segregation of storm water and isolates spills. Four tanks have been designed to pump directly to a separate tank for off-site disposal of material inappropriate for discharge to surface waters.
- 7. The facility discharges compressor condensate, fire system testing water, and storm water generated from 377,000 square feet of asphalt. The compressor condensate and fire system testing water are incidental discharges that do not produce sufficient flows for offsite disposal. The maximum discharge flow rate (primarily storm water) is 3.25 million gallons annually. There are no connections to the sewer in the area where Vopak is located. The domestic wastewater generated onsite is collected and hauled offsite for disposal.

Storm Water Management

8. One objective of this Order is to protect the beneficial uses of receiving waters. To meet this objective, storm water runoff discharges from Vopak are subject to the requirements contained in this NPDES permit. In addition, the Discharger will be required to comply with all applicable provisions of the Storm Water Pollution Prevention Plan (Attachment A). This plan includes requirements to develop, implement, and when appropriate, update a Storm Water Pollution Prevention Plan (SWPPP) with the intent of preventing all pollutants from contacting storm water and with the intent of keeping all contaminants of concern from being discharged into receiving waters.

The SWPPP shall also specify Best Management Practices (BMPs) that will be implemented to reduce the discharge of pollutants in storm water to the maximum extent practicable. Further, the Discharger shall assure that storm water discharges from the facility would neither cause, nor contribute to, the exceedance of water quality standards and objectives, nor create conditions of nuisance in the receiving water.

Applicable Plans, Policies, and Regulations

9. 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) as amended on January 27, 1997 by Regional Board Resolution No. 97-02. The Basin Plan (i) designates beneficial uses for surface and groundwaters, (ii) sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to

the state antidegradation policy (*Statement of Policy with Respect to Maintaining High Quality Waters in California*, State Board Resolution No. 68-16, October 28, 1968), and (iii) describes implementation programs to protect all waters in the Region. In addition, the Basin Plan incorporates (by reference) applicable State and Regional Board plans and policies and other pertinent water quality policies and regulations. The Regional Board prepared the 1994 update of the Basin Plan to be consistent with all previously adopted State and Regional Board plans and policies. This Order implements the plans, policies and provisions of the Regional Board's Basin Plan.

- 10. Ammonia Basin Plan Amendment. The 1994 Basin Plan provided water quality objectives for ammonia to protect aquatic life, in Tables 3-1 through Tables 3-4. However, those ammonia objectives were revised on April 25, 2002, by the Regional Board with the adoption of Resolution No. 2002-011, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters (Including Enclosed Bays, Estuaries and Wetlands) with Beneficial Use Designations for <i>Protection of Aquatic Life*. The ammonia Basin Plan amendment was approved by the State Board, the Office of Administrative Law, and U.S. EPA on April 30, 2003, June 5, 2003, and June 19, 2003, respectively. Although the revised ammonia water quality objectives may be less stringent than those contained in the 1994 Basin Plan, they are still protective of aquatic life and are consistent with U.S. EPA's 1999 ammonia criteria update.
- 11. The Basin Plan contains water quality objectives and beneficial uses for inland surface waters and for the Pacific Ocean. Inland surface waters consist of rivers, streams, lakes, reservoirs, and inland wetlands. Beneficial uses for a surface water can be designated, whether or not they have been attained on a waterbody, in order to implement either federal or state mandates and goals (such as fishable and swimmable for regional waters).
- 12. 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 Cerritos Channel, Long Beach Inner Harbor:
 - Existing Uses: industrial service supply, navigation, non-contact water recreation, commercial/sport fishing, marine habitat, and rare, threatened and endangered species.

Potential Uses: water contact recreation and shellfish harvesting.

- 13. 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.
- 14. 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 allows for a schedule of compliance not to exceed five 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.

- 15. On March 2, 2000, the 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 the 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 limits (WQBELs) and to calculate the effluent limitations. Since the discharge location is within the Estuary, 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 Cerritos Channel, Long Beach Inner Harbor.
- 16. Under 40 CFR 122.44(d), Water Quality Standards and State Requirements, "Limitations must control all pollutants or pollutant parameters (either conventional, non-conventional, or toxic pollutants), which the Director [permitting authority] determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality." Where numeric effluent limitations for a pollutant or pollutant parameter have not been established in the applicable state water quality control plan, 40 CFR section 122.44(d)(1)(vi) specifies that WQBELs may be set based on U.S. EPA criteria, and may be supplemented where necessary by other relevant information to attain and maintain narrative water quality criteria, and to fully protect designated beneficial uses.
- 17. Effluent limitation guidelines requiring the application of best practicable control technology currently available (BPT), best conventional pollutant control technology (BCT), and best available technology economically achievable (BAT), were promulgated by the U.S. EPA for some pollutants in this discharge. Effluent limitations for pollutants not subject to the U.S. EPA effluent limitation guidelines are based on one of the following: Best Professional Judgment (BPJ) of BPT, BCT or BAT; current plant performance; or WQBELs. The WQBELs are based on the Basin Plan, other State plans and policies, or U.S. EPA water quality criteria which are taken from the CTR. These requirements, as they are met, will protect and maintain existing beneficial uses of the receiving water. The attached Fact Sheet for this Order includes specific bases for the effluent limitations.
- 18. 40 CFR section 122.45(f)(1) requires that except under certain conditions, all permit limits, standards, or prohibitions be expressed in terms of mass units. 40 CFR section 122.45(f)(2) allows the permit writer, at his its discretion, to express limits in additional units (e.g., concentration units). The regulations mandate that, where limits are expressed in more than one unit, the permittee must comply with both.

- 19. Generally, mass-based limits ensure that proper treatment, and not dilution, is employed to comply with the final effluent concentration limits. Concentration-based effluent limits, on the other hand, discourage the reduction in treatment efficiency during low-flow periods and require proper operation of the treatment units at all times. In the absence of concentration-based effluent limits, a permittee would be able to increase its effluent concentration (i.e., reduce its level of treatment) during low-flow periods and still meet its mass-based limits. To account for this, this permit includes mass and concentration limits.
- 20. State and Federal antibacksliding and antidegradation policies require 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) and 303 (d)(4) of the Clean Water Act (CWA) and in Title 40, 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.
- 21. Effluent limitations are established in accordance with sections 301, 304, 306, and 307 of the CWA, and amendments thereto. These requirements, as they are met, will maintain and protect the beneficial uses of the Cerritos Channel, Long Beach Inner Harbor.

Watershed Management Approach and Total Maximum Daily Loads (TMDLs)

- 22. The Regional Board has implemented the Watershed Management Approach to address water quality issues in the region. Watershed management may include diverse issues as defined by stakeholders to identify comprehensive solutions to protect, maintain, enhance, and restore water quality and beneficial uses. To achieve this goal, the Watershed Management Approach integrates the Regional Board's many diverse programs, particularly Total Maximum Daily Loads (TMDLs), to better assess cumulative impacts of pollutants from all point and non-point sources. A TMDL is a tool for implementing water quality standards and is based on the relationship between pollution sources and in-stream water quality conditions. The TMDL establishes the allowable loadings or other quantifiable parameters for a waterbody and thereby provides the basis to establish water quality-based controls. These controls should provide the pollution reduction necessary for a waterbody to meet water quality standards. This process facilitates the development of watershed-specific solutions that balance the environmental and economic impacts within the watershed. The TMDLs will establish waste load allocation (WLAs) and load allocations (LAs) for point and non-point sources, and will result in achieving water quality standards for the waterbody.
- 23. The Los Angeles/Long Beach Harbors are located in the southern portion of the Los Angeles Basin in the greater San Pedro Bay. These Harbors receive discharges from highly industrialized areas. The 2002 State Board's California 303(d) List classifies the Long Beach Inner Harbor and several water bodies within the Harbor, as impaired. These water bodies include: a portion of Main Channel, Southeast Basin, West Basin, Pier J, and the breakwater. Cerritos Channel is tributary to Long Beach Inner Harbor. The pollutants of concern, detected in the water column, in the sediment, and in the fish tissue, include: DDT, PAHs, sediment toxicity, benthic community effects, and PCBs. No TMDLs have been approved for the Long Beach Inner Harbor and therefore no conditions in the Order are based on TMDLs.

Data Availability and Reasonable Potential Monitoring

- 24. 40 CFR 122.44(d)(1)(ii) requires that each toxic pollutant be analyzed with respect to its reasonable potential when determining whether a discharge (1) causes; (2) has the reasonable potential to cause; or (3) contributes to the exceedance of a receiving water quality objective. This is done by performing a reasonable potential analysis (RPA) for each pollutant.
- 25. Section 1.3 of the SIP requires that a limit be imposed for a toxic pollutant if (1) the maximum effluent concentration (MEC) is greater than the most stringent CTR criterion, or (2) the background concentration is greater than the CTR criterion, or (3) other information is available that indicates the need for a WQBEL. Sufficient effluent data are needed for this analysis.
- 26. The RPA was performed for the priority pollutants for which effluent data were available. Effluent and receiving water data were provided pursuant to a February 22, 2002 letter from the Regional Board requiring guarterly monitoring of the discharged effluent for priority pollutants. Effluent data collected during the four guarters of 2002 were used to conduct the RPA. Receiving water data was submitted for the 2nd and 3rd quarters of 2002. In addition, samples for priority pollutants that were determined to be chemicals of concern at the site were collected as required by the existing permit. These data were also used to perform the RPA. Based on the RPA, the discharge through Discharge Serial No. 001 demonstrates statistical reasonable potential to exceed water guality criteria for copper, nickel, thallium, zinc, cyanide, tetrachloroethylene, and bis(2-ethylhexyl) phthalate. Thus, new effluent limitations and effluent monitoring requirements for these contaminants have been established in this permit. The maximum detected concentration of vinyl chloride (120 µg/L) exceeds the monthly average effluent limit in the current permit (36 µg/L which is based on the Ocean Plan). The CTR-based WQBELs for vinyl chloride are 525 µg/L and 1.635 µg/L respectively for the AMEL and the MDEL. Since, the CTR-based WQBELs are higher than the exiting permit limit, the exiting permit limit was retained to prevent backsliding.

Compliance Schedules and Interim Limitations

- 27. The Vopak facility may not be able to achieve immediate compliance with the WQBELs for copper, nickel, thallium, zinc, cyanide, and bis (2-ethylhexyl) phthalate contained in Section I.B.4. of this Order. Data submitted as self-monitoring reports indicate that these constituents have been detected at concentrations greater than the new limits proposed in this Order. Because the CTR-based effluent limits appear infeasible for the Discharger to achieve at this time, interim limits are contained in this Order.
- 28. The SIP requires that the Regional Board establish other interim requirements such as requiring the discharger to develop a pollutant minimization plan and/or source control measures and participate in the activities necessary to achieve the final effluent limitations. Therefore, the Discharger will be required to develop and implement a compliance plan that will identify the measures that will be taken to reduce the concentrations of copper, nickel, thallium, zinc, cyanide, and bis(2-ethylhexyl)phthalate in their discharge. This plan should evaluate options to achieve compliance with the revised permit limitations. These options can include,

for example, evaluating and updating available treatment unit processes, upgrading the system if necessary, and maintaining proper operation and maintenance of the treatment system. These interim limitations shall be effective until January 30, 2007, after which, the Discharger shall demonstrate compliance with the final effluent limitations.

CEQA and Notifications

- 29. The Regional Board has notified the Discharger and interested agencies and persons of its intent to issue waste discharge requirements for this discharge, and has provided them with an opportunity to submit their written views and recommendations.
- 30. The Regional Board, in a public hearing, heard and considered all comments pertaining to the discharge and to the tentative requirements.
- 31. This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Clean Water Act or amendments thereto, and is effective 30 days (February 25, 2005) from the date at the time of adoption in accordance with federal law, provided the Regional Administrator, U.S. EPA, has no objections.
- 32. Pursuant to California Water Code section 13320, any aggrieved party may seek review of this Order by filing a petition with the State Board. A petition must be sent to the State Water Resources Control Board, Office of Chief Counsel, ATTN: Elizabeth Miller Jennings, Senior Staff Counsel, 1001 I Street, 22nd Floor, Sacramento, California, 95814, within 30 days of adoption of this Order.
- 33. The issuance of waste discharge requirements for this discharge is exempt from the provisions of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code (CEQA) in accordance with the California Water Code, section 13389.

IT IS HEREBY ORDERED that Vopak Terminal Long Beach, Incorporated, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted there under, and the provisions of the Federal Clean Water Act and regulations and guidelines adopted there under, shall comply with the following:

I. DISCHARGE REQUIREMENTS

- A. Discharge Prohibitions
 - 1. The daily maximum flow of fire system test water, compressor condensate, and storm water through Discharge Serial No. 001 (Latitude 33° 45' 00" and Longitude 118° 14' 06") shall not exceed 288,000 gpd. The discharge of wastes from accidental spills or other sources is prohibited.
 - 2. Discharges of water, materials, thermal wastes, elevated temperature wastes, toxic wastes, deleterious substances, or wastes other than those authorized by this Order, to a storm drain system, Cerritos Channel, Long Beach Inner Harbor or waters of the State, are prohibited.

B. Effluent Limitations

The discharge of an effluent in excess of the following limitations is prohibited:

- 1. A pH value less than 6.5 or greater than 8.5.
- 2. Temperature:
 - a. A temperature greater than 86°F; and
 - b. The maximum temperature of the discharge shall not exceed the natural receiving water temperature by more than 20°F.
- 3. Toxicity limitations:
 - a. Acute Toxicity Limitation and Requirements
 - i. The acute toxicity of the effluent shall be such that (i) the average survival in the undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, and (ii) no single test shall have less than 70% survival.
 - ii. If either of the above requirements [Section I.B.3.a.(i)] is not met, the Discharger shall conduct six additional tests over a 6-week period. The Discharger shall ensure that they receive results of a failing acute toxicity test within 24 hours of the completion of the test, and the additional tests shall begin within 3 business days of the receipt of the result. If the additional tests indicate compliance with acute toxicity limitation, the Discharger may resume regular testing. However if the results of any two of the six accelerated tests are less than 90% survival, then the Discharger shall begin a Toxicity Identification Evaluation (TIE). The TIE shall include all reasonable steps to identify the source(s) of toxicity. Once the source(s) of toxicity is identified, the Discharger shall take all reasonable steps to reduce the toxicity to meet the objective.
 - iii. If the initial test and any of the additional six acute toxicity bioassay tests result in less than 70% survival, the Discharger shall immediately begin a TIE.
 - iv. The Discharger shall conduct acute toxicity monitoring as specified in Monitoring and Reporting Program No. 7873.
- 4. Final effluent limitations: In addition to the Requirements I.B.1 through I.B.3, the discharge of fire system test water, compressor condensate, and storm water from Discharge Serial No. 001 (Latitude 33° 45' 00" and Longitude 118° 14' 06") containing constituents in excess of the following limits is prohibited:

Constituent	Units ¹	Average Monthly Effluent Limit (AMEL)	Maximum Daily Effluent Limit (MDEL)
Total suspended solids	mg/L	50	60
Total suspended solids	lbs/day	120	360
Oil and grease	mg/L	10	15
	lbs/day	24	36
Settleable solids	ml/L	0.1	0.3
Turbidity	NTU	50	150
Phenols	mg/L		1
FILEHOIS	lbs/day		2.4
Sulfides	mg/L		1
Sundes	lbs/day		2.4
Residual chlorine	mg/L		0.1
	lbs/day		0.24
BOD₅20°C	mg/L	20	30
DOD520 0	lbs/day	48	72
Totrachloroothylopo	μg/L	8.9	17.8
Tetrachloroethylene	lbs/day	0.02	0.04
Vinul oblarida	μg/L	20 48 8.9 0.02 36 0.09 2.9	
Vinyl chloride	lbs/day	0.09	
Copper ^{2, 4}	μg/L	2.9	5.8
Copper	lbs/day	0.007	0.014
Nickel ^{2, 4}	μg/L	Effluent Limit (AMEL) 50 120 10 24 0.1 50 20 48 8.9 0.02 36 0.09 2.9	13.6
NICKEI	lbs/day	0.02	0.04
Thallium ^{2,4}	μg/L	6.3	12.6
Inallium	lbs/day	0.02	0.03
7 :2.4	μg/L	47.4	95.1
Zinc ^{2, 4}	lbs/day	0.11	0.23
0 : 1 2.4	μg/L		1.0
Cyanide ^{2,4}	lbs/day		0.002
-	μg/L	(AMEL) 50 120 10 24 0.1 50 20 48 8.9 0.02 36 0.09 2.9 0.007 6.8 0.02 47.4 0.11 0.5 0.001 5.9	100
Total petroleum hydrocarbons	lbs/day		0.24
Bis(2-ethylhexyl)phthalate ⁴	μg/L	5.9	11.8
	lbs/day		0.028

¹ Mass-based effluent limitations for pollutants are based on a maximum discharge flow rate of 288,000

² Effluent limitations for these metals are expressed as total recoverable.
³ The pH must remain within this range at all times.
⁴ The interim limits in Section I.B.5 below are applicable from the date of adoption of the Order through January 30, 2007.

5. Interim Effluent Limitations. From the effective date of this Order until January 30, 2007 the discharge of an effluent in excess of the following limitations is prohibited:

Constituent (units)	Daily Maximum Concentration	Mass ¹ (Ibs/day)
Copper ² (µg/L)	12	0.03
Nickel ² (µg/L)	54	0.13
Thallium ² (µg/L)	21	0.05
Zinc ² (μg/L)	480	1.15
Cyanide ² (μg/L)	18.5	0.04
Bis(2-ethylhexyl)phthalate (µg/L)	18.5	0.04

¹ The mass-based effluent limitations are based on a flow rate of 288,000 gpd. ² Discharge limitations for this metal is expressed as total recoverable.

Discharges after January 30, 2007 must comply with the limits for these constituents stipulated in the table in section I.B.4.

- C. Receiving Water Limitations
 - 1. The discharge shall not cause the following conditions to exist in the receiving waters:
 - Floating, suspended, or deposited macroscopic particulate matter or foam;
 - b. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;
 - c. Visible, floating, suspended or deposited oil or other products of petroleum origin;
 - d. Bottom deposits or aquatic growths; or,
 - e. Toxic or other deleterious substances present in concentrations or quantities that cause deleterious effects on aquatic biota, wildlife, or waterfowl or render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.
 - The discharge shall not cause nuisance or adversely affect beneficial uses of the receiving water.
 - 3. No discharge shall cause a surface water temperature rise greater than 5°F above the natural temperature of the receiving waters at any time or place.
 - 4. The discharge shall not cause the following limits to be exceeded in the receiving waters at any place within the waterbody of the receiving waters:

- a. The pH shall not be depressed below 6.5 nor raised above 8.5, nor caused to vary from normal ambient pH levels by more than 0.5 units;
- b. Dissolved oxygen shall not be less than 5.0 mg/L anytime, and the median dissolved oxygen concentration for any three consecutive months shall not be less than 80 percent of the dissolved oxygen content at saturation;
- c. Dissolved sulfide shall not be greater than 0.1 mg/L;
- d. The ammonia in the 1994 Basin Plan were revised by Regional Board Resolution No. 2002-011, adopted on April 28, 2002, to be consistent with the 1999 U.S. EPA update on ammonia criteria. Regional Board Resolution No. 2002-011 was approved by State Board, OAL and U.S. EPA on April 30, 2003, June 5, 2003, and June 19, 2003, respectively and is now in effect. Total ammonia (as N) shall not exceed concentrations specified in the Regional Board Resolution 2002-011.
- 5. The discharge shall not cause a violation of any applicable water quality standards for receiving waters adopted by the Regional Board or State Board. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the Regional Board will revise or modify this Order in accordance with such standards.
- 6. The discharge shall not cause the following to be present in receiving waters:
 - Biostimulatory substances at concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses;
 - b. Chemical substances in amounts that adversely affect any designated beneficial use;
 - c. Oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the receiving water or on objects in the water;
 - d. Suspended or settleable materials in concentrations that cause nuisance or adversely affect beneficial uses;
 - e. Taste or odor-producing substances in concentrations that alter the natural taste, odor, and/or color of fish, shellfish, or other edible aquatic resources; cause nuisance; or adversely affect beneficial uses;
 - f. Substances that result in increases of BOD₅20°C that adversely affect beneficial uses;

- 7. The discharge shall not alter the color, create a visual contrast with the natural appearance, nor cause aesthetically undesirable discoloration of the receiving waters.
- 8. The discharge shall not degrade surface water communities and population including vertebrate, invertebrate, and plant species.
- 9. The discharge shall not damage, discolor, nor cause formation of sludge deposits on flood control structures or facilities nor overload their design capacity.
- 10. The discharge shall not cause problems associated with breeding of mosquitoes, gnats, black flies, midges, or other pests.

II. REQUIREMENTS

A. Pollution Prevention and Best Management Practices Plans

The Discharger shall develop, within 90 days of the effective date of this Order, the following plans. If necessary, the plans shall be updated to address any changes in operation and/or management of the facility. Updated plans shall be submitted to the Regional Board within 30 days of revision.

- 1. A Storm Water Pollution Prevention Plan (SWPPP) that describes site-specific management practices for minimizing storm water runoff from being contaminated, and for preventing contaminated storm water runoff from being discharged to waters of the State. The SWPPP shall be developed in accordance with the requirements contained in Attachment A and submitted to the Regional Board within 90 days of the effective date of this Order.
- 2. A Best Management Practices Plan (BMPP) that entails site-specific plans and procedures implemented and/or to be implemented to prevent hazardous waste/material from being discharged to waters of the State. The BMPP shall be consistent with the general guidance contained in the EPA *Guidance Manual for Developing Best Management Practices (BMPs)* (EPA 833-B-93-004). In particular, a risk assessment of each area identified by the Discharger shall be performed to determine the potential of hazardous or toxic waste/material discharge to surface waters. The BMPP will establish site-specific procedures that will ensure proper operation and maintenance of equipment and storage areas, to ensure that unauthorized non-storm water discharges do not occur at the Vopak facility.

Both plans shall cover all areas of the facility and shall include an updated drainage map for the facility. The discharger shall identify on a map of appropriate scale the areas that contribute runoff to the permitted discharge points; describe the activities in each area and the potential for contamination of storm water runoff and the discharge of hazardous waste/material; and address the feasibility of containment and/or treatment of the storm

water. The plans shall be reviewed annually and at the same time. Updated information shall be submitted within 30 days of revision.

- B. Pursuant to the requirements of 40 CFR 122.42(a), the Discharger must notify the Board as soon as it knows, or has reason to believe (1) that it has begun or expected to begin, to use or manufacture a toxic pollutant not reported in the permit application, or (2) a discharge of toxic pollutant not limited by this Order has occurred, or will occur, in concentrations that exceed the specified limitations in 40 CFR 122.42(a).
- C. Compliance Plan
 - 1. The Discharger shall develop and implement a compliance plan that will identify the measures that will be taken to reduce the concentrations of copper, nickel, thallium, zinc, cyanide, and bis(2-ethylhexyl)phthalate in their discharge. This plan must evaluate options to achieve compliance with the permit limitations specified in provision I.B.4.
 - 2. The Discharger shall submit quarterly reports to describe the progress of studies and or actions undertaken to reduce copper, nickel, thallium, zinc, cyanide, and bis(2-ethylhexyl)phthalate in the effluent, and to achieve compliance with the limits in this Order by the deadline specified in provision I.B.5. The Regional Board shall receive the first quarterly progress report August 1, 2005, as required in Section I.A of Monitoring and Reporting Program No. 7873.
 - 3. The interim limits stipulated shall be in effect for a period not to extend beyond January 30, 2007. Thereafter, the Discharger shall comply with the limitations specified in Section I.B.4.a. of this Order
 - 4. The Discharger must notify the Regional Board's Executive Officer, in writing, no later than 14 days following each interim date, compliance implementation event, or quarterly report, of the Discharger's compliance or noncompliance with the interim requirements.
- D. The Discharger shall at all times properly operate and maintain all facilities and systems installed or used to achieve compliance with this Order.
- E. The Discharger shall comply with the waste load allocations that will be developed from the TMDL process for the 303(d)-listed pollutants.
- F. The discharge of any product registered under the Federal Insecticide, Fungicide, and Rodenticide Act to any waste stream which may ultimately be released to waters of the United States, is prohibited unless specifically authorized elsewhere in this permit or another NPDES permit. This requirement is not applicable to products used for lawn and agricultural purposes.

- G. The discharge of any waste resulting from the combustion of toxic or hazardous wastes to any waste stream which ultimately discharges to waters of the United States is prohibited, unless specifically authorized elsewhere in this permit.
- H. The Discharger shall notify the Executive Officer in writing no later than 6 months prior to the planned discharge of any chemical, other than chlorine or other product previously reported to the Executive Officer, which may be toxic to aquatic life. Such notification shall include:
 - a. Name and general composition of the chemical,
 - b. Frequency of use,
 - c. Quantities to be used,
 - d. Proposed discharge concentrations, and
 - e. U.S. EPA registration number, if applicable.

No discharge of such chemical shall be made prior to the Executive Officer's approval.

I. The Regional Board and U.S. EPA shall be notified immediately, by telephone, of the presence of adverse conditions in the receiving waters as a result of wastes discharged; written confirmation shall follow as soon as possible but not later than five working days after occurrence.

III. PROVISIONS

- A. This Order includes the attached *Standard Provisions and General Monitoring and Reporting Requirements* (Standard Provisions, Attachment N). If there is any conflict between provisions stated herein and the attached Standard Provisions, those provisions stated herein shall prevail.
- B. This Order includes the attached Monitoring and Reporting Program No. 7873. If there is any conflict between provisions stated in the Monitoring and Reporting Program and the Standard Provisions, those provisions stated in the former shall prevail.
- C. This Order may be modified, revoked, reissued, or terminated in accordance with the provisions of 40 CFR sections 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.
- D. 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 Board to local agencies.

- E. Discharge of wastes to any point other than specifically described in this Order and permit is prohibited and constitutes a violation thereof.
- F. 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, and 423 of the Federal Clean Water Act and amendments thereto.
- G. Compliance Determination
 - 1. Compliance with single constituent effluent limitation If the concentration of the pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported Minimum Level (see Reporting Requirement II.C. of *M&RP* No. CI-7873), then the Discharger is out of compliance.
 - 2. Compliance with monthly average limitations In determining compliance with monthly average limitations, the following provisions shall apply to all constituents:
 - a. If the analytical result of a single sample, monitored monthly, quarterly, semiannually, or annually, does not exceed the monthly average limit for that constituent, the Discharger has demonstrated compliance with the monthly average limit for that month.
 - b. If the analytical result of a single sample, monitored monthly, quarterly, semiannually, or annually, exceeds the monthly average limit for any constituent, the Discharger shall collect up to four additional samples at approximately equal intervals during the month. All analytical results shall be reported in the monitoring report for that month, or 45 days after results for the additional samples were received, whichever is later.

When all sample results are greater than or equal to the reported Minimum Level (see Reporting Requirement II.C. of M&RP), the numerical average of the analytical results of these samples will be used for compliance determination.

When one or more sample results are reported as "Not-Detected (ND)" or "Detected, but Not Quantified (DNQ)" (see Reporting Requirement III. D. of M&RP), the median value of these samples shall be used for compliance determination. If one or both of the middle values is ND or DNQ, the median shall be the lower of the two middle values.

c. In the event of noncompliance with a monthly average effluent limitation, the sampling frequency for that constituent shall be increased to weekly and shall continue at this level until compliance with the monthly average effluent limitation has been demonstrated for 1 month.

- d. If only one sample was obtained for the month or more than a monthly period and the result exceed the monthly average, then the Discharger is in violation of the monthly average limit.
- 3. Compliance with effluent limitations expressed as a sum of several constituents If the sum of the individual pollutant concentrations is greater than the effluent limitation, then the Discharger is out of compliance. In calculating the sum of the concentrations of a group of pollutants, consider constituents reported as ND or DNQ to have concentrations equal to zero, provided that the applicable ML is used.
- 4. Compliance with effluent limitations expressed as a median in determining compliance with a median limitation, the analytical results in a set of data will be arranged in order of magnitude (either increasing or decreasing order); and
 - a. If the number of measurements (n) is odd, then the median will be calculated as = $X_{(n+1)/2}$, or
 - b. If the number of measurements (n) is even, then the median will be calculated $as = [X_{n/2} + X_{(n/2)+1}]$, i.e. the midpoint between the n/2 and n/2+1 data points.
- H. In calculating mass emission rates from the monthly average concentrations, use one half of the method detection limit for "Not Detected" (ND) and the estimated concentration for "Detected, but Not Quantified" (DNQ) for the calculation of the monthly average concentration. To be consistent with section III.H.3., if all pollutants belonging to the same group are reported as ND or DNQ, the sum of the individual pollutant concentrations should be considered as zero for the calculation of the monthly average concentration.

IV. REOPENERS

- A. 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.
- B. This Order may be reopened and modified, to incorporate in accordance with the provisions set forth in 40 CFR Parts 122 and 124, to include requirements for the implementation of the watershed management approach.
- C. This Order may be reopened and modified, in accordance with the provisions set forth in 40 CFR Parts 122 and 124, to include new MLs.
- D. This Order may be reopened and modified to revise effluent limitations as a result of future Basin Plan Amendments, such as an update of an objective or the adoption of a TMDL for the Cerritos Channel, Long Beach Inner Harbor.

E. This Order may also be reopened and modified, revoked, and reissued or terminated in accordance with the provisions of 40 CFR sections 122.44, 122.62 to 122.64, 125.62, and 125.64. Causes for taking such actions include, but are not limited to, failure to comply with any condition of this Order and permit, and endangerment to human health or the environment resulting from the permitted activity.

V. EXPIRATION DATE

This Order expires on December 10, 2009.

The Discharger must file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, not later than 180 days in advance of such date as application for issuance of new waste discharge requirements.

VI. RESCISSION

Order No. 98-019, adopted by this Regional Board on March 2, 1998, is hereby rescinded except for enforcement purposes.

I, Jonathan Bishop, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on January 27, 2005.

Jonathan S. Bishop Executive Officer