

## Los Angeles Regional Water Quality Control Board

March 13, 2014

Mr. Eric Conard  
Petro-Diamond Terminal Company  
Petro-Diamond Marine Terminal  
1920 Lugger Way  
Long Beach, CA 90813

VIA CERTIFIED MAIL  
RETURN RECEIPT REQUESTED  
NO. 7000 0520 0024 7127 9068

Dear Mr. Conard:

**TRANSMITTAL OF THE WASTE DISCHARGE REQUIREMENTS (WDRs) AND NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR PETRO-DIAMOND TERMINAL COMPANY, PETRO-DIAMOND MARINE TERMINAL, (NPDES NO. CA0059358, CI NO. 6677)**

Our letter dated January 7, 2014, transmitted the tentative waste discharge requirements (WDRs) for renewal of your permit for the discharge of wastes under the National Pollutant Discharge Elimination System (NPDES) Program.

Pursuant to Division 7 of the California Water Code, this Regional Water Board at a public hearing held on March 6, 2014, reviewed the proposed requirements, considered all factors in the case, and adopted Order No. R4-2014-0031 (NPDES permit).

Order R4-2014-0031 serves as an NPDES permit, and it expires on June 30, 2019. Section 13376 of the California Water Code requires that an application/Report of Waste Discharge for a new permit must be filed at least 180 days before the expiration date.

You are required to implement the Monitoring and Reporting Program (MRP) on the effective date (May 1, 2014) of Order No. R4-2014-0031. Your first monitoring report for the period of May 2014 through June 2014, is due by August 1, 2014. Petro-Diamond will electronically submit Self-Monitoring Reports (SMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) (<http://www.waterboards.ca.gov/ciwqs/index.html>).

When submitting monitoring or technical reports to the Regional Water Board per these requirements, please include a reference to Compliance File CI-6677 and NPDES No. CA0059358, which will assure that the reports, are directed to the appropriate file and staff.

We are sending the paper copy of the Permit to the Discharger only. For those on the mailing list or other interested parties who would like access to a copy of the Permit, please go to the Regional Water Board's website at:

[http://www.waterboards.ca.gov/losangeles/board\\_decisions/adopted\\_orders/by\\_permits\\_tools.shtml](http://www.waterboards.ca.gov/losangeles/board_decisions/adopted_orders/by_permits_tools.shtml).

CHARLES STRINGER, CHAIR | SAMUEL UNGER, EXECUTIVE OFFICER

320 West 4th St., Suite 200, Los Angeles, CA 90013 | [www.waterboards.ca.gov/losangeles](http://www.waterboards.ca.gov/losangeles)

Mr. Eric Conard  
Petro-Diamond Terminal Company  
Petro-Diamond Marine Terminal

- 2 -

March 13, 2014

If you have any questions, please contact Mazhar Ali at (213) 576-6652.

Sincerely,



Cassandra D. Owens, Chief  
Industrial Permitting Unit

Enclosures

cc: Via E-mail Only

Environmental Protection Agency, Region 9, Permits Branch (WTR-5)  
U.S. Army Corps of Engineers  
NOAA, National Marine Fisheries Service  
Department of Interior, U.S. Fish and Wildlife Service  
NPDES Wastewater Unit, State Water Resources Control Board, Division of Water Quality  
Mr. William Paznokas, Department of Fish and Game, Region 5  
Department of Public Health, Sanitary Engineering Section  
California State Parks and Recreation  
California Coastal Commission, South Coast Region  
Los Angeles County, Department of Public Works, Waste Management Division  
Los Angeles County, Department of Public Health  
Ms. Kirsten James, Heal the Bay  
Mr. Peter Shellenbarger, Heal the Bay  
Ms. Liz Crosson, Los Angeles Waterkeeper  
Ms. Anna Kheyfets, Natural Resources Defense Council  
Ms. Ann.LaDuca, Tetra Tech  
Mr. Jae Kim, Tetra Tech

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

## LOS ANGELES REGION

320 W. 4<sup>th</sup> Street, Suite 200, Los Angeles, California 90013  
Phone (213) 576 - 6600 • Fax (213) 576 - 6640  
<http://www.waterboards.ca.gov>

**ORDER R4-2014-0031**  
**NPDES NO. CA0059358**

### **WASTE DISCHARGE REQUIREMENTS FOR PETRO-DIAMOND TERMINAL COMPANY PETRO-DIAMOND MARINE TERMINAL**

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

**Table 1. Discharger Information**

<b>Discharger</b>	Petro-Diamond Terminal Company
<b>Name of Facility</b>	Petro-Diamond Marine Terminal
<b>Facility Address</b>	1920 Luger Way
	Long Beach, CA 90813
	Los Angeles County

**Table 2. Discharge Location**

<b>Discharge Point</b>	<b>Effluent Description</b>	<b>Discharge Point Latitude</b>	<b>Discharge Point Longitude</b>	<b>Receiving Water</b>
001	Storm water	33° 46' 27" N	118° 13' 07" W	Channel No. 2, Long Beach Inner Harbor

**Table 3. Administrative Information**

This Order was adopted by the Los Angeles Regional Water Quality Control Board on:	<b>March 6, 2014</b>
This Order shall become effective on:	<b>May 1, 2014</b>
This Order shall expire on:	<b>April 30, 2019</b>
The Discharger shall file a Report of Waste Discharge as an application for renewal reissuance of waste discharge requirements in accordance with title 23, California Code of Regulations, and an application for reissuance of a National Pollutant Discharge Elimination System (NPDES) permit no later than:	<b>180 days prior to the Order expiration date</b>
The U.S. Environmental Protection Agency (USEPA) and the Los Angeles Regional Water Quality Control Board have classified this discharge as follows:	<b>Minor Discharge</b>

January 7, 2014  
Revised; March 20, 2014

I, Samuel Unger, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on March 6, 2014.

Samuel Unger  
Samuel Unger, P.E.  
Executive Officer

January 7, 2014

### Contents

I.	Facility Information .....	5
II.	Findings .....	5
III.	Discharge Prohibitions.....	6
IV.	Effluent Limitations and Discharge Specifications .....	6
	A. Effluent Limitations – Discharge Point 001 .....	6
	B. Interim Effluent Limitations) – Not Applicable .....	8
	C. Land Discharge Specifications) – Not Applicable .....	8
	D. Recycling Specifications) – Not Applicable .....	8
V.	Receiving Water Limitations .....	8
	A. Surface Water Limitations.....	8
	B. Groundwater Limitations) – Not Applicable.....	10
VI.	Provisions .....	10
	A. Standard Provisions.....	10
	B. Monitoring and Reporting Program (MRP) Requirements .....	13
	C. Special Provisions.....	13
VII.	Compliance Determination .....	19

### Tables

Table 1.	Discharger Information .....	1
Table 2.	Discharge Location.....	1
Table 3.	Administrative Information .....	1
Table 4.	Effluent Limitations – Discharge Point 001 (Storm Water).....	7
Table 5.	Monitoring Thresholds .....	15
Table 6.	Sediment Chemistry Monitoring Requirements <sup>1</sup> .....	16
Table 7.	Sediment Monitoring Requirements .....	17

**Attachments**

Attachment A – Definitions ..... A-1  
Attachment B – Aerial View of Petro-Diamond Terminal Facility ..... B-1  
Attachment C-1 – Rain Water Flow Diagram ..... C-1  
Attachment C-2 – Water Flow Diagram ..... C-2  
Attachment D – Standard Provisions ..... D-1  
Attachment E – Monitoring and Reporting Program (MRP No. 6677) ..... E-1  
Attachment F – Fact Sheet ..... F-1  
Attachment G – Storm Water Pollution Prevention Plan Requirements ..... G-1  
Attachment H – State Water Board Minimum Levels ..... H-1  
Attachment I – List of Priority Pollutants ..... I-1

## I. FACILITY INFORMATION

Information describing the Petro-Diamond Terminal Company, Petro-Diamond Marine Terminal (Facility) is summarized in Table 1 and in sections I and II of the Fact Sheet (Attachment F). Section I of the Fact Sheet also includes information regarding the Facility's permit application.

## II. FINDINGS

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

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

**B. Background and Rationale for Requirements.** The Los Angeles Regional Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for Order requirements, is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A through E and G through I are also incorporated into this Order.

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

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

THEREFORE, IT IS HEREBY ORDERED, that this Order supersedes Order R4-2008-0016 except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the CWA and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order. This action in no way prevents the Los Angeles Regional Water Board from taking enforcement action for past violations of the previous Order.

### **III. DISCHARGE PROHIBITIONS**

- A.** Wastes discharged shall be limited to 0.12 million gallons per day (MGD) of storm water as described in the findings. The discharge of wastes from accidental spills or other sources is prohibited.
- B.** Discharges of water, materials, thermal wastes, elevated temperature wastes, toxic wastes, deleterious substances, or wastes other than those authorized by this Order, to a storm drain system, the Long Beach Inner Harbor, or other waters of the State, are prohibited.
- C.** Neither the treatment nor the discharge of pollutants shall create pollution, contamination, or a nuisance as defined by Section 13050 of the Water Code.
- D.** Wastes discharged shall not contain any substances in concentrations toxic to human, animal, plant, or aquatic life.
- E.** The discharge shall not cause a violation of any applicable water quality standards for receiving waters adopted by the Regional Water Board or the State Water Resources Control Board as required by the Federal CWA and regulations adopted thereunder.
- F.** The discharge of any radiological, chemical, or biological warfare agent or high level radiological waste is prohibited.
- G.** Any discharge of wastes at any point(s) other than specifically described in this Order is prohibited, and constitutes a violation of the Order.

### **IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS**

#### **A. Effluent Limitations – Discharge Point 001**

##### **1. Final Effluent Limitations – Discharge Point 001**

- a.** The Discharger shall maintain compliance with the following effluent limitations at Discharge Point 001, with compliance measured at Monitoring Location EFF-001, as described in the attached Monitoring and Reporting Program (MRP) (Attachment E):



**Table 4. Effluent Limitations – Discharge Point 001 (Storm Water)**

Parameter	Units	Effluent Limitations			Performance Goals
		Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Biochemical Oxygen Demand (BOD), 5-day @ 20 °C	mg/L	30	—	—	—
	lbs/day <sup>1</sup>	30	—	—	—
Oil and Grease	mg/L	15	—	—	—
	lbs/day <sup>1</sup>	15	—	—	—
Total Suspended Solids (TSS)	mg/L	75	—	—	—
	lbs/day <sup>1</sup>	75	—	—	—
pH	S.U.	—	6.5	8.5	—
Settleable Solids	ml/L	0.3	—	—	—
Temperature	°F	—	—	86	—
Turbidity	NTU	75	—	—	—
Chronic Toxicity <sup>7</sup>	Pass or Fail, % Effect	Pass or % Effect <50	—	—	—
Phenolic Compounds <sup>2</sup>	mg/L	1.0	—	—	—
	lbs/day <sup>1</sup>	1.0	—	—	—
Copper, Total Recoverable <sup>3,4</sup>	µg/L	6.1	—	—	—
	lbs/day <sup>1</sup>	0.006	—	—	—
Lead, Total Recoverable <sup>3,4</sup>	µg/L	14	—	—	—
	lbs/day <sup>1</sup>	0.014	—	—	—
Zinc, Total Recoverable <sup>3,4</sup>	µg/L	141	—	—	—
	lbs/day <sup>1</sup>	0.141	—	—	—
4,4'-DDT <sup>3,4</sup>	µg/L	0.001	—	—	—
	lbs/day <sup>1</sup>	1E-06	—	—	—
PCBs <sup>3,4,5</sup>	µg/L	0.0003	—	—	—
	lbs/day <sup>1</sup>	3E-07	—	—	—
Benzo(a)pyrene <sup>4</sup>	µg/L	—	—	—	0.049 <sup>6,8</sup>
Chrysene <sup>4</sup>	µg/L	—	—	—	0.049 <sup>6,8</sup>

<sup>1</sup> Mass-based effluent limitations are based upon a maximum discharge flow rate of 0.12 MGD and calculated as follows:

Mass (lbs/day) = Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor)

<sup>2</sup> Phenolic compounds include the sum of the following individual chlorinated and non-chlorinated phenolic compounds: 2-chlorophenol; 2-nitrophenol; phenol; 2,4-dimethylphenol; 2,4-dichlorophenol; 2,4,6-trichlorophenol; 4-chloro-3-methylphenol; 2,4-dinitrophenol; 2-methyl-4,6-dinitrophenol; pentachlorophenol; and 4-nitrophenol.

<sup>3</sup> The effluent limitations are based on the USEPA approved Harbor Toxics TMDL WLAs and calculated using the CTR-SIP procedures.

<sup>4</sup> During each reporting period, if effluent monitoring results exceed both a TSS effluent limit and a CTR TMDL-based effluent limit or performance goal for copper, lead, zinc, 4,4-DDT, total PCBs, benzo(a)pyrene, or chrysene, then the Discharger has not demonstrated attainment with the interim sediment allocations stipulated by the Harbor Toxics TMDL, Resolution No. R11-008, page 11, Item 3, and implementation of the effluent sediment monitoring program is required for that priority pollutant. Sediment monitoring of the effluent shall begin during the first discharge event following the effluent exceedances. An effluent sediment monitoring result at or below the interim sediment allocation (Monitoring Thresholds) in Table 10, page 28 of this Order, demonstrates attainment with the interim sediment allocation and additional sediment monitoring of the effluent is not required. A sediment monitoring result that exceeds the interim sediment allocation requires additional sediment monitoring of the effluent during discharge but not more frequently than once per year until the three-year average concentration for sediment monitoring results is at or below the interim sediment allocation.

- <sup>5</sup> Total PCBs (polychlorinated biphenyls) means the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260.
- <sup>6</sup> CTR human health criteria were not established for total PAHs. Therefore, the performance goals are based on the CTR human health criteria for the individual PAHs; benzo(a)pyrene and chrysene. The benzo(a)pyrene and chrysene were selected because the State's 2010 303(d) List classifies the Long Beach Inner Harbor as impaired for these PAH compounds. The performance goals prescribed in this Order are not enforceable effluent limitations or standards. They act as triggers to determine when sediment monitoring is required for this category of pollutants.
- <sup>7</sup> "Pass" or "Fail" and "% Effect" for Maximum Daily Effluent Limitations (MDEL). The Discharger shall conduct chronic toxicity monitoring as specified in the MRP. The Discharger demonstrates compliance with the chronic toxicity MDELs if the chronic toxicity testing result meets one of the following:
- <sup>8</sup> i. The chronic toxicity testing result is "Pass"; or
  - ii. The percent effect is less than 50 if the chronic toxicity result is "Fail".
- 8 samples analyzed must be unfiltered

**B. Interim Effluent Limitations – Not Applicable**

**C. Land Discharge Specifications – Not Applicable**

**D. Recycling Specifications – Not Applicable**

**V. RECEIVING WATER LIMITATIONS**

**A. Surface Water Limitations**

Receiving water limitations are based on water quality objectives contained in the Basin Plan and are a required part of this Order. The discharge shall not cause the following in the Long Beach Inner Harbor:

1. The normal ambient pH to fall below 6.5 nor exceed 8.5 units nor vary from normal ambient pH levels by more than 0.5 units.
2. Surface water temperature to rise greater than 5°F above the natural temperature of the receiving waters at any time or place. At no time the temperature be raised above 80° F as a result of waste discharged.
3. Water Contact Standards

**a. State/Regional Water Board Water Contact Standards**

In marine waters designated for Water Contact Recreation (REC-1), the waste discharged shall not cause the following bacterial standards to be exceeded in the receiving water:

- i. Geometric Mean Limits
  - (a) Total coliform density shall not exceed 1,000/100 ml.
  - (b) Fecal coliform density shall not exceed 200/100 ml.
  - (c) Enterococcus density shall not exceed 35/100 ml.
- ii. Single Sample Maximum (SSM)

- (a) Total coliform density shall not exceed 10,000/100 ml.
- (b) Fecal coliform density shall not exceed 400/100 ml.
- (c) Enterococcus density shall not exceed 104/100 ml.
- (d) Total coliform density shall not exceed 1,000/100 ml, if the ratio of fecal-to-total coliform exceeds 0.1.

The geometric mean values should be calculated based on a statistically sufficient number of samples (generally not less than 5 samples equally spaced over a 30-day period).

If any of the single sample limits are exceeded, the Regional Water Board may require repeat sampling on a daily basis until the sample falls below the single sample limit in order to determine the persistence of the exceedance.

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

- 4. The concentration of dissolved oxygen to fall below 5.0 mg/L anytime, and the median dissolved oxygen concentration for any three consecutive months to be less than 80 percent of the dissolved oxygen content at saturation.
- 5. Exceedance of the total ammonia (as N) concentrations specified in the Regional Water Board Resolution 2004-022, adopted on March 4, 2004, *Amendment to the Water Quality Plan for the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters Not Characteristic of Freshwater (including Enclosed Bays, Estuaries, and Wetlands) with the Beneficial Use Designations for Protection of "Aquatic Life"*.
- 6. The presence of visible, floating, suspended or deposited macroscopic particulate matter or foam.
- 7. 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.
- 8. Suspended or settleable materials, chemical substances or pesticides in amounts that cause nuisance or adversely affect any designated beneficial use.
- 9. Toxic or other deleterious substances in concentrations or quantities which 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.
- 10. Accumulation of bottom deposits or aquatic growths.
- 11. Biostimulatory substances at concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses.

12. The presence of substances that result in increases of BOD that adversely affect beneficial uses.
13. 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.
14. Alteration of turbidity, or apparent color beyond present natural background levels.
15. Damage, discolor, or formation of sludge deposits on flood control structures or facilities, or overloading of the design capacity.
16. Degradation of surface water communities and populations including vertebrate, invertebrate, and plant species.
17. Problems associated with breeding of mosquitoes, gnats, black flies, midges, or other pests.
18. Nuisance, or adversely affect beneficial uses of the receiving water.
19. Violation of any applicable water quality standards for receiving waters adopted by the Regional Water Board or State Water Board.

**B. Groundwater Limitations – Not Applicable**

**VI. PROVISIONS**

**A. Standard Provisions**

1. Federal Standard Provisions. The Discharger shall comply with all Standard Provisions included in Attachment D of this Order.
2. Los Angeles Regional Water Board Standard Provisions.
  - a. This Order may be modified, revoked, reissued, or terminated in accordance with the provisions of 40 C.F.R., 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.
  - b. The Discharger must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of storm water to storm drain systems or other water courses under their jurisdiction; including applicable requirements in municipal storm water

management program developed to comply with NPDES permits issued by the Los Angeles Regional Water Board to local agencies.

- c. Discharge of wastes to any point other than specifically described in this Order and permit is prohibited and constitutes a violation thereof.
- d. The Discharger shall comply with all applicable effluent limitations, national standards of performance, toxic effluent standards, and all federal regulations established pursuant to sections 301, 302, 303(d), 304, 306, 307, 316, 318, 405, and 423 of the Federal CWA and amendments thereto.
- e. These requirements do not exempt the operator of the waste disposal facility from compliance with any other laws, regulations, or ordinances which may be applicable; they do not legalize this waste disposal facility, and they leave unaffected any further restraints on the disposal of wastes at this site which may be contained in other statutes or required by other agencies.
- f. Oil or oily material, chemicals, refuse, or other pollutionable materials shall not be stored or deposited in areas where they may be picked up by rainfall and carried off of the property and/or discharged to surface waters. Any such spill of such materials shall be contained and removed immediately.
- g. A copy of these waste discharge specifications shall be maintained at the discharge facility so as to be available at all times to operating personnel.
- h. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:
  - i. Violation of any term or condition contained in this Order;
  - ii. Obtaining this Order by misrepresentation, or failure to disclose all relevant facts;
  - iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- i. If there is any storage of hazardous or toxic materials or hydrocarbons at this facility and if the facility is not manned at all times, a 24-hour emergency response telephone number shall be prominently posted where it can easily be read from the outside.
- j. The Discharger shall notify the Los Angeles Regional Water Board not later than 120 days in advance of implementation of any plans to alter production capacity of the product line of the manufacturing, producing or processing facility by more than ten percent. Such notification shall include estimates of proposed production rate, the type of process, and projected effects on effluent quality. Notification shall include submittal of a new report of waste discharge appropriate filing fee.

- k.** The Discharger shall file with the Los Angeles Regional Water Board a report of waste discharge at least 120 days before making any material change or proposed change in the character, location or volume of the discharge.
- l.** All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Regional Water Board as soon as they know or have reason to believe that they have begun or expect to begin to use or manufacture intermediate or final product or byproduct of any toxic pollutant that was not reported on their application.
- m.** In the event of any change in name, ownership, or control of these waste disposal facilities, the discharger shall notify this Los Angeles Regional Water Board of such change and shall notify the succeeding owner or operator of the existence of this Order by letter, copy of which shall be forwarded to the Los Angeles Regional Water Board.
- n.** The Water Code provides that any person who violates a waste discharge requirement or a provision of the Water Code is subject to civil penalties of up to \$5,000 per day, \$10,000 per day, or \$25,000 per day of violation, or when the violation involves the discharge of pollutants, is subject to civil penalties of up to \$10 per gallon per day or \$25 per gallon per day of violation; or some combination thereof, depending on the violation, or upon the combination of violations.

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

- o.** 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.
- p.** The discharge of any waste resulting from the combustion of toxic or hazardous wastes to any waste stream that ultimately discharges to waters of the United States is prohibited, unless specifically authorized elsewhere in this permit.
- q.** The Discharger shall notify the Executive Officer in writing no later than 6 months prior to the planned discharge of any chemical, other than the products previously reported to the Executive Officer, which may be toxic to aquatic life. Such notification shall include:
  - i.** Name and general composition of the chemical,
  - ii.** Frequency of use,
  - iii.** Quantities to be used,

- iv. Proposed discharge concentrations, and
- v. USEPA registration number, if applicable.
- r. Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges from this facility, may subject the Discharger to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.
- s. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, average monthly effluent limitation, maximum daily effluent limitation, instantaneous minimum effluent limitation, instantaneous maximum effluent limitation, or receiving water limitation of this Order, the Discharger shall notify the Los Angeles Regional Water Board by telephone (213) 576-6600 within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in writing within five days, unless the Los Angeles Regional Water Board waives confirmation. The written notification shall state the nature, time, duration, and cause of noncompliance, and shall describe the measures being taken to remedy the current noncompliance and, prevent recurrence including, where applicable, a schedule of implementation. Other noncompliance requires written notification as above at the time of the normal monitoring report.
- t. Prior to making any change in the point of discharge, place of use, or purpose of use of treated wastewater that results in a decrease of flow in any portion of a watercourse, the Discharger must file a petition with the State Water Board, Division of Water Rights, and receive approval for such a change. (Wat. Code § 1211.)

## **B. Monitoring and Reporting Program (MRP) Requirements**

The Discharger shall comply with the MRP, and future revisions thereto, in Attachment E of this Order.

## **C. Special Provisions**

### **1. Reopener Provisions**

- a. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal CWA, and amendments thereto, the Regional Water Board may revise and modify this Order in accordance with such more stringent standards.
- b. This Order may be reopened to include effluent limitations for toxic constituents determined to be present in significant amounts in the discharge through a more comprehensive monitoring program included as part of this Order and based on the results of the RPA.

- c. This Order may be reopened and modified, to incorporate in accordance with the provisions set forth in 40 C.F.R., parts 122 and 124, to include requirements for the implementation of the watershed management approach or to include new MLs.
- d. This Order may be reopened and modified to revise effluent limitations as a result of future Basin Plan Amendments, such as an update of an objective or the adoption of a TMDL for the Long Beach Inner Harbor.
- e. This Order may be reopened upon submission by the Discharger of adequate information, as determined by the Regional Water Board, to provide for dilution credits or a mixing zone, as may be appropriate.
- f. This Order may be reopened for modification, or revocation and reissuance, as a result of the detection of a reportable priority pollutant generated by special conditions included in this Order. These special conditions may be, but are not limited to, fish tissue sampling, whole effluent toxicity, monitoring requirements on internal waste stream(s), and monitoring for surrogate parameters. Additional requirements may be included in this Order as a result of the special condition monitoring data.

## 2. Special Studies, Technical Reports and Additional Monitoring Requirements

- a. **Initial Investigation Toxicity Reduction Evaluation (TRE) Workplan.** The Discharger shall submit to the Los Angeles Regional Water Board an Initial Investigation Toxicity Reduction Evaluation (TRE) workplan (1-2 pages) **within 90 days** of the effective date of this permit. This plan shall describe the steps the permittee intends to follow in the event that toxicity is detected, and should include at a minimum:
  - i. A description of the investigation and evaluation techniques that will be used to identify potential causes/sources of toxicity, effluent variability, and treatment system efficiency;
  - ii. A description of the facility's method of maximizing in-house treatment efficiency and good housekeeping practices, and a list of all chemicals used in operation of the facility;
  - iii. If a toxicity identification evaluation (TIE) is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor) (Section V of the MRP, Attachment E, provides references for the guidance manuals that should be used for performing TIEs).
- b. **Monitoring Thresholds based on Sediment Interim Concentration-based Allocations in Harbor Toxics TMDL**

The following monitoring thresholds based on sediment interim concentration-based allocations (in mg/kg sediment) for copper, lead, zinc, DDT, PAHs, and PCBs and associated monitoring requirements are applicable to Discharge Point 001, per the Harbor Toxics TMDL, Resolution R11-008. These monitoring thresholds are designed to ensure that effluent concentrations and mass



discharges (TSS concentrations) do not exceed levels currently achieved by the permitted facility, during implementation of the TMDL.

**Table 5. Monitoring Thresholds**

Pollutant	Monitoring Thresholds based on Sediment Interim Concentration-based Allocations (mg/kg sediment) <sup>1,2,3</sup>
Copper	142.3
Lead	50.4
Zinc	240.6
PAHs	4.58
DDT	0.070
PCBs	0.060

<sup>1</sup> Regardless of the monitoring thresholds, the Discharger shall ensure that effluent concentrations do not exceed levels that can be attained by performance of the Facility's treatment technologies existing at the time of permit issuance, reissuance, or modification.

<sup>2</sup> Attainment with the monitoring thresholds may be demonstrated by compliance with the effluent limitations stipulated for TSS and the CTR TMDL-based effluent limitations for any of these constituents; copper, lead, zinc, PAHs, DDT, and total PCBs and attainment with the performance goals for the specified PAH compounds: benzo(a)pyrene and chrysene. See Footnote 4 to Table 4, page 6 of this Order for details.

<sup>3</sup> Attainment with the monitoring thresholds in cases where sediment monitoring is required as per Footnote 4 to Table 4 of this Order may be demonstrated by meeting the interim allocations in the discharge over a 3-year averaging period.

**c. Harbor Toxics TMDL Water and Sediment Monitoring Plan.** As defined in the Harbor Toxics TMDL, the Discharger is a "responsible party" because it is an "Individual Stormwater Permittee." As such, the Discharger, either alone, or as part of a collaborative effort, is responsible for monitoring water and sediment discharges. The Discharger, by itself, or as part of a collaborative monitoring effort (Responsible Parties), is required to prepare and submit a Monitoring and Reporting Plan (Monitoring Plan) and Quality Assurance Project Plan (QAPP), following TMDL Element - Monitoring Plan regulatory provisions in Attachment A to Resolution R11-008. The TMDL requires that the Monitoring Plan and QAPP shall be submitted 20 months after the effective date (March 23, 2012) of the TMDL for public review and, subsequently, Executive Officer approval. Since the effective date of this order exceeds the deadline for the Monitoring Plan and QAPP, the Discharger shall join a group already formed or develop a site specific monitoring plan. If the Discharger decides to join a group already formed, the Discharger shall notify the Regional Water Board within 90 days of the effective date of the Order. If the Discharger decides to develop a site specific Monitoring Plan with a QAPP, the Discharger shall notify the Regional Water Board within 90 days of the effective date of the Order and submit the proposed Monitoring Plan and QAPP to the Regional Water Board within 12 months of the effective date of the Order for public comment and the Regional Water Board approval. The Discharger shall begin monitoring 6 months after the Monitoring Plan and QAPP are approved by the Executive Officer, unless otherwise directed by the Executive Officer. The compliance monitoring program shall include water column, sediment, and fish tissue monitoring as specified in Section VI.C.2.c. of Limitations and Discharge Requirements.

The Monitoring Plan shall include the following components:

**i. Water Column Monitoring:**

Water samples and total suspended solids (TSS) samples shall be collected during two wet weather events and one dry weather event each year. TSS shall be collected at several depths during wet weather events. The first large storm event of the season shall be included as one of the wet weather monitoring events. General water chemistry (temperature, dissolved oxygen, pH, and salinity) and a flow measurement shall be required at each sampling event.

**ii. Sediment Monitoring:**

Sediment chemistry samples shall be collected every five years (in addition to, and in between, the sediment triad sampling events), beginning after the first sediment triad event, to evaluate trends in general sediment quality constituents and listed constituents relative to sediment quality targets. Chemistry data without accompanying sediment triad data shall be used to assess sediment chemistry trends and shall not be used to determine compliance.

**Table 6. Sediment Chemistry Monitoring Requirements<sup>1</sup>**

Water Body Name	Station ID	Station Location	Sample Media and Parameters	
			Water Column	Sediment
Long Beach Inner Harbor	12	Cerritos Channel between the Heim Bridge and Turning Basin	Flow, Temperature, DO, pH, Salinity, TSS, Metals <sup>2</sup> , PCBs, DDT	Metals <sup>2</sup> , Toxicity, Benthic Community Effect
	13	Back Channel between Turning Basin and West Basin		
	14	Center of West Basin		
	15	Center of Southeast Basin		

<sup>1</sup> Sampling shall be designed to collect sufficient volumes of suspended solids to allow for analysis of the listed pollutants in the bulk sediment.

<sup>2</sup> Metals: copper, lead, and zinc.

**iii. Fish Tissue Monitoring:**

Fish tissue shall be collected every two years in Long Beach Inner Harbor and analyzed for chlordane, dieldrin, toxaphene, DDT, and PCBs. At a minimum, three species shall be collected, including white croaker, a sport fish, and a prey fish.

**iv. Sampling and Analysis Plan:**

The Sampling and Analysis Plan must be proposed based on methods or metrics described in the *State Water Board Water Quality Control Plan for*

*Enclosed Bays and Estuaries – Part 1 Sediment Quality* (Resolution 2008-0070 – SQO Part 1), and the *USEPA or American Society for Testing and Materials (ASTM)*. The plan shall include a list of chemical analytes for the water column and sediment.

**v. Quality Assurance Project Plan:**

The Quality Assurance Project Plan (QAPP) shall describe the project objectives and organization, functional activities, and quality assurance/quality control protocols for the water and sediment monitoring. The QAPP shall include protocols for sample collection, standard analytical procedures, and laboratory certification. All samples shall be collected in accordance with Surface Water Ambient Monitoring Program (SWAMP) protocols.

vi. The details of the Harbor Toxics TMDL Water and Sediment Monitoring Plan including sampling locations and all methods shall be specified in the Monitoring Plans submitted to the Executive Officer.

**d. Sediment Sampling/Monitoring**

i. The Discharger must sample the discharge at the point following final treatment, prior to entering the receiving water. The exact location of the sampling point must be stipulated in the initial self-monitoring report. All samples shall be tested in accordance with USEPA or ASTM methodologies where such methods exist. Where no USEPA or ASTM methods exist, the State Water Board or Los Angeles Regional Water Board (collectively Water Boards) shall approve the use of other methods. Analytical tests shall be conducted by laboratories certified by the California Department of Public Health in accordance with Water Code Section 13176.

**Table 7. Sediment Monitoring Requirements**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Copper	mg/kg	Grab	1/Year <sup>1</sup>
Lead	mg/kg	Grab	1/Year <sup>1</sup>
Zinc	mg/kg	Grab	1/Year <sup>1</sup>
PAHs <sup>2</sup>	mg/kg	Grab	1/Year <sup>1</sup>
DDT <sup>3</sup>	mg/kg	Grab	1/Year <sup>1</sup>
PCBs <sup>4</sup>	mg/kg	Grab	1/Year <sup>1</sup>

<sup>1</sup> Effluent monitoring is only required during years in which a discharge occurs.

If the discharge exceeds the effluent limitations for TSS and exceed the CTR TMDL-based effluent limitation for any of these constituents: copper, lead, zinc, 4,4'-DDT, total PCBs, or an exceedance of the performance goals for either of the PAH compounds: benzo(a)pyrene and chrysene, the Discharger is required to conduct sediment monitoring for the CTR TMDL-based priority pollutant or the PAH that yielded the elevated effluent concentration based on those stipulated in Table 6 of this Order. The sediment monitoring will occur during the first subsequent discharge event after obtaining the data with the elevated results. Sediment concentrations that are below the interim sediment allocations in Table 7 of this Order demonstrate attainment with the interim concentration-based sediment allocations.

- <sup>2</sup> The State Water Board Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1 Sediment Quality, August 25, 2009, (known as Sediment Quality Plan, Attachment A) listed chemical analytes needed to characterize sediment contamination exposure and effect. The chemical analytes are: acenaphthene, anthracene, biphenyl, naphthalene, 2,6-dimethylnaphthalene, fluorene, 1-methylnaphthalene, 2-methylnaphthalene, phenanthrene, benzo(a)anthracene, benzo(a)pyrene, benzo(e)pyrene, chrysene, dibenz(a,h)anthracene, fluoranthene, perylene, and pyrene. These analytes are included in the PAHs (polynuclear aromatic hydrocarbons) chemical group.
- <sup>3</sup> The Sediment Quality Plan, Attachment A listed in the pesticide group, the following analytes: alpha chlordane, gamma chlordane, trans nonachlor, dieldrin, o,p'-DDE, o,p'-DDD, o,p'-DDT, p,p'-DDD, p,p'-DDE, and p,p'-DDT. These chemical analytes are also needed to characterize sediment contamination exposure and effect.
- <sup>4</sup> The Sediment Quality Plan, Attachment A listed the PCB congeners: 2,4'-Dichlorobiphenyl, 2,2',5-Trichlorobiphenyl, 2,4,4'-Trichlorobiphenyl, 2,2',3,5'-Tetrachlorobiphenyl, 2,2',5,5'-Tetrachlorobiphenyl, 2,3',4,4'-Tetrachlorobiphenyl, 2,2',4,5,5'-Pentachlorobiphenyl, 2,3,3',4,4'-Pentachlorobiphenyl, 2,3',4,4',5-Pentachlorobiphenyl, 2,2',3,3',4,4'-Hexachlorobiphenyl, 2,2',3,4,4',5'-Hexachlorobiphenyl, 2,2',4,4',5,5'-Hexachlorobiphenyl, 2,2',3,3',4,4',5-Heptachlorobiphenyl, 2,2',3,4,4',5,5'-Hexachlorobiphenyl, 2,2',3,4',5,5',6- Hexachlorobiphenyl, 2,2',3,3',4,4',5,6- Octachlorobiphenyl, 2,2',3,3',4,4',5,5',6- Nonachlorobiphenyl, and Decachlorobiphenyl.
- ii. In cases where sediment monitoring is required as per Table 7 above, attainment with the monitoring thresholds based on sediment interim concentration-based allocations may be demonstrated by meeting the interim allocations in the discharge over a 3-year averaging period.

### 3. Storm Water Pollution Prevention Plan, Best Management Practices, and Spill Contingency Plan

- a. The Discharger shall submit, within 90 days of the effective date of this Order:
- i. An updated storm water pollution prevention plan (SWPPP) that describes site-specific management practices for minimizing contamination of storm water runoff and for preventing contaminated storm water runoff from being discharged directly to waters of the State. The updated SWPPP shall accurately reflect current facility conditions and incorporate changes in discharge practice (i.e., hydrostatic test water is no longer routed to retention ponds prior to discharge). The BMPs shall address the following specific areas of concern: petroleum storage tanks, equipment washing, vehicle traffic, and chemical storage. The SWPPP shall be developed in accordance with the requirements in Attachment G.
- ii. A Best Management Practice 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 USEPA *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 for hazardous or toxic waste/material discharges to surface waters.
- iii. A Spill Control Plan (SCP) that shall be site-specific and shall cover all areas of the Facility.

Each plan 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 (e.g., petroleum storage tanks); describe the activities in each area and the potential for contamination of storm water runoff and the discharge of hazardous waste/material.

The Discharger shall implement the SWPPP, BMPP, and SCP within 10 days of the approval by the Executive Officer or 90 days after submittal of the plan if no comments are submitted by the Regional Board. The plans shall be reviewed annually and at the same time. Updated information shall be submitted within 30 days of revision.

#### **4. Construction, Operation and Maintenance Specifications**

- a. The Discharger shall at all times properly operate and maintain all facilities and systems installed or used to achieve compliance with this Order.

#### **5. Special Provisions for Municipal Facilities (POTWs Only) – Not Applicable**

#### **6. Other Special Provisions – Not Applicable**

#### **7. Compliance Schedules – Not Applicable**

### **VII. COMPLIANCE DETERMINATION**

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

#### **A. 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 I.G. of the MRP), then the Discharger is out of compliance.

#### **B. 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.

#### **C. 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

1. If the number of measurements (n) is odd, then the median will be calculated as  $= X_{(n+1)/2}$ , or
2. 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.

**D. Multiple Sample Data.**

When determining compliance with an AMEL or MDEL for priority pollutants and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

1. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

**E. Mass-Based Effluent Limitations**

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 Limitations and Discharge Requirements, Section VII.B, 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.

**F. Average Monthly Effluent Limitation (AMEL).**

If the average (or when applicable, the median determined by subsection E above for multiple sample data) of daily discharges over a calendar month exceeds the AMEL for a given parameter, this will represent a single violation, though the Discharger will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Discharger will be considered out of compliance for that calendar month. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

In determining compliance with the AMEL, the following provisions shall also apply to all constituents:

1. If the analytical result of a single sample, monitored monthly, quarterly, semiannually, or annually, does not exceed the AMEL for that constituent, the Discharger has demonstrated compliance with the AMEL for that month;
2. If the analytical result of a single sample, monitored monthly, quarterly, semiannually, or annually, exceeds the AMEL for any constituent, the Discharger shall collect four additional samples at approximately equal intervals during the month. All five 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 I.G. of the MRP), the numerical average of the analytical results of these five 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 I.G. of the MRP), the median value of these four 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.

3. In the event of noncompliance with an AMEL, the sampling frequency for that constituent shall be increased to weekly and shall continue at this level until compliance with the AMEL has been demonstrated.
4. If only one sample was obtained for the month or more than a monthly period and the result exceeds the AMEL, then the Discharger is in violation of the AMEL.

**G. Maximum Daily Effluent Limitations (MDEL).**

If a daily discharge exceeds the MDEL for a given parameter, an alleged violation will be flagged and the discharger will be considered out of compliance for that parameter for that 1 day only within the reporting period. For any 1 day during which no sample is taken, no compliance determination can be made for that day.

**H. Instantaneous Minimum Effluent Limitation.**

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

**I. Instantaneous Maximum Effluent Limitation.**

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

## ATTACHMENT A – DEFINITIONS

### Arithmetic Mean ( $\mu$ )

Also called the average, is the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

Arithmetic mean =  $\mu = \Sigma x / n$       where:  $\Sigma x$  is the sum of the measured ambient water concentrations, and  $n$  is the number of samples.

### Average Monthly Effluent Limitation (AMEL)

The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

### Best Management Practices (BMPs)

BMPs are methods, measures, or practices designed and selected to reduce or eliminate the discharge of pollutants to surface waters from point and nonpoint source discharges including storm water. BMPs include structural and non-structural control, and operation maintenance procedures, which can be applied before, during, and/or after pollution-producing activities.

### Bioaccumulative

Those substances taken up by an organism from its surrounding medium through gill membranes, epithelial tissue, or from food and subsequently concentrated and retained in the body of the organism.

### Carcinogenic

Pollutants are substances that are known to cause cancer in living organisms.

### Coefficient of Variation (CV)

CV is a measure of the data variability and is calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

### Daily Discharge

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

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



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

**Detected, but Not Quantified (DNQ)**

DNQ are those sample results less than the RL, but greater than or equal to the laboratory's MDL. Sample results reported as DNQ are estimated concentrations.

**Dilution Credit**

Dilution Credit is the amount of dilution granted to a discharge in the calculation of a water quality-based effluent limitation, based on the allowance of a specified mixing zone. It is calculated from the dilution ratio or determined through conducting a mixing zone study or modeling of the discharge and receiving water.

**Effluent Concentration Allowance (ECA)**

ECA is a value derived from the water quality criterion/objective, dilution credit, and ambient background concentration that is used, in conjunction with the coefficient of variation for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The ECA has the same meaning as waste load allocation (WLA) as used in USEPA guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).

**Enclosed Bays**

Enclosed Bays means indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between the headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. Enclosed bays include, but are not limited to, Humboldt Bay, Bodega Harbor, Tomales Bay, Drake's Estero, San Francisco Bay, Morro Bay, Los Angeles-Long Beach Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay. Enclosed bays do not include inland surface waters or ocean waters.

**Estimated Chemical Concentration**

The estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

**Estuaries**

Estuaries means waters, including coastal lagoons, located at the mouths of streams that serve as areas of mixing for fresh and ocean waters. Coastal lagoons and mouths of streams that are temporarily separated from the ocean by sandbars shall be considered estuaries. Estuarine waters shall be considered to extend from a bay or the open ocean to a point upstream where there is no significant mixing of fresh water and seawater. Estuarine waters included, but are not limited to, the Sacramento-San Joaquin Delta, as defined in Water Code section 12220, Suisun Bay, Carquinez Strait downstream to the Carquinez Bridge, and appropriate areas of the Smith, Mad, Eel, Noyo, Russian, Klamath, San Diego, and Otay rivers. Estuaries do not include inland surface waters or ocean waters.

**Existing Discharger**

Any discharger that is not a new discharger. An existing discharger includes an "increasing discharger" (i.e., any existing facility with treatment systems in place for its current discharge

that is or will be expanding, upgrading, or modifying its permitted discharge after the effective date of this Order).

#### **Four-Day Average of Daily Maximum Flows**

The average of daily maxima taken from the data set in four-day intervals.

#### **Infeasible**

Not capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.

#### **Inland Surface Waters**

All surface waters of the State that do not include the ocean, enclosed bays, or estuaries.

#### **Instantaneous Maximum Effluent Limitation**

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

#### **Instantaneous Minimum Effluent Limitation**

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

#### **Maximum Daily Effluent Limitation (MDEL)**

The highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

#### **Median**

The middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements ( $n$ ) is odd, then the median =  $X_{(n+1)/2}$ . If  $n$  is even, then the median =  $(X_{n/2} + X_{(n/2)+1})/2$  (i.e., the midpoint between the  $n/2$  and  $n/2+1$ ).

#### **Method Detection Limit (MDL)**

MDL is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in 40 C.F.R. part 136, Attachment B, revised as of July 3, 1999.

#### **Minimum Level (ML)**

ML is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

### **Mixing Zone**

Mixing Zone is a limited volume of receiving water that is allocated for mixing with a wastewater discharge where water quality criteria can be exceeded without causing adverse effects to the overall water body.

### **Not Detected (ND)**

Sample results which are less than the laboratory's MDL.

### **Ocean Waters**

The territorial marine waters of the State as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. Discharges to ocean waters are regulated in accordance with the State Water Board's California Ocean Plan.

### **Persistent Pollutants**

Persistent pollutants are substances for which degradation or decomposition in the environment is nonexistent or very slow.

### **Pollutant Minimization Program (PMP)**

PMP means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of a priority pollutant(s) through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Los Angeles Regional Water Board may consider cost effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

### **Pollution Prevention**

Pollution Prevention means any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant that is discharged into water and includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as defined in Water Code section 13263.3). Pollution prevention does not include actions that merely shift a pollutant in wastewater from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the State or Los Angeles Regional Water Board.

### **Reporting Level (RL)**

The RL is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order, including an additional factor if applicable as discussed herein. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Los Angeles Regional Water Board either from Appendix 4 of the SIP in accordance with section 2.4.2 of the SIP or established in accordance with section 2.4.3 of the SIP. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the

specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

#### **Satellite Collection System**

The portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility that a sanitary sewer system is tributary to.

#### **Source of Drinking Water**

Any water designated as municipal or domestic supply (MUN) in a Los Angeles Regional Water Board Basin Plan.

#### **Standard Deviation ( $\sigma$ )**

Standard Deviation is a measure of variability that is calculated as follows:

$$\sigma = (\sum[(x - \mu)^2]/(n - 1))^{0.5}$$

where:

x is the observed value;

$\mu$  is the arithmetic mean of the observed values; and

n is the number of samples.

#### **Toxicity Reduction Evaluation (TRE)**

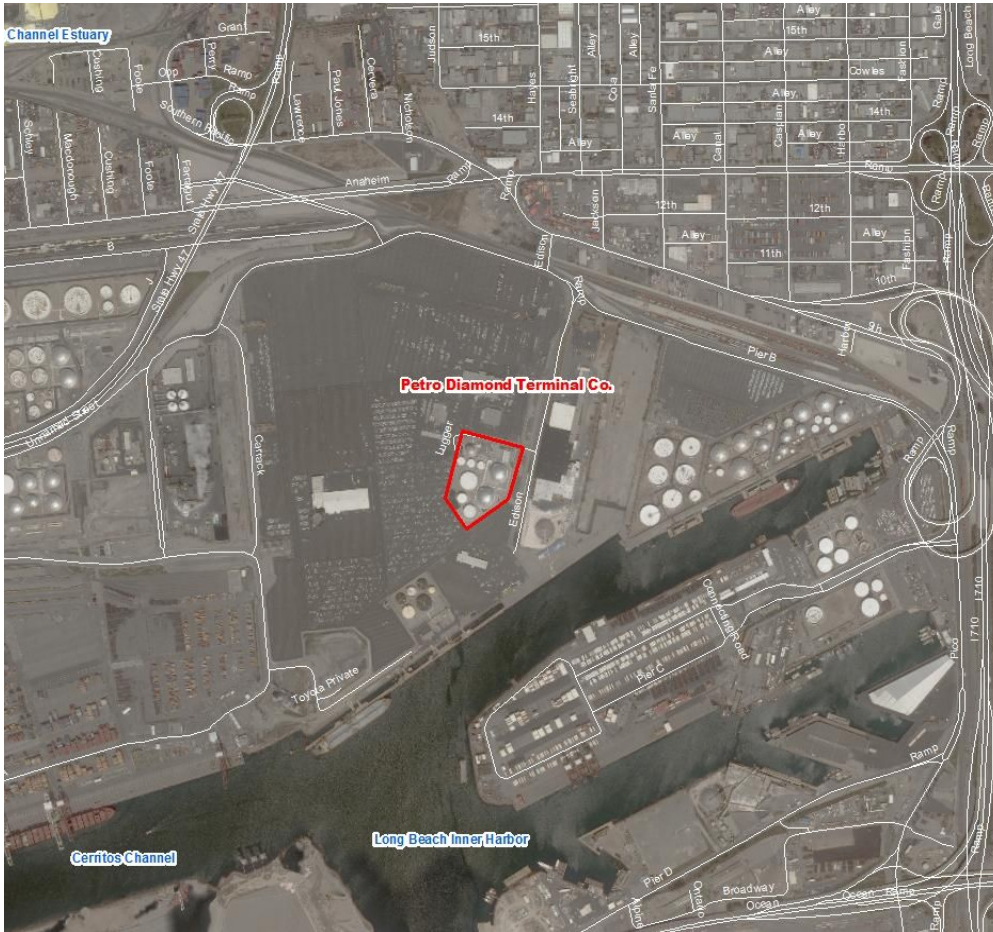
TRE is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an evaluation of facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. (A TIE is a set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.)

ACRONYMS AND ABBREVIATIONS

AMEL	Average Monthly Effluent Limitation
B	Background Concentration
BAT	Best Available Technology Economically Achievable
Basin Plan	Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties
BCT	Best Conventional Pollutant Control Technology
BMP	Best Management Practices
BMPP	Best Management Practices Plan
BPJ	Best Professional Judgment
BOD	Biochemical Oxygen Demand 5-day @ 20 °C
BPT	Best Practicable Treatment Control Technology
C	Water Quality Objective
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CTR	California Toxics Rule
CV	Coefficient of Variation
CWA	Clean Water Act
CWC	California Water Code
Discharger	Petro-Diamond Terminal Company
DMR	Discharge Monitoring Report
DNQ	Detected But Not Quantified
ELAP	California Department of Health Services Environmental Laboratory Accreditation Program
ELG	Effluent Limitations, Guidelines and Standards
Facility	Petro-Diamond Marine Terminal
g/kg	grams per kilogram
gpd	gallons per day
IC	Inhibition Coefficient
IC <sub>15</sub>	Concentration at which the organism is 15% inhibited
IC <sub>25</sub>	Concentration at which the organism is 25% inhibited
IC <sub>40</sub>	Concentration at which the organism is 40% inhibited
IC <sub>50</sub>	Concentration at which the organism is 50% inhibited
LA	Load Allocations
LOEC	Lowest Observed Effect Concentration
µg/L	micrograms per Liter
mg/L	milligrams per Liter
MDEL	Maximum Daily Effluent Limitation
MEC	Maximum Effluent Concentration
MGD	Million Gallons Per Day
ML	Minimum Level
MRP	Monitoring and Reporting Program
ND	Not Detected
ng/L	nanograms per liter
NOEC	No Observable Effect Concentration
NPDES	National Pollutant Discharge Elimination System

NSPS.....	New Source Performance Standards
NTR .....	National Toxics Rule
OAL .....	Office of Administrative Law
PAHs .....	Polynuclear Aromatic Hydrocarbons
pg/L .....	picograms per liter
PMEL.....	Proposed Maximum Daily Effluent Limitation
PMP.....	Pollutant Minimization Plan
POTW.....	Publicly Owned Treatment Works
ppm .....	parts per million
ppb .....	parts per billion
QA .....	Quality Assurance
QA/QC.....	Quality Assurance/Quality Control
Ocean Plan.....	Water Quality Control Plan for Ocean Waters of California
Regional Water Board .....	California Regional Water Quality Control Board, Los Angeles Region
RPA .....	Reasonable Potential Analysis
SCP .....	Spill Contingency Plan
Sediment Quality Plan .....	<i>Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1 Sediment Quality</i>
SIP.....	State Implementation Policy (Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California)
SMR.....	Self-Monitoring Reports
State Water Board .....	California State Water Resources Control Board
SWPPP.....	Storm Water Pollution Prevention Plan
TAC .....	Test Acceptability Criteria
Thermal Plan .....	Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California
TIE .....	Toxicity Identification Evaluation
TMDL.....	Total Maximum Daily Load
TOC.....	Total Organic Carbon
TRE .....	Toxicity Reduction Evaluation
TSD .....	Technical Support Document
TSS.....	Total Suspended Solid
TU <sub>c</sub> .....	Chronic Toxicity Unit
USEPA .....	United States Environmental Protection Agency
WDR.....	Waste Discharge Requirements
WET.....	Whole Effluent Toxicity
WLA.....	Waste Load Allocations
WQBELs.....	Water Quality-Based Effluent Limitations
WQS.....	Water Quality Standards
% .....	Percent

**ATTACHMENT B – Aerial View of Petro-Diamond Terminal Facility**



Petro-Diamond Terminal Company  
Petro-Diamond Marine Terminal  
1920 Lugger Way  
Long Beach, CA 90813

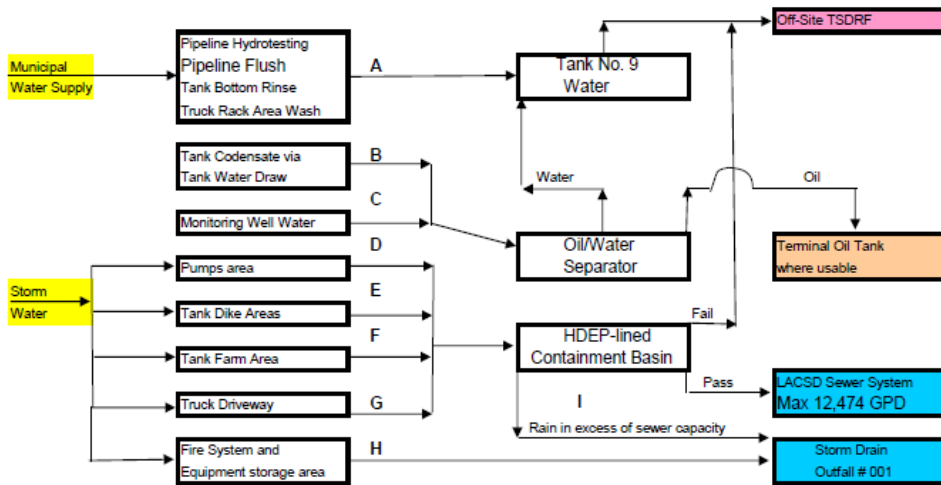
ATTACHMENT C-1 – Rain Water Flow Diagram





**ATTACHMENT C-2 – Water Flow Diagram**

**Petro-Diamond Terminal Company  
 Storm Water and Waste Water Systems** (As of November, 2007)



FLOW KEY (IN GPY)			
A	15,000	F	1,244,800
B	3,650	G	187,600
C	1,825	H	98,455
D	10,000	I	Emergency Only
E	533,500		

## **ATTACHMENT D – STANDARD PROVISIONS**

### **I. STANDARD PROVISIONS – PERMIT COMPLIANCE**

#### **A. Duty to Comply**

1. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application [section 122.41(a)].
2. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement [section 122.41(a)(1)].

#### **B. Need to Halt or Reduce Activity Not a Defense**

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

#### **C. Duty to Mitigate**

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

#### **D. Proper Operation and Maintenance**

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

#### **E. Property Rights**

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

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

#### **F. Inspection and Entry**

The Discharger shall allow the Los Angeles Regional Water Board, State Water Board, United States Environmental Protection Agency (USEPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to [section 122.41(i)] [Water Code section 13383]:

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order [section 122.41(i)(1)];
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order [section 122.41(i)(2)];
3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order [section 122.41(i)(3)]; and
4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location [section 122.41(i)(4)].

#### **G. Bypass**

##### **1. Definitions**

- a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility [section 122.41(m)(1)(i)].
- b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production [section 122.41(m)(1)(ii)].

2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below [section 122.41(m)(2)].

3. Prohibition of bypass. Bypass is prohibited, and the Los Angeles Regional Water Board may take enforcement action against a Discharger for bypass, unless [section 122.41(m)(4)(i)]:
  - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage [section 122.41(m)(4)(i)(A)];
  - b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance [section 122.41(m)(4)(i)(B)]; and
  - c. The Discharger submitted notice to the Los Angeles Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below [section 122.41(m)(4)(i)(C)].
4. The Los Angeles Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Los Angeles Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above [section 122.41(m)(4)(ii)].
5. Notice
  - a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass [section 122.41(m)(3)(i)].
  - b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice) [section 122.41(m)(3)(ii)].

#### H. Upset

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

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

2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that [section 122.41(n)(3)]:
  - a. An upset occurred and that the Discharger can identify the cause(s) of the upset [section 122.41(n)(3)(i)];
  - b. The permitted facility was, at the time, being properly operated [section 122.41(n)(3)(ii)];
  - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) [section 122.41(n)(3)(iii)]; and
  - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above [section 122.41(n)(3)(iv)].
3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof [section 122.41(n)(4)].

## II. STANDARD PROVISIONS – PERMIT ACTION

### A. General

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

### B. Duty to Reapply

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

### C. Transfers

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

## III. STANDARD PROVISIONS – MONITORING

- A. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity [section 122.41(j)(1)].
- B. Monitoring results must be conducted according to test procedures under 40 C.F.R. part 136 or, in the case of sludge use or disposal, approved under 40 C.F.R. part 136 unless

otherwise specified in 40 C.F.R. part 503 unless other test procedures have been specified in this Order [section 122.41(j)(4) and section 122.44(i)(1)(iv)].

#### **IV. STANDARD PROVISIONS – RECORDS**

- A.** Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 C.F.R. part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Los Angeles Regional Water Board Executive Officer at any time [section 122.41(j)(2)].
- B.** Records of monitoring information shall include:
1. The date, exact place, and time of sampling or measurements [section 122.41(j)(3)(i)];
  2. The individual(s) who performed the sampling or measurements [section 122.41(j)(3)(ii)];
  3. The date(s) analyses were performed [section 122.41(j)(3)(iii)];
  4. The individual(s) who performed the analyses [section 122.41(j)(3)(iv)];
  5. The analytical techniques or methods used [section 122.41(j)(3)(v)]; and
  6. The results of such analyses [section 122.41(j)(3)(vi)].
- C. Claims of confidentiality for the following information will be denied [section 122.7(b)]:**
1. The name and address of any permit applicant or Discharger [section 122.7(b)(1)]; and
  2. Permit applications and attachments, permits and effluent data [section 122.7(b)(2)].

#### **V. STANDARD PROVISIONS – REPORTING**

##### **A. Duty to Provide Information**

The Discharger shall furnish to the Los Angeles Regional Water Board, State Water Board, or USEPA within a reasonable time, any information which the Los Angeles Regional Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Los Angeles Regional Water Board, State Water Board, or USEPA copies

of records required to be kept by this Order [section 122.41(h)] [Water Code section 13267].

## **B. Signatory and Certification Requirements**

1. All applications, reports, or information submitted to the Los Angeles Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below [section 122.41(k)].
2. All permit applications shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. [section 122.22(a)(1)].
3. All reports required by this Order and other information requested by the Los Angeles Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above [section 122.22(b)(1)];
  - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) [section 122.22(b)(2)]; and
  - c. The written authorization is submitted to the Los Angeles Regional Water Board and State Water Board [section 122.22(b)(3)].
4. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard

Provisions – Reporting V.B.3 above must be submitted to the Los Angeles Regional Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative [section 122.22(c)].

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

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

### **C. Monitoring Reports**

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order [section 122.22(l)(4)].
2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Los Angeles Regional Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices [section 122.41(l)(4)(i)].
3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 C.F.R. part 136 or, in the case of sludge use or disposal, approved under 40 C.F.R. part 136 unless otherwise specified in 40 C.F.R. part 503, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Los Angeles Regional Water Board [section 122.41(l)(4)(ii)].
4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order [section 122.41(l)(4)(iii)].

### **D. Compliance Schedules**

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

### **E. Twenty-Four Hour Reporting**

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time



the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance [section 122.41(l)(6)(i)].

2. The following shall be included as information that must be reported within 24 hours under this paragraph [section 122.41(l)(6)(ii)]:
  - a. Any unanticipated bypass that exceeds any effluent limitation in this Order [section 122.41(l)(6)(ii)(A)].
  - b. Any upset that exceeds any effluent limitation in this Order [section 122.41(l)(6)(ii)(B)].
3. The Los Angeles Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours [section 122.41(l)(6)(iii)].

#### **F. Planned Changes**

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

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) [section 122.41(l)(1)(i)]; or
2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in this Order nor to notification requirements under section 122.42(a)(1) (see Additional Provisions—Notification Levels VII.A.1) [section 122.41(l)(1)(ii)].
3. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan [section 122.41(l)(1)(iii)].

#### **G. Anticipated Noncompliance**

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

#### **H. Other Noncompliance**

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

#### **I. Other Information**

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

### **VI. STANDARD PROVISIONS – ENFORCEMENT**

- A.** The Los Angeles Regional Water Board is authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, sections 13385, 13386, and 13387.
- B.** The CWA provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed \$25,000 per day for each violation. The CWA provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than one (1) year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than two (2) years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than three (3) years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than six (6) years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to

\$2,000,000 for second or subsequent convictions [section 122.41(a)(2)] [Water Code sections 13385 and 13387].

- C. Any person may be assessed an administrative penalty by the Los Angeles Regional Water Board for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000 [section 122.41(a)(3)].
- D. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both [section 122.41(j)(5)].
- E. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this Order, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation, or by both [section 122.41(k)(2)].

## VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

### A. Non-Municipal Facilities

Existing manufacturing, commercial, mining, and silvicultural Dischargers shall notify the Los Angeles Regional Water Board as soon as they know or have reason to believe [section 122.42(a)]:

- 1. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" [section 122.42(a)(1)]:
  - a. 100 micrograms per liter ( $\mu\text{g/L}$ ) [section 122.42(a)(1)(i)];
  - b. 200  $\mu\text{g/L}$  for acrolein and acrylonitrile; 500  $\mu\text{g/L}$  for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter ( $\text{mg/L}$ ) for antimony [section 122.42(a)(1)(ii)];
  - c. Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge [section 122.42(a)(1)(iii)]; or



**ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP NO. 6677)**

**Contents**

I.	General Monitoring Provisions.....	E-2
II.	Monitoring Locations .....	E-5
III.	Influent Monitoring Requirements – Not applicable .....	E-5
IV.	Effluent Monitoring Requirements .....	E-5
	A. Monitoring Location EFF-001.....	E-5
V.	Whole Effluent Toxicity Testing Requirements .....	E-7
	A. Chronic Toxicity .....	E-7
VI.	Land Discharge Monitoring Requirements – Not Applicable .....	E-11
VII.	Reclamation Monitoring Requirements – Not Applicable.....	E-11
VIII.	Receiving Water Monitoring Requirements – Surface Water.....	E-11
	A. Monitoring Location RSW-001 .....	E-11
IX.	Other Monitoring Requirements.....	E-13
	A. Visual Monitoring of Receiving Water Sampling Point .....	E-13
	B. Storm Water Monitoring .....	E-13
	C. SWPPP, BMPP, and SCP Plan Status and Effectiveness Report .....	E-14
	D. Regional Monitoring .....	E-14
X.	Reporting Requirements.....	E-14
	A. General Monitoring and Reporting Requirements.....	E-14
	B. Self-Monitoring Reports (SMRs).....	E-14
	C. Other Reports .....	E-17

**Tables**

Table E-1.	Monitoring Station Locations .....	E-5
Table E-2.	Effluent Monitoring – Monitoring Location EFF-001 .....	E-5
Table E-3.	Receiving Water Monitoring Requirements – RSW-001 .....	E-12
Table E-4.	Monitoring Periods and Reporting Schedule .....	E-15

## **ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP) NO. 6677**

The Code of Federal Regulations (40 C.F.R. § 122.48) requires that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Regional Water Quality Control Board (Los Angeles Regional Water Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements, which implement the federal and California regulations.

### **I. GENERAL MONITORING PROVISIONS**

- A.** An effluent monitoring station shall be established for the point of discharge (Discharge Point 001 [Latitude 33 °, 46', 27" N, Longitude 118 °, 13', 07" W]). All sampling stations shall be located where representative samples of that effluent can be obtained (Monitoring Location EFF-001 [Latitude 33 °, 46', 36" N, Longitude 118 °, 13', 12" W]).
- B.** Effluent samples shall be taken downstream of any addition to treatment works and prior to mixing with the receiving waters.
- C.** The Los Angeles Regional Water Board shall be notified in writing of any change in the sampling stations once established or in the methods for determining the quantities of pollutants in the individual waste streams.
- D.** Pollutants shall be analyzed using the analytical methods described in 40 C.F.R., sections 136.3, 136.4, and 136.5 (revised May 18, 2012); or, where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board. Laboratories analyzing effluent samples and receiving water samples shall be certified by the California Department of Public Health Environmental Laboratory Accreditation Program (ELAP) or approved by the Executive Officer and must include quality assurance/quality control (QA/QC) data in their reports. A copy of the laboratory certification shall be provided each time a new certification and/or renewal of the certification is obtained from ELAP.
- E.** For any analyses performed for which no procedure is specified in the USEPA guidelines or in the MRP, the constituent or parameter analyzed and the method or procedure used must be specified in the monitoring report.
- F.** Each monitoring report must affirm in writing that "all analyses were conducted at a laboratory certified for such analyses by the Department of Public Health or approved by the Executive Officer and in accordance with current USEPA guideline procedures or as specified in this MRP".
- G.** The monitoring reports shall specify the analytical method used, the Method Detection Limit (MDL), and the Minimum Level (ML) for each pollutant. For the purpose of reporting compliance with numerical limitations, performance goals, and receiving water limitations, analytical data shall be reported by one of the following methods, as appropriate:
  - 1. An actual numerical value for sample results greater than or equal to the ML; or

2. "Detected, but Not Quantified (DNQ)" if results are greater than or equal to the laboratory's MDL but less than the ML; or,
3. "Not-Detected (ND)" for sample results less than the laboratory's MDL with the MDL indicated for the analytical method used.

Analytical data reported as "less than" for the purpose of reporting compliance with permit limitations shall be the same or lower than the permit limit(s) established for the given parameter.

Current MLs (Attachment H) are those published by the State Water Board in the Policy for the Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California, February 24, 2005.

- H.** Where possible, the MLs employed for effluent analyses shall be lower than the permit limitations established for a given parameter. If the ML value is not below the effluent limitation, then the lowest ML value and its associated analytical method shall be selected for compliance purposes. At least once a year, the Discharger shall submit a list of the analytical methods employed for each test and associated laboratory QA/QC procedures.

The Los Angeles Regional Water Board, in consultation with the State Water Board Quality Assurance Program, shall establish a ML that is not contained in Attachment H to be included in the Discharger's permit in any of the following situations:

1. When the pollutant under consideration is not included in Attachment H;
2. When the Discharger and Los Angeles Regional Water Board agree to include in the permit a test method that is more sensitive than that specified in Part 136 (revised May 18, 2012);
3. When the Discharger agrees to use an ML that is lower than that listed in Attachment H;
4. When the Discharger demonstrates that the calibration standard matrix is sufficiently different from that used to establish the ML in Attachment H, and proposes an appropriate ML for their matrix; or,
5. When the Discharger uses a method whose quantification practices are not consistent with the definition of an ML. Examples of such methods are the USEPA-approved method 1613 for dioxins and furans, method 1624 for volatile organic substances, and method 1625 for semi-volatile organic substances. In such cases, the Discharger, the Los Angeles Regional Water Board, and the State Water Board shall agree on a lowest quantifiable limit and that limit will substitute for the ML for reporting and compliance determination purposes.

- I. Water/wastewater samples must be analyzed within allowable holding time limits as specified in section 136.3. All QA/QC items must be run on the same dates the samples were actually analyzed, and the results shall be reported in the Los Angeles Regional Water Board format, when it becomes available, and submitted with the laboratory reports. Proper chain of custody procedures must be followed, and a copy of the chain of custody shall be submitted with the report.
- J. All analyses shall be accompanied by the chain of custody, including but not limited to data and time of sampling, sample identification, and name of person who performed sampling, date of analysis, name of person who performed analysis, QA/QC data, method detection limits, analytical methods, copy of laboratory certification, and a perjury statement executed by the person responsible for the laboratory.
- K. The Discharger shall calibrate and perform maintenance procedures on all monitoring instruments and to insure accuracy of measurements, or shall insure that both equipment activities will be conducted.
- L. The Discharger shall have, and implement, an acceptable written quality assurance (QA) plan for laboratory analyses. Unless otherwise specified in the analytical method, duplicate samples must be analyzed at a frequency of 5% (1 in 20 samples) with at least one if there is fewer than 20 samples in a batch. A batch is defined as a single analytical run encompassing no more than 24 hours from start to finish. A similar frequency shall be maintained for analyzing spiked samples.
- M. When requested by the Los Angeles Regional Water Board or USEPA, the Discharger will participate in the NPDES discharge monitoring report QA performance study. The Discharger must have a success rate equal to or greater than 80%.
- N. For parameters that both average monthly and daily maximum limits are specified and the monitoring frequency is less than four times a month, the following shall apply. If an analytical result is greater than the average monthly limit, the Discharger shall collect four additional samples at approximately equal intervals during the month, until compliance with the average monthly limit has been demonstrated. All five 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. In the event of noncompliance with an average monthly effluent limitation, the sampling frequency for that constituent shall be increased to weekly and shall continue at this level until compliance with the average monthly effluent limitation has been demonstrated. The Discharger shall provide for the approval of the Executive Officer a program to ensure future compliance with the average monthly limit.
- O. In the event wastes are transported to a different disposal site during the report period, the following shall be reported in the monitoring report:
  - 1. Types of wastes and quantity of each type;
  - 2. Name and address for each hauler of wastes (or method of transport if other than by hauling); and



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

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

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

**Q.** Laboratories analyzing monitoring samples shall be certified by the Department of Public Health (DPH), in accordance with the provision of Water Code section 13176, and must include quality assurance/quality control data with their reports.

**II. MONITORING LOCATIONS**

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

**Table E-1. Monitoring Station Locations**

Discharge Point Name	Monitoring Location Name	Monitoring Location Description (include Latitude and Longitude when available)
001	EFF-001	Effluent shall be sampled at the point of discharge into the storm sewer located on Luger Way located at Latitude 33 °, 46', 36" N", Longitude 118 °, 13', 12" W"
--	RSW-001	At a point located at least 50 feet upstream from the point of discharge into Long Beach Inner Harbor [Discharge Point 001 Latitude 33 °, 46', 27" N, Longitude 118 °, 13', 07" W].

**III. INFLUENT MONITORING REQUIREMENTS – NOT APPLICABLE**

**IV. EFFLUENT MONITORING REQUIREMENTS**

**A. Monitoring Location EFF-001**

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

**Table E-2. Effluent Monitoring – Monitoring Location EFF-001**

Parameter	Units	Sample Type	Minimum Sampling Frequency <sup>1</sup>	Required Analytical Test Method
Total Flow	gal/day	---	1/Discharge Event	<sup>2</sup>
Biochemical Oxygen Demand (BOD)(5-day @20 Deg. C) <sup>4</sup>	mg/L	Grab	1/Discharge Event	<sup>2</sup>
Oil and Grease <sup>4</sup>	mg/L	Grab	1/Discharge Event	<sup>2</sup>
pH	pH Units	Grab	1/Discharge Event	<sup>2</sup>
Temperature	°F	Grab	1/Discharge Event	<sup>2</sup>
Total Suspended Solids (TSS) <sup>3</sup>	mg/L	Grab	1/Discharge Event	<sup>2</sup>

Parameter	Units	Sample Type	Minimum Sampling Frequency <sup>1</sup>	Required Analytical Test Method <sup>2</sup>
Phenolic Compounds, Total <sup>3,4</sup>	mg/L	Grab	1/Discharge Event	<sup>2</sup>
Copper, Total Recoverable <sup>3</sup>	µg/L	Grab	1/Discharge Event	<sup>2</sup>
Lead, Total Recoverable <sup>3</sup>	µg/L	Grab	1/Discharge Event	<sup>2</sup>
Zinc, Total Recoverable <sup>3</sup>	µg/L	Grab	1/Discharge Event	<sup>2</sup>
4,4'-DDT <sup>3,10</sup>	µg/L	Grab	1/Discharge Event	<sup>2</sup>
PCBs <sup>3,5,10</sup>	µg/L	Grab	1/Discharge Event	<sup>2</sup>
PAHs <sup>3,6,10</sup>	µg/L	Grab	1/Discharge Event	<sup>2</sup>
Total Organic Carbon	mg/L	Grab	1/Discharge Event	<sup>2</sup>
Ammonia Nitrogen, Total (as N)	mg/L	Grab	1/Discharge Event	<sup>2</sup>
Turbidity	NTU	Grab	1/Discharge Event	<sup>2</sup>
Total coliform	MPN/100 mL	Grab	1/Discharge Event	<sup>2</sup>
Fecal coliform	MPN/100 mL	Grab	1/Discharge Event	<sup>2</sup>
Enterococcus	MPN/100 mL	Grab	1/Discharge Event	<sup>2</sup>
Chronic Toxicity <sup>7</sup>	pass or fail, % effect	Grab	1/Discharge Event	<sup>2</sup>
Benzo(a)pyrene, Total <sup>10</sup>	µg/L	Grab	1/Discharge Event	<sup>2</sup>
Chrysene, Total <sup>10</sup>	µg/L	Grab	1/Discharge Event	<sup>2</sup>
Total Petroleum Hydrocarbons (TPH) as Gasoline (C <sub>4</sub> -C <sub>12</sub> )	µg/L	Grab	1/Discharge Event	EPA Method 503.1 or 8015B
TPH as Diesel (C <sub>13</sub> -C <sub>22</sub> )	µg/L	Grab	1/Discharge Event	EPA Method 503.1, 8015B, or 8270
TPH as Waste Oil (C <sub>23+</sub> )	µg/L	Grab	1/Discharge Event	EPA Method 503.1, 8015B, or 8270
Remaining Priority Pollutants <sup>8</sup>	µg/L	Grab	1/Year	<sup>2</sup>
TCDD Equivalents <sup>9</sup>	µg/L	Grab	1/Year	<sup>2</sup>

- During periods of extended rainfall, no more than one sample per week needs 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 delay shall be included in the report. If there is no discharge to surface waters, then no monitoring is required. In the corresponding monitoring report, the Discharger will indicate under statement of perjury that no effluent was discharged to surface water during the reporting period.
- Pollutants shall be analyzed using the analytical methods described in Part 136; for priority pollutants the methods must meet the lowest minimum levels (MLs) specified in Attachment 4 of the SIP. Where no methods are specified for a given pollutant, the methods must be approved by this Los Angeles Regional Water Board or the State Water Board.
- The mass emission (lbs/day) for the discharge shall be calculated and reported using the concentration measured in the effluent and the actual flow rate measured at the time of discharge, using the formula:  

$$M = 8.34 \times C_e \times Q$$
 Where: M = mass discharge for a pollutant, lbs/day  
 C<sub>e</sub> = effluent concentration measured, mg/L  
 Q = actual discharge flow rate measured, MGD
- Phenolic compounds include the sum of the following individual chlorinated and non-chlorinated phenolic compounds: 2-chlorophenol; 2-nitrophenol; phenol; 2,4-dimethylphenol; 2,4-dichlorophenol; 2,4,6-trichlorophenol; 4-chloro-3-methylphenol; 2,4-dinitrophenol; 2-methyl-4,6-dinitrophenol; pentachlorophenol; and 4-nitrophenol.

5. Total PCBs (polychlorinated biphenyls) means the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260.
6. PAHs means polynuclear aromatic hydrocarbons. The Discharger shall monitor the CTR individual PAHs compounds for benzo(a)pyrene and chrysene. Other individual PAHs compounds listed in Attachment I of this Order shall be monitoring once per year.
7. Refer to Section V, Whole Effluent Toxicity Testing Requirements of the MRP. The Maximum Daily Single Result shall be reported as "Pass or Fail" with a "% Effect". Sufficient storm water shall be collected in case the TIE is required following a failed initial toxicity test. Please refer to section V.A.9. for the toxicity identification evaluation (TIE) procedure.
8. Priority Pollutants as defined by the California Toxics Rule (CTR), promulgated May 18, 2000 and included as Attachment I.
9. TCDD Equivalents shall be calculated using the following formula, where the Minimum Levels (MLs) and toxicity equivalency factors (TEFs) are as listed in the table below. The Discharger shall report all measured values of individual congeners, including data qualifiers. When calculating TCDD equivalents, the Discharger shall set congener concentrations below the MLs to zero. USEPA Method 1613 may be used to analyze dioxin and furan congeners.

$$\text{Dioxin-TEQ (TCDD Equivalents)} = \sum(C_x \times \text{TEF}_x)$$

Where:

$C_x$  = concentration of dioxin or furan congener x

$\text{TEF}_x$  = TEF for congener x

**Toxicity Equivalency Factors**

Congeners	Minimum Level (pg/L)	Toxicity Equivalence Factor (TEF)
2,3,7,8 - tetra CDD	10	1.0
1,2,3,7,8 - penta CDD	50	1.0
1,2,3,4,7,8 - hexa CDD	50	0.1
1,2,3,6,7,8 - hexa CDD	50	0.1
1,2,3,7,8,9 - hexa CDD	50	0.1
1,2,3,4,6,7,8 - hepta CDD	50	0.01
Octa CDD	100	0.0001
2,3,7,8 - tetra CDF	10	0.1
1,2,3,7,8 - penta CDF	50	0.05
2,3,4,7,8 - penta CDF	50	0.5
1,2,3,4,7,8 - hexa CDF	50	0.1
1,2,3,6,7,8 - hexa CDF	50	0.1
1,2,3,7,8,9 - hexa CDF	50	0.1
2,3,4,6,7,8 - hexa CDF	50	0.1
1,2,3,4,6,7,8 - hepta CDFs	50	0.01
1,2,3,4,7,8,9 - hepta CDFs	50	0.01
Octa CDF	100	0.0001

10. Water samples analyzed for these pollutants shall not be filtered.

## V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

### A. Chronic Toxicity Testing

#### 1. Discharge In-stream Waste Concentration (IWC) for Chronic Toxicity

The chronic toxicity IWC for this discharge is **100 percent** effluent.

#### 2. Sample Volume and Holding Time

The total sample volume shall be determined by the specific toxicity test method used. Sufficient sample volume shall be collected to perform the required toxicity test. For the storm water, sufficient sample volume shall also be collected for

subsequent TIE studies, if necessary, at each sampling event. All toxicity tests shall be conducted as soon as possible following sample collection. No more than 36 hours shall elapse before the conclusion of sample collection and test initiation.

### 3. Chronic Marine and Estuarine Species and Test Methods

If effluent samples are collected from outfalls discharging to receiving waters with salinity  $\geq 1$  ppt, the Discharger shall conduct the following chronic toxicity tests on effluent samples—at the in-stream waste concentration for the discharge—in accordance with species and test methods in *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (EPA/600/R-95/136, 1995). Artificial sea salts shall be used to increase sample salinity. In no case shall these species be substituted with another test species unless written authorization from the Executive Officer is received.

- a. A static renewal toxicity test with the topsmelt, *Atherinops affinis* (Larval Survival and Growth Test Method 1006.01).
- b. A static non-renewal toxicity test with the purple sea urchin, *Strongylocentrotus purpuratus*, and the sand dollar, *Dendraster excentricus* (Fertilization Test Method 1008.0), or a static non-renewal toxicity test with the red abalone, *Haliotis rufescens* (Larval Shell Development Test Method).
- c. A static non-renewal toxicity test with the giant kelp, *Macrocystis pyrifera* (Germination and Growth Test Method 1009.0).

### 4. Species Sensitivity Screening

Species sensitivity screening shall be conducted during this permit's first required sample collection. The Discharger shall collect a single effluent sample and concurrently conduct three toxicity tests using the fish, an invertebrate, and the alga species previously referenced. This sample shall also be analyzed for the parameters required for the discharge. The species that exhibits the highest "Percent Effect" at the discharge IWC during species sensitivity screening shall be used for routine monitoring during the permit cycle.

### 5. Quality Assurance and Additional Requirements

Quality assurance measures, instructions, and other recommendations and requirements are found in the test methods manual previously referenced. Additional requirements are specified below.

- a. The discharge is subject to determination of "Pass" or "Fail" and "Percent Effect" from a single-effluent concentration chronic toxicity test at the discharge IWC using the Test of Significant Toxicity (TST) approach described in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010), Appendix A, Figure A-1, and Table A-1. The null hypothesis ( $H_0$ ) for the TST approach is: Mean discharge IWC response  $\leq 0.75 \times$  Mean control response. A test result that rejects this null

hypothesis is reported as "Pass". A test result that does not reject this null hypothesis is reported as "Fail". The relative "Percent Effect" at the discharge IWC is defined and reported as:  $((\text{Mean control response} - \text{Mean discharge IWC response}) \div \text{Mean control response}) \times 100$ .

- b. The Median Monthly Effluent Limit (MMEL) for chronic toxicity only applies when there is a discharge more than one day in a calendar month period. During such calendar months, exactly three independent toxicity tests are required when one toxicity test results in "Fail". This requirement is not applicable to the industrial storm water discharge.
- c. If the effluent toxicity test does not meet all test acceptability criteria (TAC) specified in the referenced test method, then the Discharger must re-sample and re-test within 14 days. For the industrial storm water discharge, the Discharger must re-sample and re-test as soon as possible.
- d. Dilution water and control water, including brine controls, shall be laboratory water prepared and used as specified in the test methods manual. If dilution water and control water is different from test organism culture water, then a second control using culture water shall also be used.
- e. Reference toxicant tests and effluent toxicity tests shall be conducted using the same test conditions (e.g., same test duration, etc.). Monthly reference toxicant testing is sufficient.
- f. All reference toxicant test results should be reviewed and reported according to EPA guidance on the evaluation of concentration-response relationships found in *Method Guidance and Recommendations for Whole Effluent Toxicity (WET) Testing* (40 CFR section 136) (EPA 821-B-00-004, 2000).
- g. The Discharger shall perform toxicity tests on final effluent samples. Chlorine and ammonia shall not be removed from the effluent sample prior to toxicity testing, unless explicitly authorized under this section of the Monitoring and Reporting Program and the rationale is explained in the Fact Sheet (Attachment F).

## 6. Preparation of Initial Investigation TRE Work Plan

The Discharger shall prepare and submit a generic Initial Investigation TRE Work Plan within 90 days of the permit effective date, to be ready to respond to toxicity events. The Discharger shall review and update this work plan as necessary so it remains current and applicable to the discharge. At minimum, the work plan shall include:

- a. A description of the investigation and evaluation techniques that would be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency.

- b. A description of methods for maximizing in-house treatment system efficiency, good housekeeping practices, and a list of all chemicals used in operations at the facility.
- c. If a Toxicity Identification Evaluation (TIE) is necessary, an indication of who would conduct the TIEs (i.e., an in-house expert or outside contractor).

## 7. Toxicity Identification Evaluation and Toxicity Reduction Evaluation Process

- a. Toxicity Identification Evaluation (TIE). A toxicity test sample is immediately subject to TIE procedures to identify the toxic chemical(s), if a chronic toxicity test shows "Fail and % Effect value  $\geq 50$ ". The Discharger shall initiate a TIE using, as guidance, EPA manuals: *Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures* (EPA/600/6-91/003, 1991); *Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/080, 1993); *Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/081, 1993); and *Marine Toxicity Identification Evaluation (TIE): Phase I Guidance Document* (EPA/600/R-96-054, 1996). The TIE should be conducted on the species demonstrating the most sensitive toxicity response.
- b. Toxicity Reduction Evaluation (TRE). When a toxicant or class of toxicants is identified, a TRE shall be performed for that toxicant. The TRE shall include all reasonable steps to identify the source(s) of toxicity and discuss appropriate BMPs to eliminate the causes of toxicity. No later than 30 days after the source of toxicity and appropriate BMPs and/or treatment are identified, the Discharger shall submit a TRE Corrective Action Plan to the Executive Officer for approval. At minimum, the plan shall include:
  - i. The potential sources of pollutant(s) causing toxicity.
  - ii. Recommended BMPs and/or treatment to reduce the pollutant(s) causing toxicity.
  - iii. Follow-up monitoring to demonstrate that toxicity has been removed.
  - iv. Actions the Discharger will take to mitigate the effects of the discharge and prevent the recurrence of toxicity.
  - v. A schedule for these actions, progress reports, and the final report.
- c. Many recommended TRE elements parallel required or recommended efforts for source control, pollution prevention, and storm water control programs. TRE efforts should be coordinated with such efforts. As toxic substances are identified or characterized, the Discharger shall continue the TRE by determining the sources and evaluating alternative strategies for reducing or eliminating the

substances from the discharge. All reasonable steps shall be taken to reduce toxicity to levels consistent with toxicity evaluation parameters.

- d. The Discharger shall conduct routine effluent monitoring for the duration of the TIE/TRE process.
- e. The Regional Water Board recognizes that toxicity may be episodic and identification of causes and reduction of sources of toxicity may not be successful in all cases. The TRE may be ended at any stage if monitoring finds there is no longer toxicity.

## **8 Reporting**

The Self Monitoring Report (SMR) shall include a full laboratory report for each toxicity test. This report shall be prepared using the format and content of the test methods manual chapter called Report Preparation, including:

- a. The toxicity test results for the TST approach, reported as "Pass" or "Fail" and "Percent Effect" at the chronic toxicity IWC for the discharge.
- b. Water quality measurements for each toxicity test (e.g., pH, dissolved oxygen, temperature, conductivity, hardness, salinity, chlorine, ammonia).
- c. TRE/TIE results. The Executive Officer shall be notified no later than 30 days from completion of each aspect of TRE/TIE analyses.
- d. Statistical program (e.g., TST calculator, CETIS, etc.) output results for each toxicity test.

## **VI. LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE**

## **VII. RECLAMATION MONITORING REQUIREMENTS – NOT APPLICABLE**

## **VIII. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER**

The Discharger may participate in coordinated receiving water, biomonitoring, and sediment monitoring program with other dischargers to the Long Beach Inner Harbor in order to provide the Los Angeles Regional Board with a comprehensive water and sediment quality database for this water body.

### **A. Monitoring Location RSW-001**

- 1. The Discharger shall monitor the Long Beach Inner Harbor at Monitoring Location RSW-001 as follows:

**Table E-3. Receiving Water Monitoring Requirements – RSW-001**

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
pH	s.u.	Grab	1/Year <sup>1</sup>	2,3
Salinity	ppt	Grab	1/Year <sup>1</sup>	3
Temperature	°F	Grab	1/Year <sup>1</sup>	2,3
Total coliform	MPN/100 mL	Grab	1/Year <sup>1</sup>	3
Fecal coliform	MPN/100 mL	Grab	1/Year <sup>1</sup>	3
Enterococcus	MPN/100 mL	Grab	1/Year <sup>1</sup>	3
Priority Pollutants <sup>4</sup>	µg/L	Grab	1/Year	3
TCDD Equivalents <sup>5</sup>	µg/L	Grab	1/Year	3

- <sup>1</sup> Receiving water pH, salinity, temperature, bacteria, and priority pollutant sampling shall be analyzed at the same time the samples are collected for effluent Priority Pollutants analysis.
- <sup>2</sup> A hand held field meter may be used, provided the meter utilizes a USEPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter is used for monitoring required by this Monitoring and Reporting Program shall be maintained at the Facility.
- <sup>3</sup> Pollutants shall be analyzed using the analytical methods described in Part 136; for priority pollutants the methods must meet the lowest minimum levels (MLs) specified in Attachment 4 of the SIP, provided as Attachment H. Where no methods are specified for a given pollutant, the methods must be approved by this Regional Water Board or the State Water Board.
- <sup>4</sup> Priority Pollutants as defined by the California Toxics Rule (CTR), promulgated May 18, 2000 and included as Attachment I.
- <sup>5</sup> TCDD Equivalents shall be calculated using the following formula, where the Minimum Levels (MLs) and toxicity equivalency factors (TEFs) are as listed in the table below. The Discharger shall report all measured values of individual congeners, including data qualifiers. When calculating TCDD equivalents, the Discharger shall set congener concentrations below the MLs to zero. USEPA Method 1613 may be used to analyze dioxin and furan congeners.

$$\text{Dioxin-TEQ (TCDD Equivalents)} = \sum(C_x \times \text{TEF}_x)$$

Where:

$C_x$  = concentration of dioxin or furan congener x

$\text{TEF}_x$  = TEF for congener x

**Toxicity Equivalency Factors**

Congeners	Minimum Level (pg/L)	Toxicity Equivalence Factor (TEF)
2,3,7,8 - tetra CDD	1	1.0
1,2,3,7,8 - penta CDD	50	1.0
1,2,3,4,7,8 - hexa CDD	50	0.1
1,2,3,6,7,8 - hexa CDD	50	0.1
1,2,3,7,8,9 - hexa CDD	50	0.1
1,2,3,4,6,7,8 - hepta CDD	50	0.01
Octa CDD	100	0.0001
2,3,7,8 - tetra CDF	10	0.1
1,2,3,7,8 - penta CDF	50	0.05
2,3,4,7,8 - penta CDF	50	0.5
1,2,3,4,7,8 - hexa CDF	50	0.1
1,2,3,6,7,8 - hexa CDF	50	0.1
1,2,3,7,8,9 - hexa CDF	50	0.1
2,3,4,6,7,8 - hexa CDF	50	0.1
1,2,3,4,6,7,8 - hepta CDFs	50	0.01
1,2,3,4,7,8,9 - hepta CDFs	50	0.01
Octa CDF	100	0.0001



## IX. OTHER MONITORING REQUIREMENTS

### A. Visual Monitoring of Receiving Water Sampling Point

1. A visual observation station shall be established in the vicinity of Discharge Point 001 to the Long Beach Inner Harbor.
2. General observations of the receiving water shall be made at each discharge point when discharges occur. All receiving water observations shall be reported in the semiannual monitoring report. Observations shall be descriptive where applicable, such that colors, approximate amounts, or types of materials are apparent. The following observations shall be made:
  - a. Tidal stage, time, and date of monitoring
  - b. Weather conditions
  - c. Color of water
  - d. Appearance of oil films or grease, or floatable materials
  - e. Extent of visible turbidity or color patches
  - f. Direction of tidal flow
  - g. Description of odor, if any, of the receiving water
  - h. Presence and activity of California Least Tern and California Brown Pelican.

### B. Storm Water Monitoring

1. **Rainfall Monitoring.** The Discharger shall measure and record the rainfall on each day of the month. This information shall be included in the monitoring report for that month. In lieu of measuring rainfall, the Discharger may report rainfall data collected at the Long Beach Airport. If no effluent discharge to surface waters occurred during a rainfall event, no rainfall data is required to be reported in the corresponding monitoring report.
2. **Visual Observation.** The Discharger shall make visual observations of all storm water discharge locations on at least one storm event per month that produces a significant storm water discharge to observe the presence of floating and suspended materials, oil and grease, discoloration, turbidity, and odor. A "significant storm water discharge" is a continuous discharge of storm water for a minimum of one hour, or the intermittent discharge of storm water for a minimum of 3 hours in a 12-hour period.

### **C. SWPPP, BMPP, and SCP Plan Status and Effectiveness Report**

1. As required under Special Provision VI.C.3 of this Order, the Discharger shall submit an updated SWPPP, BMPP, and Spill Contingency Plan to the Executive Officer of the Los Angeles Regional Water Board within 90 days of the effective date of this permit.
2. Annually the Discharger shall report the status of the implementation and the effectiveness of the SWPPP, BMPP, and SCP required under Special Provision VI.C.3 of this Order. The SWPPP, BMPP, and SCP shall be reviewed at a minimum once per year and updated as needed to ensure all actual or potential sources of pollutants in storm water discharged from the facility are addressed in the SWPPP, BMPP, and SCP. All changes or revisions to the SWPPP, BMPP, and SCP status will be summarized in the February 1<sup>st</sup> SMR required under Attachment E, Monitoring and Reporting, Section X.C.

### **D. Regional Monitoring**

The Discharger may be required to participate in the development of Regional Monitoring program(s) to address pollutants as specified in the Harbor Toxics TMDL.

## **X. REPORTING REQUIREMENTS**

### **A. General Monitoring and Reporting Requirements**

1. The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.
2. If there is no discharge during any reporting period, the Discharger will indicate under statement of perjury that no effluent was discharged to surface water during the reporting period in the corresponding monitoring report.
3. Each monitoring report shall contain a separate section titled "Summary of Non-Compliance" which discusses the compliance record and corrective actions taken or planned that may be needed to bring the discharge into full compliance with waste discharge requirements. This section shall clearly list all non-compliance with waste discharge requirements, as well as all excursions of effluent limitations.
4. The Discharger shall inform the Regional Water Board well in advance of any proposed construction activity that could potentially affect compliance with applicable requirements.
5. The Discharger shall report the results of acute and chronic toxicity testing, TRE and TIE as required in the Attachment E, Monitoring and Reporting, Section V.F.

### **B. Self-Monitoring Reports (SMRs)**

1. At any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit Self-Monitoring Reports (SMRs) using

the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (<http://www.waterboards.ca.gov/ciwqs/index.html>). Until such notification is given, the Discharger shall submit SMRs as searchable PDF documents. SMR documents that are less than 10 megabytes (MB) should be emailed to [losangeles@waterboards.ca.gov](mailto:losangeles@waterboards.ca.gov). Documents that are 10 MB or larger should be transferred to a disk and mailed to the address listed in section XI.B.8.c of this MRP. The CIWQS Web site will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal.

2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections III through IX. The Discharger shall submit quarterly SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. SMR's are to include all new monitoring results obtained since the last SMR was submitted. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

**Table E-4. Monitoring Periods and Reporting Schedule**

Sampling Frequency	Monitoring Period Begins On...	Monitoring Period	SMR Due Date
1 / Discharge Event	Permit Effective Date	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31	May 1 August 1 November 1 February 1
1 / Year	Permit Effective Date	January 1 through December 31	February 1

4. Reporting Protocols. The Discharger shall report with each sample result the applicable Reporting Level (RL) and the current Method Detection Limit (MDL), as determined by the procedure in 40 C.F.R. part 136.
5. The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:
  - a. Sample results greater than or equal to the RL shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
  - b. Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.

For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ. The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (+ a percentage of



- b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.
- c. SMRs must be submitted to the Regional Water Board, signed and certified as required in Item X.B.1. If a disk that contains a document that is 10MB or larger is required, submit it to the address listed below:

**California Regional Water Quality Control Board  
Los Angeles Region  
320 W. 4<sup>th</sup> Street, Suite 200  
Los Angeles, CA 90013**

**C. Other Reports**

- 1. Within 90 days of the effective date of this permit, the Discharger is required to submit the following to the Los Angeles Regional Water Board:
  - a. Initial Investigation TRE workplan
  - b. Updated SWPPP
  - c. Updated BMPP
  - d. Updated SCP
- 2. By the date specified in the Monitoring Plan, the Discharger or the responsible parties shall submit annual implementation reports to the Regional Water Board. The reports shall describe the measures implemented and the progress achieved toward meeting the assigned WLAs and LAs.

## ATTACHMENT F – FACT SHEET

### Contents

I.	Permit Information .....	F-3
II.	Facility Description .....	F-4
	A. Description of Wastewater Treatment or Controls .....	F-4
	B. Discharge Points and Receiving Waters.....	F-5
	C. Summary of Existing Requirements and Self-Monitoring Report (SMR) Data .....	F-5
	D. Compliance Summary.....	F-6
	E. Planned Changes .....	F-6
III.	Applicable Plans, Policies, and Regulations.....	F-6
	A. Legal Authorities .....	F-6
	B. California Environmental Quality Act (CEQA) .....	F-6
	C. State and Federal Laws, Regulations, Policies, and Plans .....	F-7
	D. Impaired Water Bodies on CWA 303(d) List .....	F-9
	E. Other Plans, Policies and Regulations – Not Applicable.....	F-12
IV.	Rationale For Effluent Limitations and Discharge Specifications.....	F-12
	A. Discharge Prohibitions .....	F-13
	B. Technology-Based Effluent Limitations.....	F-13
	1. Scope and Authority.....	F-13
	2. Applicable Technology-Based Effluent Limitations .....	F-14
	C. Water Quality-Based Effluent Limitations (WQBELs).....	F-15
	1. Scope and Authority.....	F-15
	2. Applicable Beneficial Uses and Water Quality Criteria and Objectives .....	F-16
	3. Determining the Need for WQBELs .....	F-17
	4. WQBEL Calculations .....	F-18
	5. WQBELs based on Basin Plan Objectives.....	F-21
	6. Whole Effluent Toxicity (WET) .....	F-21
	7. Final WQBELs .....	F-22
	D. Final Effluent Limitation Consideration.....	F-23
	1. Satisfaction of Anti-Backsliding Requirements.....	F-23
	2. Satisfaction of Antidegradation Policy.....	F-23
	3. Stringency of Requirements for Individual Pollutants.....	F-23
	4. Mass-based Effluent Limitations .....	F-25
	E. Interim Effluent Limitations – Not Applicable.....	F-25
	F. Land Discharge Specifications – Not Applicable.....	F-25
	G. Recycling Specifications – Not Applicable .....	F-25
V.	Rationale for Receiving Water Limitations .....	F-25
	A. Surface Water.....	F-25
	B. Groundwater – Not Applicable .....	F-26
VI.	Rationale for Monitoring and Reporting Requirements.....	F-26
	A. Influent Monitoring – Not Applicable .....	F-26
	B. Effluent Monitoring.....	F-26
	C. Whole Effluent Toxicity Testing Requirements .....	F-26
	D. Receiving Water Monitoring.....	F-27

1. Surface Water .....	F-27
2. Groundwater – Not Applicable .....	F-27
E. Sediment Monitoring and Reporting .....	F-27
1. Effluent Sampling/Monitoring for Sediment.....	F-27
2. Harbor Toxics TMDL Water and Sediment Monitoring Plan .....	F-27
3. Regional Monitoring .....	F-28
F. Other Monitoring Requirements.....	F-28
1. Storm water monitoring requirements .....	F-28
VII. Rationale for Provisions.....	F-28
A. Standard Provisions.....	F-28
B. Special Provisions.....	F-29
1. Reopener Provisions.....	F-29
2. Special Studies and Additional Monitoring Requirements.....	F-29
3. Best Management Practices and Pollution Prevention .....	F-29
4. Construction, Operation, and Maintenance Specifications.....	F-30
5. Special Provisions for Municipal Facilities (POTWs Only) – Not Applicable .....	F-31
6. Other Special Provisions – Not Applicable.....	F-31
7. Compliance Schedules – Not Applicable .....	F-31
VIII. Public Participation .....	F-31
A. Notification of Interested Parties .....	F-31
B. Written Comments .....	F-31
C. Public Hearing .....	F-31
D. Nature of Hearing.....	F-32
E. Parties to the Hearing .....	F-32
F. Public Comments and Submittal of Evidence .....	F-32
G. Hearing Procedure.....	F-32
H. Reconsideration of Waste Discharge Requirements.....	F-33
I. Information and Copying.....	F-33
J. Register of Interested Persons .....	F-33
K. Additional Information .....	F-34

**Tables**

Table F-1. Facility Information .....	F-3
Table F-2. Historic Effluent Limitations .....	F-5
Table F-3. Basin Plan Beneficial Uses .....	F-7
Table F-4. Summary of Technology-based Effluent Limitations .....	F-15
Table F-5. Summary of Water Quality-based Effluent Limitations .....	F-22
Table F-6. Summary of Final Effluent Limitations .....	F-24

**ATTACHMENT F – FACT SHEET**

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

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

**I. PERMIT INFORMATION**

The following table summarizes administrative information related to the Facility.

**Table F-1. Facility Information**

<b>WDID</b>	4B192197001
<b>Discharger</b>	Petro-Diamond Terminal Company
<b>Name of Facility</b>	Petro-Diamond Marine Terminal
<b>Facility Address</b>	1920 Lugger Way
	Long Beach, CA 90813
	Los Angeles County
<b>Facility Contact, Title and Phone</b>	Eric Conard, Environmental Manager (949) 533 – 0112
<b>Authorized Person to Sign and Submit Reports</b>	Michael F. Dougherty, Vice President (949) 533 – 0112
<b>Mailing Address</b>	1100 Main Street, 2 <sup>nd</sup> Floor, Irvine, CA 92614
<b>Billing Address</b>	Same as above
<b>Type of Facility</b>	Industrial (SIC 5171; Petroleum Bulk Stations and Terminals)
<b>Major or Minor Facility</b>	Minor
<b>Threat to Water Quality</b>	3
<b>Complexity</b>	B
<b>Pretreatment Program</b>	No
<b>Reclamation Requirements</b>	No
<b>Facility Permitted Flow</b>	0.12 million gallons per day (MGD) <sup>1</sup>
<b>Facility Design Flow</b>	Not Applicable
<b>Watershed</b>	Los Angeles County Coastal
<b>Receiving Water</b>	Long Beach Inner Harbor
<b>Receiving Water Type</b>	Enclosed Bay

<sup>1</sup> The Discharger is required to maintain an effluent flow of 0.12 MGD or less, except during an emergency storm event, wherein the total or cumulative rainfalls are equal to or greater than a 24-hour, 25-year storm event. The Discharger may exceed a 0.12 MGD discharge to the receiving water, only after all storm water storage has been utilized and all steps have been taken to reduce the amount of storm water discharged into the receiving water. In the event of an emergency storm event discharge, the Discharger shall continue to comply with effluent limitations for all pollutants.

**A.** Petro-Diamond Terminal Company (hereinafter Discharger) is the owner and operator of the Petro-Diamond Marine Terminal (hereinafter Facility), a terminal facility which



receives, stores, and transfers a variety of petroleum and petroleum-related products. The Facility is located at 1920 Luggier Way, Long Beach, California. The Port of Long Beach owns the property on which the Facility is located.

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

- B.** The Facility discharges storm water runoff to the Long Beach Inner Harbor (Channel No. 2), a water of the United States, and is currently regulated by Order R4-2008-0016 which was adopted on April 3, 2008 and expired on March 10, 2013. The terms and conditions of the current Order have been automatically continued and remain in effect until new Waste Discharge Requirements and an NPDES permit are adopted pursuant to this Order.
- C.** The Discharger filed a report of waste discharge and submitted an application for reissuance of its Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permit on August 14, 2012. The Report of Waste Discharge was determined to be complete on November 15, 2012. A site visit was conducted on October 11, 2012, to observe operations and collect additional data to develop permit limitations and conditions.

## **II. FACILITY DESCRIPTION**

Petro-Diamond Terminal Company is the owner and operator of a tank storage terminal which provides storage and handling for petroleum liquids (i.e. gasoline, diesel, oxygenates). The Discharger receives, stores, blends, and terminals a variety of liquid petroleum products and petroleum-related products including gasoline, diesel, and oxygenates. There is no manufacturing on the premises. Products are received and shipped by marine vessel, pipeline, and tank truck. The Discharger indicated in their permit renewal application that there is no direct storm water contact to products stored at the Facility. The Facility has ten above ground storage tanks ranging in size from 2,500 to 140,000 barrels. Except for the roadways and the office area, the entire facility is protected by a primary berm and each tank is isolated by an intermediate berm as well.

### **A. Description of Wastewater Treatment or Controls**

The Facility isolates all contact water (i.e., pipeline hydrotesting, pipeline flushing, tank bottom cleaning, truck loading rack water, tank condensate, tank water draw water, and monitoring well water) from storm water. This wastewater is pumped to a 2,500-barrel tank (No. 9) for storage prior to sending it off-site for recovery and disposal. Storm water, which accumulates in the product transfer pump area, is treated in an oil/water separator prior to being pumped to tank No. 9.

Storm water which falls on a portion of the driveway and in the area around the Facility's office is discharged directly to the storm sewer system catch basin (Monitoring Location EFF-001) located on Luggier Way. This area is owned by the Port of Long Beach adjacent to Luggier Way. The storm sewer catch basin is a valve-controlled outfall that is located on and controlled by the Port of Long Beach. The Port of Long Beach roadways

are covered by the State Water Board NPDES Permit for Storm Water Discharges Associated with Industrial Activities (NPDES Permit No. CAS000001) which is held and administered by the Port's Storm Water Master Program. The storm sewer discharges to Channel No.2, Long Beach Inner Harbor at Discharge Point 001.

Storm water that falls on the remaining areas of the Facility (i.e., areas within intermediate tank berms and the rest of the Facility which is isolated by a primary berm) is visually examined for a petroleum sheen and then pumped to a holding pond (500,000 gallon) for storage. The water in the pond is monitored for compliance with an industrial wastewater discharge permit (No. 16273) before being discharged to the County Sanitation District of Los Angeles County (CSDLAC) at a maximum discharge rate of 12,474 gallons per day (gpd) during the hours of 10:00 PM and 6:00 AM.

Discharge to the Long Beach Inner Harbor occurs only during extended storm events when the maximum allowed storm water is discharged to sanitary sewer, the storage pond is full, and flooding of the Facility is imminent. The last time that the Facility discharged to surface water was January 10, 2005. The Facility's permitted flow is 120,000 gpd (based on 25-year storm event).

**B. Discharge Points and Receiving Waters**

The discharge location for the facility (Discharge Point 001) is at a valve-controlled sump located adjacent to the Petro-Diamond Terminal Company property on Luger Way. The Facility discharges through this discharge point by connecting a hose from its storm water storage pond to the storm sewer catch basin. The storm sewer catch basin is a valve-controlled storm water grate that is owned and controlled by the Port of Long Beach; Port of Long Beach personnel manually open and close the storm grate drain during and after rainfall events. Samples for Discharge Point 001 (EFF-001) are taken from inside the storm water grate and not from the connecting discharge hose.

Discharge Point 001 (33° 46' 27" N, 118° 13' 07" W) discharges to Channel No. 2, Long Beach Inner Harbor, a water of the United States near Berths 82 and 83.

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

Effluent limitations contained in the existing Order for discharges from Discharge Point 001 (Monitoring Location EFF-001) are summarized in Table F-2, below. The Facility did not have any discharges of storm water from Discharge Point 001 during the previous permit term; therefore, monitoring data are unavailable.

**Table F-2. Historic Effluent Limitations**

Parameter	Units	Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Biochemical Oxygen Demand (BOD) 5-day @ 20°C	mg/L	20	30	---	---
pH	S.U.	---	---	6.5	8.5
Oil and Grease	mg/L	10	15	---	---

Parameter	Units	Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Total Suspended Solids (TSS)	mg/L	50	75	---	---
Phenols	mg/L	---	1.0	---	---
Settleable Solids	ml/L	0.1	0.3	---	---
Temperature	°F	---	---	---	86
Turbidity	NTU	50	75	---	---
Acute Toxicity <sup>1</sup>	% survival	---	1	---	---

<sup>1</sup> The acute toxicity of the effluent shall be such that: (i) the average survival in undiluted effluent for any three consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, and (ii) no single test producing less than 70% survival.

**D. Compliance Summary**

During the term of Order R4-2008-0016, no discharges occurred. Therefore, there were no violations of effluent limitations.

**E. Planned Changes**

The Facility is planning changes that would potentially occur during the next NPDES permit term. The Facility plans to add another bermed tank in the next three to four years, depending on market demand and economic viability. The new bermed area will be constructed as an extension to the northwest corner of the current tank farm area. The Facility is also considering building a rail spur, depending on market demand and economic viability, so it can accept and ship materials and products via rail. The spur would be built on the southeast corner (adjacent to tank No. 2) of the property. There is no projected date for the rail spur.

**III. APPLICABLE PLANS, POLICIES, AND REGULATIONS**

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

**A. Legal Authorities**

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

**B. California Environmental Quality Act (CEQA)**

Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code sections 21100 through 21177.

**C. State and Federal Laws, Regulations, Policies, and Plans**

**1. Water Quality Control Plans.** The Los Angeles Regional Water Quality Control Board (Regional Water Board) adopted a Water Quality Control Plan for the Los Angeles Region (hereinafter Basin Plan) on June 13, 1994 that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Requirements in this Order implement the Basin Plan. Beneficial uses applicable to the Long Beach Inner Harbor are as follows:

**Table F-3. Basin Plan Beneficial Uses**

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Long Beach Inner Harbor	<p><u>Existing:</u>                      Industrial service supply (IND); Navigation (NAV); Non-contact water recreation (REC-2); Commercial and sport fishing (COMM); Marine habitat (MAR); and Preservation of rare, threatened, or endangered species (RARE) .</p> <p><u>Potential:</u>                      Water contact recreation (REC-1) and Shellfish harvesting (SHELL).</p>

**Enclosed Bays and Estuaries Policy.** The Water Quality Control Policy for the Enclosed Bays and Estuaries of California (Enclosed Bays and Estuaries Policy), adopted by the State Water Resources Control Board (State Water Board) as Resolution No. 95-84 on November 16, 1995, states that:

*"It is the policy of the State Water Board that the discharge of municipal wastewaters and industrial process waters (exclusive of cooling water discharges) to enclosed bays and estuaries, other than the San Francisco Bay-Delta system, shall be phased out at the earliest practicable date. Exceptions to this provision may be granted by a Regional Water Board only when the Regional Water Board finds that the wastewater in question would consistently be treated and discharged in such a manner that it would enhance the quality of receiving waters above that which would occur in the absence of the discharge."*

The discharge from the Petro-Diamond Marine Terminal is comprised solely of storm water runoff. Discharges to the Long Beach Inner Harbor would only occur during significant storm events. Since the discharge is not municipal wastewater or industrial process wastewater, the discharge is not prohibited by the Enclosed Bays and Estuaries Policy. This Order also contains provisions necessary to protect all beneficial uses of the receiving water.

**2. Thermal Plan.** The State Water Board adopted a Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California (Thermal Plan) on January 7, 1971, and amended this plan on September 18, 1975. This plan contains temperature objectives for surface

waters. Requirements of this Order implement the Thermal Plan. Additionally, a white paper developed by Regional Water Board staff entitled *Temperature and Dissolved Oxygen Impacts on Biota in Tidal Estuaries and Enclosed Bays in the Los Angeles Region*, evaluated the optimum temperatures for steelhead, topsmelt, ghost shrimp, brown rock crab, jackknife clam, and blue mussel, a number of aquatic species prevalent in the region. A maximum effluent temperature limitation of 86°F was determined to be appropriate for protection of aquatic life and is included in this Order.

- 3. National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.
- 4. State Implementation Policy.** On March 2, 2000, the State Water 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 became effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Los Angeles Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.
- 5. Antidegradation Policy.** Federal regulation 40 C.F.R. section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution 68-16. Resolution 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Los Angeles Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provision of 40 C.F.R. section 131.12 and State Water Board Resolution 68-16.
- 6. Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 C.F.R. section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed. Order No. R4-2008-0016 included average monthly effluent limitations (AMELs). The proposed discharge consists

solely of stormwater. Recently adopted NPDES permits that regulate only storm water discharges do not include AMELs. Since the discharge is storm water only, discharges are of short duration (less than 24 hours) and infrequent (one in last 7 years); only daily maximum limits are prescribed by this Order.

- 7. Endangered Species Act Requirements.** This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code, §§ 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. §§ 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state, including protecting rare and endangered species. The discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

#### **D. Impaired Water Bodies on CWA 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 Los Angeles Regional Water 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 approved the State's 2010 303(d) list of impaired water bodies on November 12, 2010. 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 2010 303(d) list and have been scheduled for TMDL development.

The Facility discharges into Long Beach Inner Harbor. The 2010 State Water Resources Control Board (State Water Board) California 303(d) List includes the classification of the Los Angeles-Long Beach Inner Harbor. The pollutants of concern include beach closures due to bacteria, benthic community effects, benzo(a)pyrene (3,4-benzopyrene-7-d), chrysene, copper, dichlorodiphenyltrichloroethane (DDT), polychlorinated biphenyls (PCBs), sediment toxicity, and zinc.

The following are summaries of the TMDLs for the Los Angeles-Long Beach Inner Harbor:

- 1. Harbor Toxics TMDL.** The Regional Water Board adopted Resolution No. R11-008 on May 5, 2011, that amended the Basin Plan to incorporate the *TMDL for Toxic Pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbors Waters* (Harbor Toxics TMDL). The Harbor Toxic TMDL was approved by the State Water Board on February 7, 2012, the OAL on March 21, 2012, and the USEPA on March 23, 2012. The Harbor Toxics TMDL contains requirements applicable to this discharge. Therefore, this Order contains effluent limitations and monitoring requirements based on the TMDL. The Harbor Toxics TMDL includes:

- a. Sediment interim concentration-based allocations (in mg/kg sediment) for copper, lead, zinc, DDT, PAHs, and PCBs (Attachment A to Resolution R11-008, p. 11).
- b. Water column final concentration-based WLAs ( $\mu\text{g/L}$ ) for copper, lead, zinc, 4,4'-DDT, and total PCBs (Attachment A to Resolution R11-008, pp. 13-14).
- c. Provisions for monitoring discharges and/or receiving waters during the TMDL's 20-year implementation schedule to determine attainment with WLAs and LAs as appropriate.

### **Implementation of the Harbor Toxics TMDL**

This Order includes monitoring thresholds based on sediment interim concentration-based allocations (in mg/kg sediment) for copper (142.3), lead (50.4), zinc (240.6), DDT (0.070), PAHs (4.58), and PCBs (0.060) [referred to in this Order as TMDL-based priority pollutants] and associated monitoring requirements. These monitoring thresholds are designed to ensure that effluent concentrations and mass discharges do not exceed levels currently achieved by the permitted facility, during implementation of the TMDL.

This Order also requires final QBELs that are statistically-calculated based on saltwater column final concentration-based WLAs (in  $\mu\text{g/L}$ , total recoverable metal) for copper (3.73), lead (8.52), zinc (85.6), 4,4'-DDT (0.00059), and total PCBs (0.00017) [referred to in this Order as CTR TMDL-based WLAs] converted from saltwater CTR criteria using CTR saltwater default translators, and relevant implementation provisions in section 1.4 of the State Implementation Policy. The TMDL includes provisions for a 20-year implementation schedule when warranted. Yet, this Order requires final QBELs (referred to in this Order as CTR TMDL-based effluent limitations) because compliance schedules for permit limitations implementing either criteria promulgated in the CTR (40 C.F.R. 131.38, revised as of July 1, 2005), or water quality objectives identical to CTR criteria that are adopted after promulgation of the CTR, may not extend beyond May 18, 2010 (State Water Resources Control Board Resolution 2008-0025, *Policy for Compliance Schedules in National Pollutant Discharge Elimination System Permits*, adopted by the State Water Board on April 15, 2008, and approved by OAL and USEPA on June 26, 2008 and August 27, 2008, respectively).

As mentioned above, the Harbor Toxics TMDL includes interim concentration-based sediment allocations (referred to in this Order as monitoring thresholds based on the sediment interim concentration-based allocations) for copper, lead, zinc, DDT, PAHs, and PCBs (TMDL-based priority pollutants) for the Long Beach Inner Harbor. The sediment WLAs were developed to ensure that the beneficial uses of the Long Beach Inner Harbor are preserved. The water column CTR TMDL-based WLAs for copper, lead, zinc, 4,4'-DDT, and total PCBs are also developed to ensure that the beneficial uses of the Long Beach Inner Harbor are preserved. However, no water column CTR TMDL-based WLAs are assigned for PAHs for the Greater Harbor Waters (includes Long Beach Inner Harbor). Therefore, performance goals are established for the PAHs (benzo(a)pyrene and chrysene) based on CTR human health criteria (see below for

details). Hence, the Discharger will demonstrate attainment with the interim monitoring thresholds by demonstrating compliance with the effluent limitations for TSS and/or for the CTR TMDL-based effluent limitations for copper, lead, zinc, 4,4'-DDT, and total PCBs, including attainment with the performance goals for the PAH compounds: [benzo(a)pyrene and chrysene]. Exceedances of the water column effluent limitations for TSS and either of these contaminants (copper, lead, zinc, 4,4'-DDT, and total PCBs), or the performance goals for either of the PAH compounds [benzo(a)pyrene and chrysene], results in a requirement for the Discharger to complete sediment monitoring for that constituent. See Footnote 4 to Table 4 of the Order for details.

In cases where sediment monitoring is required as per Table 5 of the Order, attainment with the monitoring thresholds based on the sediment interim concentration-based allocations will be demonstrated by meeting the interim allocations in the discharge over a 3-year averaging period (Attachment A to Resolution R11-008, p. 11, Paragraph 2, Item 3).

#### **Performance Goals for PAHs Compounds: Benzo(a)pyrene and Chrysene**

Performance goals are intended to ensure that effluent concentrations and mass discharges do not exceed levels currently achieved by the permitted facility. These performance goals are not considered as limitations or standards for the regulation of the Facility.

The CTR criteria for benzo(a)pyrene of 0.049 µg/L and chrysene of 0.049 µg/L are set as performance goals in this Order. The State's 2010 303(d) List classifies the Los Angeles/Long Beach Inner Harbor as impaired for these PAHs; benzo(a)pyrene and chrysene. The May 5, 2011 Final Staff Report for the Harbor Toxics TMDL (Staff Report) included monitoring data collected by Port of Los Angeles (POLA) in various Harbor waters. The water column data (2005 two sampling events in the Inner, Fish, and Outer Harbor) indicated total PAHs with concentration ranges of 0.09 - 0.28 µg/L which are above the CTR human health criteria of 0.049 µg/L for benzo(a)pyrene. Further, analytical results for total, unfiltered samples of water overlying the sediments collected by POLA and Port of Long Beach (POLB) in 2006 at Inner and Outer Harbor Waters included total PAHs with concentration ranges of 0.0046 – 0.42 µg/L. CTR human health criteria were not established for total PAHs. Therefore, the CTR human health criterion for individual PAHs of 0.049 µg/L is applied for benzo(a)pyrene and chrysene.

The performance goals prescribed in this Order are not enforceable effluent limitations or standards.

#### **Harbor Toxics TMDL Water Column, Sediment, and Fish Tissue Monitoring for Greater Los Angeles and Long Beach Harbor Waters Compliance Monitoring Program**

The TMDL's implementation schedule to demonstrate attainment of WLAs and load allocations is a maximum of 20 years after the TMDL effective date for a Discharger who justifies the need for that amount of time. During this period, the Discharger is required, either individually or with a collaborating group, to develop a monitoring and



reporting plan (Monitoring Plan) and quality assurance project plan (QAPP) for the water column, sediment, and fish tissue in the Greater Los Angeles and Long Beach Harbor. These plans shall follow the "TMDL Element – Monitoring Plan" provisions in Attachment A to Resolution No. R11-008. The TMDL requires that the Monitoring Plan and QAPP shall be submitted 20 months after the effective date (March 23, 2012) of the TMDL for public review and subsequent Executive Officer approval. Since the effective date of this Order exceeds the deadline for the Monitoring Plan and QAPP, the Discharger shall join a group already formed or develop a site monitoring specific plan. If the Discharger joins a group already formed, the Discharger shall notify the Regional Water Board within 90 days of the effective date of the Order. If the Discharger decides to develop a site specific Monitoring Plan with a QAPP, the Discharger shall notify the Regional Water Board within 90 days of the effective date of the Order and submit them to the Regional Water Board within 12 months of the effective date of the Order for public comment and the Regional Water Board review and approval. The Discharger shall begin monitoring 6 months after the Monitoring Plan and QAPP are approved, unless otherwise directed by the Executive Officer. The compliance monitoring program shall include water column, sediment, and fish tissue monitoring.

#### **E. Other Plans, Policies and Regulations – Not Applicable**

### **IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS**

The CWA requires point source dischargers to control the amount of conventional, nonconventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the Code of Federal Regulations: 40 C.F.R. section 122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 C.F.R. section 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water.

The Facility is a tank storage terminal which provides storage and handling for petroleum liquids (i.e., gasoline, diesel, oxygenates). Products are received and shipped by marine vessel, pipeline, and tank truck. Effluent limitations in the existing permit were established for pH, temperature, BOD<sub>5</sub>, oil and grease, TSS, turbidity, phenols, settleable solids and acute toxicity. These are typical pollutants of concern for storm water discharges from tank storage terminals in the Los Angeles Region. As per 40 CFR section 122.45(d), continuous discharges require both a daily maximum and a monthly average effluent limit. The discharge from the Petro-Diamond Marine Terminal facility is not a continuous discharge. Since storm events in Southern California occur infrequently and historically the facility has less than one discharge per month, this permit includes daily maximum effluent limits only.

Chronic toxicity is a more stringent requirement than acute toxicity. A chemical at a low concentration can have chronic effects but no acute effects. Chronic toxicity limitations are expressed as "Pass" or "Fail" and "% Effect" for maximum daily single result. Since the storm water discharge is intermittent, no average monthly effluent limitation for the chronic

toxicity is prescribed. The chronic toxicity effluent limitations in this Order are as stringent as necessary to protect the Basin Plan Water Quality Objective for chronic toxicity.

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

Mass-based effluent limitations are established based on the maximum allowable discharge flow rate, 0.12 MGD, as indicated in the Discharger's permit renewal application.

#### **A. Discharge Prohibitions**

The discharge prohibitions are based on the requirements of the Basin Plan, State Water Board's plans and policies, the Water Code, and previous permit provisions, and are consistent with the requirements established for other discharges to the Long Beach Inner Harbor regulated by NPDES permits.

#### **B. Technology-Based Effluent Limitations**

##### **1. Scope and Authority**

Section 301(b) of the CWA and implementing USEPA permit regulations at 40 C.F.R. section 122.44 require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Best Professional Judgment (BPJ) in accordance with 40 C.F.R. section 125.3.

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

- a. Best practicable treatment control technology (BPT) represents the average of the best existing performance by well-operated facilities within an industrial category or subcategory. BPT standards apply to toxic, conventional, and non-conventional 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 non-conventional pollutants.

- c. Best conventional pollutant control technology (BCT) represents the control from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering a two-part reasonableness test. The first test compares the relationship between the costs of attaining a reduction in effluent discharge and the resulting benefits. The second test examines the cost and level of reduction of pollutants from the discharge from publicly owned treatment works to the cost and level of reduction of such pollutants from a class or category of industrial sources. Effluent limitations must be reasonable under both tests. .
- d. New source performance standards (NSPS) represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

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

## 2. Applicable Technology-Based Effluent Limitations

ELGs have not been developed for the discharges from the petroleum bulk storage and distribution facilities. Thus, no effluent limitations based on ELGs are prescribed in this permit.

This Order includes technology-based effluent limitations based on BPJ in accordance with 40 C.F.R. section 125.3. Effluent limitations for TSS, turbidity, BOD<sub>5</sub>, oil and grease, settleable solids and phenols have been carried over from the existing Order (R4-2008-0016) for daily maximum effluent limitations, and continue to be appropriate limitations based on the factors listed in 40 C.F.R. 125.3(d).

In addition, the previous Order required the Discharger to develop and implement a Storm Water Pollution Prevention Plan (SWPPP). This Order will require the Discharger to update and continue to implement, consistent with the existing Order requirements, the existing SWPPP. The revised SWPPP will reflect current operations, treatment activities, and staff responsible for implementing and supporting the SWPPP. The SWPPP will outline site-specific management processes for minimizing storm water runoff contamination and for preventing contaminated storm water runoff from being discharged directly into the storm drain. The proposed Order requires the Discharger to update and continue to implement their SWPPP (Attachment G).

In addition, due to the lack of national ELGs for storm water runoff from petroleum tank farms and the absence of data to apply BPJ to develop numeric effluent limitations, and pursuant to 40 C.F.R. section 122.44(k), the Los Angeles Regional

Water Board will require the Discharger to update and continue to implement the Best Management Practices Plan (BMPP). A BMPP shall be consistent with the requirements of 40 C.F.R. section 125, Subpart K, and the general guidance contained in the NPDES Best Management Guidance Document, USEPA Report No. 600/9-79-045, December 1979 (revised June 1981). The BMPP shall include a summary of BMPs aimed at controlling the potential exposure of pollutants to storm water, inspection practices, schedules of preventive maintenance, housekeeping procedures, vehicle management practices, and spill containment and cleanup procedures. The purpose of the BMPP will be to establish site-specific procedures that will ensure proper operation and maintenance of equipment and storage areas, to ensure that unauthorized non-storm water discharges (i.e., spills) do not occur at the facility. This Order will also require the Discharger to update and continue to implement their Spill Contingency Plan (SCP).

The combination of the SWPPP, BMPP, SCP, and existing Order 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.

**Table F-4. Summary of Technology-based Effluent Limitations**

Parameter	Units	Effluent Limitations
		Maximum Daily
BOD <sub>5</sub> @ 20 °C	mg/L	30
Oil and Grease	mg/L	15
Total Suspended Solids (TSS)	mg/L	75
Phenolic Compounds <sup>1</sup>	mg/L	1.0
Settleable Solids	ml/L	0.3
Turbidity	NTU	75

<sup>1</sup> Phenolic compounds include the sum of the following individual chlorinated and non-chlorinated phenolic compounds: 2-chlorophenol; 2-nitrophenol; phenol; 2,4-dimethylphenol; 2,4-dichlorophenol; 2,4,6-trichlorophenol; 4-chloro-3-methylphenol; 2,4-dinitrophenol; 2-methyl-4,6-dinitrophenol; pentachlorophenol; and 4-nitrophenol.

**C. Water Quality-Based Effluent Limitations (WQBELs)**

**1. Scope and Authority**

Section 301(b) of the CWA and 40 C.F.R. section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

40 C.F.R. section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) USEPA criteria guidance under CWA section 304(a),

supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi). Permit WQBELs must also be consistent with TMDL WLAs approved by USEPA.

The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of 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 any applicable 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 Technical Support Document (TSD) for storm water discharges and in the SIP for non-storm water discharges. However, the Section 3.3.8 Effluent Characterization of Specific Chemicals, Step 4, in the first full paragraph on p. 64 of the TSD reads "The statistical approach shown in Box 3-2 or an analogous approach developed by a regulatory authority can be used to determine the reasonable potential". The Los Angeles Regional Water Board has determined that the procedures for determining reasonable potential and calculating WQBELs contained in the SIP for non-storm water discharges may be used to evaluate reasonable potential and calculate WQBELs for storm water discharges as well. Hence, in this Order, the Los Angeles Regional Water Board has used the SIP methodology to evaluate reasonable potential for storm water discharges through Discharge Point 001.

## **2. Applicable Beneficial Uses and Water Quality Criteria and Objectives**

As noted in Section II of the Limitations and Discharge Requirements, the Los Angeles Regional Water Board adopted a Basin Plan that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the Basin Plan. The beneficial uses applicable to the Long Beach Inner Harbor, are summarized in Section III.C.1 of this Fact Sheet. The Basin Plan includes both narrative and numeric water quality objectives applicable to the receiving water.

Priority pollutant water quality criteria in the CTR are applicable to Long Beach Inner Harbor. The CTR contains both saltwater and freshwater criteria. Because a distinct separation generally does not exist between freshwater and saltwater aquatic communities, the following apply, in accordance with 40 C.F.R. 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. As indicated in the Harbor Toxics TMDL, the salinity in the Los Angeles-Long Beach Inner Harbor at the location of the discharge supports marine aquatic life. Therefore, the CTR criteria for saltwater or human health for consumption of organisms, whichever is more stringent, are used to determine the need for water quality-based effluent

limitations in this Order to protect the beneficial uses of the Long Beach Inner Harbor, a water of the United States in the vicinity of the discharge.

### 3. Determining the Need for WQBELs

In accordance with Section 1.3 of the SIP, the Los Angeles Regional Water Board conducts a reasonable potential analysis (RPA) for each priority pollutant with an applicable criterion or objective to determine if a WQBEL is required in the permit. If there are TMDL WLAs approved by USEPA, then WQBELs are developed using these WLAs [40 C.F.R. section 122.44(d)(1)(vii)]. Otherwise, the Los Angeles Regional Water Board analyzes effluent and receiving water data and identifies the maximum observed effluent concentration (MEC) and maximum background concentration (B) in the receiving water for each constituent. To determine reasonable potential, the MEC and the maximum background concentration are then compared with the applicable water quality objectives (C) outlined in the CTR, NTR, as well as the Basin Plan. For all pollutants that have a reasonable potential to cause or contribute to an excursion above a state water quality standard, numeric WQBELs are required. The RPA considers water quality criteria from the CTR and NTR, and when applicable, water quality objectives specified in the Basin Plan. To conduct the RPA, the Los Angeles Regional Water Board identifies the MEC and maximum background concentration in the receiving water 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 applicable water quality criteria and objectives. The SIP specifies three triggers to complete a RPA:

- 1) Trigger 1 – If the MEC  $\geq$  C, a limit is needed.
- 2) Trigger 2 – If the background concentration (B)  $>$  C and the pollutant is detected in the effluent, 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 receiving water data are needed to conduct a complete RPA. If available data are not sufficient, the Discharger will be required to gather the appropriate data for the Los Angeles Regional Water Board to conduct the RPA. Upon review of the data, and if the Los Angeles Regional Water Board determines that WQBELs are needed to protect the beneficial uses, the permit will be reopened for appropriate modification.

There have been no discharges from the Petro-Diamond Marine Terminal through Discharge Point 001 to surface waters during this permit term (last discharge January 2005), and insufficient data are available to characterize potential discharges from the Facility. Therefore, the RPA was not performed. Monitoring requirements for CTR parameters have been included to provide sufficient data to

perform a RPA. This Order includes final WQBELs for copper, lead, zinc, 4,4'-DDT, and total PCBs based on the TMDL WLAs included in the Harbor Toxics TMDL.

#### 4. WQBEL Calculations

- a. If a reasonable potential exists to exceed applicable water quality criteria or objectives, then a WQBEL must be established in accordance with one or more of the three procedures contained in Section 1.4 of the SIP. These procedures include:
- b. WQBELs for copper, lead, zinc, 4,4'-DDT, and total PCBs are based on Harbor Toxics TMDL WLAs approved by USEPA that are calculated following procedures in Section 1.4 of the SIP.
- c. This Order, does not include dilution credit. However, in accordance with the reopener provision in section VI.C.1.e in the Order, this Order may be reopened upon the submission by the Discharger of adequate information to establish appropriate dilution credits or a mixing zone, as determined by the Regional Water Board.
- d. WQBELs Calculation Example

*Calculation of aquatic life AMEL and MDEL:*

**Step 1:** For each constituent requiring an effluent limit, identify the applicable water quality criteria or objective. For each criteria, determine the effluent concentration allowance (ECA) using the following steady state equation:

$$\begin{aligned} \text{ECA} &= C + D(C-B) \quad \text{when } C > B, \text{ and} \\ \text{ECA} &= C \quad \quad \quad \text{when } C \leq B, \end{aligned}$$

- Where C = The priority pollutant criterion/objective, adjusted if necessary for hardness, pH and translators. For discharges from the Facility, criteria for saltwater are independent of hardness and pH.
- D = The dilution credit, and
- B = The ambient background concentration

Where a WLA has been established through a TMDL for a parameter, the WLA replacing C and is set equal to the ECA. The Harbor Toxics TMDL establishes the copper water column concentration-based WLA as equal to the saltwater chronic aquatic life criterion.

$$\text{ECA} = \text{WLA}_{\text{chronic}} = 3.73 \text{ } \mu\text{g/L}$$

**Step 2:** For each ECA based on aquatic life criterion/objective, determine the long-term average discharge condition (LTA) by multiplying the ECA by a factor (multiplier). The multiplier is a statistically based factor that adjusts the ECA to account for effluent variability. The value of the multiplier varies depending on the coefficient of variation (CV) of the data set and whether it is an acute or chronic

criterion/objective. The dry-weather WLAs are based on chronic CTR criteria. The wet-weather WLAs are based on acute CTR criteria. Table 1 of the SIP provides pre-calculated values for the multipliers based on the value of the CV. Equations to develop the multipliers in place of using values in the tables are provided in Section 1.4, Step 3 of the SIP and will not be repeated here.

$$LTA_{acute} = ECA_{acute} \times Multiplier_{acute} \text{ 99}$$

$$LTA_{chronic} = ECA_{chronic} \times Multiplier_{chronic} \text{ 99}$$

The CV for the data set must be determined before the multipliers can be selected and will vary depending on the number of samples and the standard deviation of a data set. If the data set is less than 10 samples, or at least 80% of the samples in the data set are reported as non-detect, the CV shall be set equal to 0.6.

For total recoverable copper, the following data was used to develop the acute and chronic LTA using equations provided in Section 1.4, Step 3 of the SIP (Table 1 of the SIP also provides this data up to three decimals):

No. of Samples	CV	ECA Multiplier <sub>acute</sub>	ECA Multiplier <sub>chronic</sub>
0	0.60	Not Applicable	0.527

Since the WLA for total recoverable copper is based on the chronic criterion (i.e., no WLA was established as equal to the acute criterion), the chronic multiplier will be used to develop the LTA and effluent limitations.

$$LTA_{copper} = 3.73 \mu\text{g/L} \times 0.527 = 1.97 \mu\text{g/L}$$

**Step 3:** Select the most limiting (lowest) of the LTA.

$$LTA = \text{most limiting of } LTA_{acute} \text{ or } LTA_{chronic}$$

For total recoverable copper, based on the Harbor Toxics TMDL, since there is only one LTA,

$$LTA_{copper} = 1.97 \mu\text{g/L}$$

**Step 4:** Calculate the WQBELs by multiplying the LTA by a factor (multiplier). WQBELs are expressed as AMELs and MDELs. The multiplier is a statistically based factor that adjusts the LTA for the averaging periods and exceedance frequencies of the criteria/objectives. The value of the multiplier varies depending on the probability basis, the CV of the data set, the number of samples (for AMEL) and whether it is a monthly or daily limit. Table 2 of the SIP provides pre-calculated values for the multipliers based on the value of the CV and the number of samples. Equations to develop the multipliers in place of using values in the tables are provided in Section 1.4, Step 5 of the SIP and will not be repeated here.

$$AMEL_{aquatic \text{ life}} = LTA \times AMEL_{multiplier} \text{ 95}$$



$$MDEL_{\text{aquatic life}} = LTA \times MDEL_{\text{multiplier 99}}$$

AMEL multipliers are based on a 95<sup>th</sup> percentile occurrence probability, and the MDEL multipliers are based on the 99<sup>th</sup> percentile occurrence probability. If the number of samples is less than four (4), the default number of samples to be used is four (4).

For total recoverable copper, based on the Harbor Toxics TMDL, the following data were used to develop the AMEL and MDEL for effluent limitations using equations provided in Section 1.4, Step 5 of the SIP:

No. of Samples Per Month	CV	Multiplier <sub>MDEL 99</sub>	Multiplier <sub>AMEL 95</sub>
4	0.6	3.11	1.55

Total Recoverable Copper:

$$AMEL = 1.97 \mu\text{g/L} \times 1.55 = 3.1 \mu\text{g/L}$$

$$MDEL = 1.97 \mu\text{g/L} \times 3.11 = 6.1 \mu\text{g/L}$$

**Step 5:** For the ECA based on human health, set the AMEL equal to the ECA<sub>human health</sub>

$$AMEL_{\text{human health}} = ECA_{\text{human health}}$$

Copper does not have human health criteria for the consumption of organisms only defined in the CTR or in the Harbor Toxics TMDL. The Harbor Toxics TMDL includes WLAs for 4,4'-DDT and total PCBs, that are set equal to CTR human health criteria for the consumption of organisms only. For demonstration, the calculated effluent limitations for 4,4'-DDT, stemming from the Harbor Toxics TMDL, are shown.

For 4,4'-DDT:

$$AMEL_{\text{human health}} = 0.00059 \mu\text{g/L}$$

**Step 6:** Calculate the MDEL for human health by multiplying the AMEL by the ratio of the Multiplier<sub>MDEL</sub> to the Multiplier<sub>AMEL</sub>. Table 2 of the SIP provides pre-calculated ratios to be used in this calculation based on the CV and the number of samples.

$$MDEL_{\text{human health}} = AMEL_{\text{human health}} \times (\text{Multiplier}_{\text{MDEL}} / \text{Multiplier}_{\text{AMEL}})$$

For 4,4'-DDT, the following data were used to develop the MDEL<sub>human health</sub>:

No. of Samples Per Month	CV	Multiplier <sub>MDEL 99</sub>	Multiplier <sub>AMEL 95</sub>	Ratio
4	0.6	3.11	1.55	2.0

For 4,4'-DDT:

$$\text{MDEL}_{\text{human health}} = 0.00059 \mu\text{g/L} \times 2.0 = 0.00118 \mu\text{g/L}$$

**Step 7:** Select the lower of the AMEL and MDEL based on aquatic life and human health as the WQBEL for the Order. Since the Harbor Toxics TMDL established single value WLAs, this step is unnecessary.

For copper, lead, and zinc, there are no human health (Consumption of Organism Only) criteria, and WLAs have been established based on the Harbor Toxics TMDL; therefore, the established effluent limitations are based on aquatic life criteria used for the Harbor Toxics TMDL WLAs. For 4-4' DDT and total PCBs, there are no aquatic life criteria and WLAs have been established based on the Harbor Toxics TMDL, therefore the established effluent limitations are based on human health criteria used for the Harbor Toxics TMDL WLAs. These limitations are expected to be protective of the beneficial uses.

#### 5. WQBELs based on Basin Plan Objectives

The Basin Plan states that the pH of inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharge. Based on the requirements of the Basin Plan, an instantaneous minimum limitation of 6.5 and an instantaneous maximum limitation of 8.5 for pH are included in the proposed permit. The effluent limitations for pH are equivalent to the limits in the previous Order.

The Basin Plan lists temperature requirements for the receiving waters and references the Thermal Plan. A white paper developed by Los Angeles Regional Water Board staff entitled *Temperature and Dissolved Oxygen Impacts on Biota in Tidal Estuaries and Enclosed Bays in the Los Angeles Region*, evaluated the optimum temperatures for steelhead, topsmelt, ghost shrimp, brown rock crab, jackknife clam, and blue mussel; aquatic species present in water bodies in the Los Angeles Region. The 86°F temperature was found to be protective of receiving water beneficial uses and has been included in this Order consistent with Order No. R4-2008-0016.

#### 6. Whole Effluent Toxicity (WET)

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 may measure 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 responses by 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.

Chronic toxicity is a more stringent requirement than acute toxicity. A chemical at a low concentration can have chronic effects but no acute effects. This Order establishes a chronic toxicity effluent limitation at Discharge Point 001 using USEPA's 2010 TST hypothesis testing approach. Chronic toxicity limitations are expressed as "Pass" or "Fail" and "% Effect" for maximum daily single result. Since the storm water discharge is intermittent, no average monthly effluent limitation for the chronic toxicity is prescribed. The chronic toxicity effluent limitations in this Order are as stringent as necessary to protect the Basin Plan Water Quality Objective for chronic toxicity.

**7. Final WQBELs**

**Table F-5. Summary of Water Quality-based Effluent Limitations**

Parameter	Units	Effluent Limitations		
		Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Temperature	°F	--	--	86
pH	s.u.	--	6.5	8.5
Chronic Toxicity <sup>1</sup>	Pass or Fail, % Effect	Pass or % Effect <50	--	--
Copper, Total Recoverable <sup>2</sup>	µg/L	6.1	--	--
	lbs/day <sup>3</sup>	0.006	--	--
Lead, Total Recoverable <sup>2</sup>	µg/L	14	--	--
	lbs/day <sup>3</sup>	0.014	--	--
Zinc, Total Recoverable <sup>2</sup>	µg/L	141	--	--
	lbs/day <sup>3</sup>	0.14	--	--
4,4'-DDT <sup>2</sup>	µg/L	0.0012	--	--
	lbs/day <sup>3</sup>	1.2E-06	--	--
Total PCBs <sup>2</sup>	µg/L	0.0003	--	--
	lbs/day <sup>3</sup>	3E-07	--	--

<sup>1</sup> "Pass" or "Fail" and "% Effect" for Maximum Daily Effluent Limitations (MDEL). The Discharger demonstrates compliance with the chronic toxicity MDELs if the chronic toxicity testing result meet one of the following:

- i. The chronic toxicity testing result is "Pass"; or
- ii. The percent effect is less than 50 if the chronic toxicity result is "Fail".

<sup>2</sup> The new effluent limitations are based on the USEPA-approved Harbor Toxics TMDL WLAs and calculated using the CTR-SIP procedures.

<sup>3</sup> The mass limitations are based on a maximum discharge flow rate of 0.12 MGD and are calculated as follows:

$$\text{Flow (MGD)} \times \text{Concentration (mg/L)} \times 8.34 \text{ (conversion factor)} = \text{lbs/day}$$

## D. Final Effluent Limitation Consideration

### 1. Satisfaction of Anti-Backsliding Requirements

Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 C.F.R. section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. Effluent limits for BOD<sub>5</sub>, oil and grease, TSS, turbidity, phenolic compounds, settleable solids, and acute toxicity are consistent with the limits from the previous Order (Order R4-2008-0016). Order No. R4-2008-0016 included average monthly effluent limitations (AMELs), which are not included in this Order. The elimination of AMELs is allowed by section 402(o)(2)(A), which allows the relaxation of effluent limitations if material and substantial alterations to the permitted facility occurred after permit issuance which justify the application of less stringent effluent limitations. There has been a material change in the permitted facility and the discharge, as historically the discharge was composed of storm water with small amounts of wastewater. The facility currently segregates the other wastewater and proposes to discharge storm water only. The discharges are of short duration (less than 24 hours) and infrequent (once in last 7 years); therefore, only maximum daily effluent limitations (MDELs) are prescribed. All MDELs in this Order are at least as those in the previous Order.

**Comment [JN1]:** Is the elimination of AMELs the only relaxation of effluent limitations in the permit (all others are the same or more stringent?)

### 2. Satisfaction of Antidegradation Policy

Section 131.12, 40 C.F.R., requires that the state water quality standards include an anti-degradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution 68-16. Resolution 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Los Angeles Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies.

This Order does not provide for an increase in the permitted design flow or allow for a reduction in the level of treatment. The final limitations and performance goals in this Order meet the requirements of the Basin Plan and SIP and they hold the Discharger to performance levels that will not cause or contribute to water quality impairment or degrade receiving water quality. Compliance with these requirements will result in the use of best practicable treatment or control of the discharge. Hence the permitted discharge is consistent with the antidegradation provision of 40 CFR section 131.12 and State Water Board Resolution 68-16.

### 3. Stringency of Requirements for Individual Pollutants

This Order contains both technology-based effluent limitations and WQBELs for individual pollutants. The technology-based effluent limitations consist of restrictions on BOD, oil and grease, TSS, phenolic compounds, settleable solids, and turbidity. Restrictions on these pollutants are discussed in section IV.B of the Fact Sheet.

This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements per 40 C.F.R. sections 419.22(e)(2), 419.23(e)(2), and 419.24(e)(2).

WQBELs for pH, temperature and acute toxicity are carried over from the existing Order (No. R4-2008-0016) and have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant WQBELs were derived from the CTR, the CTR is the applicable standard pursuant to 40 C.F.R. section 131.38. The scientific procedures for calculating the individual WQBELs for priority pollutants are based on the CTR, which was approved by USEPA on May 18, 2000. All beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to section 131.21(c)(1). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

**Table F-6. Summary of Final Effluent Limitations**

Parameter	Units	Effluent Limitations				Basis <sup>1</sup>
		Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	Performance Goals	
BOD <sub>5</sub> @20°C	mg/L	30	—	—	—	E, BPJ
	lbs/day <sup>2</sup>	30	—	—	—	
pH	S.U.	—	6.5	8.5	—	E, BP
Oil and Grease	mg/L	15	—	—	—	E, BPJ
	lbs/day <sup>2</sup>	15	—	—	—	
Total Suspended Solids	mg/L	75	—	—	—	E, BPJ
	lbs/day <sup>2</sup>	75	—	—	—	
Phenolic Compounds <sup>3</sup>	mg/L	1	—	—	—	E, BPJ
	lbs/day <sup>2</sup>	1	—	—	—	
Settleable Solids	ml/L	0.3	—	—	—	E, BPJ
Temperature	°F	—	—	86	—	E, BP, TP, WP
Turbidity	NTU	75	—	—	—	E, BPJ
Copper, Total Recoverable <sup>4</sup>	µg/L	6.1	—	—	—	TMDL, CTR-SIP
	lbs/day	0.006	—	—	—	
Lead, Total Recoverable <sup>4</sup>	µg/L	14	—	—	—	TMDL, CTR-SIP
	lbs/day	0.014	—	—	—	
Zinc, Total Recoverable	µg/L	141	—	—	—	TMDL, CTR-SIP
	lbs/day	0.14	—	—	—	
4,4'-DDT <sup>4</sup>	µg/L	0.0012	—	—	—	TMDL, CTR-SIP
	lbs/day	1.2E-06	—	—	—	

Parameter	Units	Effluent Limitations				Basis <sup>1</sup>
		Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	Performance Goals	
Total PCBs <sup>4</sup>	µg/L	0.0003	—	—	—	TMDL, CTR-SIP
	lbs/day	3E-07	—	—	—	
Benzo(a)pyrene <sup>5</sup>	µg/L	—	—	—	0.049	CTR <sup>6</sup>
Chrysene <sup>5</sup>	µg/L	—	—	—	0.049	CTR <sup>6</sup>
Chronic Toxicity <sup>7</sup>	Pass or Fail, % Effect	Pass or % Effect <50	—	—	—	TST

<sup>1</sup> E = Existing Limitation; BP = Basin Plan; TP = Thermal Plan; WP = White Paper; BPJ = Best Professional Judgment; CTR = California Toxics Rule; SIP = State Implementation Policy, TST = EPA Test of Significant Toxicity Approach

<sup>2</sup> Mass-based (lbs/day) effluent limitations are based on a maximum discharge flow rate of 0.12 MGD.

<sup>3</sup> Phenolic compounds include the sum of the following individual chlorinated and non-chlorinated phenolic compounds: 2-chlorophenol; 2-nitrophenol; phenol; 2,4-dimethylphenol; 2,4-dichlorophenol; 2,4,6-trichlorophenol; 4-chloro-3-methylphenol; 2,4-dinitrophenol; 2-methyl-4,6-dinitrophenol; pentachlorophenol; and 4-nitrophenol.

<sup>4</sup> The effluent limitations are based on the Harbor Toxics TMDL WLAs and were calculated based on CTR-SIP procedures.

<sup>5</sup> Performance goals are intended to ensure that effluent concentrations and mass discharges do not exceed levels currently achieved by the permitted facility. These performance goals are not considered as limitations or standards for the regulation of the facility. They act as triggers to determine when sediment monitoring is required for this category of pollutants.

<sup>6</sup> CTR human health criteria were not established for total PAHs. Therefore, the performance goals are based on the CTR human health criteria for the individual PAHs; benzo(a)pyrene and chrysene. The benzo(a)pyrene and chrysene were selected because the State's 2010 303(d) List classifies the Los Angeles/Long Beach Inner Harbor as impaired for these PAH compounds.

<sup>7</sup> "Pass" or "Fail" and "% Effect" for Maximum Daily Effluent Limitations (MDEL). The Discharger demonstrates compliance with the acute toxicity MDELs if the acute toxicity testing result meets one of the following:

- i. The acute toxicity testing result is "Pass"; or
- ii. The percent effect is less than 50 if the acute toxicity result is "Fail".

#### 4. Mass-based Effluent Limitations

Mass-based effluent limitations based upon a maximum discharge flow rate of 0.12 MGD, as noted in the Discharger's permit renewal application.

#### E. Interim Effluent Limitations – Not Applicable

#### F. Land Discharge Specifications – Not Applicable

#### G. Recycling Specifications – Not Applicable

### V. RATIONALE FOR RECEIVING WATER LIMITATIONS

#### A. Surface Water

The Basin Plan contains numeric and narrative water quality objectives applicable to all surface waters within the Los Angeles Region. Water quality objectives include an objective to maintain the high quality waters pursuant to federal regulations (40 C.F.R. section 131.12) and State Water Board Resolution 68-16. Receiving water limitations in

this Order are included to ensure protection of beneficial uses of the receiving water and are based on the water quality objectives contained in the Basin Plan.

**B. Groundwater – Not Applicable**

**VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS**

40 C.F.R. section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorize the Los Angeles Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP), Attachment E of this Order, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this facility.

**A. Influent Monitoring – Not Applicable**

**B. Effluent Monitoring**

Monitoring for those pollutants expected to be present in the Monitoring Location EFF-001 at Discharge Point 001 will be required as shown in the proposed MRP. The Order requires that the monitoring for the pollutants is performed once per discharge event and that at a minimum, annual monitoring is required to characterize the discharge for future analysis.

The SIP states that the Regional Water Board will require periodic monitoring for pollutants for which criteria or objectives apply and for which no effluent limitations have been established. This Order requires the Discharger to conduct annual monitoring for the remaining CTR priority pollutants and TCDD Equivalents. The Regional Water Board will use the additional data to conduct an RPA and determine if additional WQBELs are required. The Regional Water Board may reopen the permit to incorporate additional effluent limitations and requirements, if necessary.

**C. Whole Effluent Toxicity Testing Requirements**

Whole effluent toxicity (WET) protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. 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 may measure mortality, reproduction, and growth. Chronic toxicity is a more stringent requirement than acute toxicity. A chemical at a low concentration can have chronic effects but no acute effects. For this permit, chronic toxicity in the discharge is limited and evaluated using USEPA's 2010 TST hypothesis testing approach.

This Order includes chronic toxicity limitation for storm water discharge from Discharge Point EFF-001, and therefore, monitoring requirements are included in the MRP to determine compliance with the effluent limitation.

## D. Receiving Water Monitoring

### 1. Surface Water

Monitoring has been established at Monitoring Location RSW-001 for pH, temperature, salinity, and priority pollutants. The Facility is also required to perform general observations of the receiving water when discharges occur and report the observations in the monitoring report. Attention shall be given to the presence or absence of: floating or suspended matter, discoloration, aquatic life, visible film, sheen or coating, and fungi, slime, or objectionable growths.

According to the SIP, the Discharger is required to monitor the upstream receiving water for the CTR priority pollutants, to determine reasonable potential. Accordingly, the Los Angeles Regional Water Board is requiring that the Discharger conduct upstream receiving water monitoring of the CTR priority pollutants at Monitoring Location RSW-001. The Discharger must analyze temperature, pH, bacteria, and salinity of the upstream receiving water at the same time the samples are collected for priority pollutants analysis.

### 2. Groundwater – Not Applicable

## E. Sediment Monitoring and Reporting

### 1. Effluent Sampling/Monitoring for Sediment

The Harbor Toxics TMDL requires attainment with both water column and sediment WLAs. This permit has utilized tools to translate the WLAs into permit effluent limitations and interim monitoring thresholds. Attainment with these CTR TMDL-based requirements will be demonstrated using TSS effluent monitoring, CTR TMDL-based priority pollutant effluent monitoring, monitoring for specific PAH compounds [e.g., benzo(a)pyrene and chrysene], and when required, sediment monitoring. Compliance with these requirements will ensure that discharges from the Petro-Diamond Marine Terminal do not contribute to contaminant sediment concentrations in Long Beach Inner Harbor.

### 2. Harbor Toxics TMDL Water and Sediment Monitoring Plan

As defined in the Harbor Toxics TMDL, the Discharger is a “responsible party” because it is an “Individual Stormwater Permittee.” As such, the Discharger, either alone, or as part of a collaborative effort, is responsible for monitoring water and sediment discharges. The Discharger, by itself, or as part of a collaborative monitoring effort (Responsible Parties), is required to prepare and submit a Monitoring and Reporting Plan (Monitoring Plan) and Quality Assurance Project Plan (QAPP), following TMDL Element - Monitoring Plan regulatory provisions in Attachment A to Resolution R11-008. The TMDL requires that the Monitoring Plan and QAPP shall be submitted 20 months after the effective date (March 23, 2012) of the TMDL for public review and, subsequently, Executive Officer approval. Since the effective date of this order exceeds the deadline for the Monitoring Plan and QAPP, the Discharger shall join a group already formed or develop a site specific

**Comment [JN2]:** Revise section to include edits from this paragraph in the main Order.



monitoring plan. If the Discharger decides to join a group already formed, the Discharger shall notify the Regional Water Board within 90 days of the effective date of the Order. If the Discharger decides to develop a site specific Monitoring Plan with a QAPP, the Discharger shall notify the Regional Water Board within 90 days of the effective date of the Order and submit the proposed Monitoring Plan and QAPP to the Regional Water Board within 12 months of the effective date of the Order for public comment and the Regional Water Board approval. The Discharger shall begin monitoring 6 months after the Monitoring Plan and QAPP are approved by the Executive Officer, unless otherwise directed by the Executive Officer. The compliance monitoring program shall include water column, sediment, and fish tissue monitoring as specified in Section VI.C.2.c. of Limitations and Discharge Requirements.

### **3. Regional Monitoring**

The Discharger is required to participate in the development of Regional Monitoring program(s) to address pollutants as specified in the Harbor Toxics TMDL

## **F. Other Monitoring Requirements**

### **1. Storm water monitoring requirements**

In order to evaluate the effectiveness of the SWPPP, rainfall monitoring and visual storm water monitoring requirements are required during discharge events.

## **VII. RATIONALE FOR PROVISIONS**

### **A. Standard Provisions**

Standard Provisions, which apply to all NPDES permits in accordance with 40 C.F.R. section 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 C.F.R. section 122.42, are provided in Attachment D. The Discharger must comply with all standard provisions and with those additional conditions that are applicable under 40 C.F.R. section 122.42.

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

## **B. Special Provisions**

### **1. Reopener Provisions**

These provisions are based on 40 C.F.R. section 123 and the previous Order. The Los Angeles Regional Water Board may reopen the permit to modify permit conditions and requirements. Causes for modifications include the promulgation of new federal regulations, modification in toxicity requirements, or adoption of new regulations by the State Water Board or Los Angeles Regional Water Board, including revisions to the Basin Plan.

### **2. Special Studies and Additional Monitoring Requirements**

**a. Initial Investigation Toxicity Reduction Evaluation Workplan.** This provision is based on section 4 of the SIP, Toxicity Control Provisions, which establishes minimum toxicity control requirements for implementing the narrative toxicity objective for aquatic life protection established in the basin plans of the State of California.

**b. Harbor Toxics TMDL Water and Sediment Monitoring Plan.** Monitoring Thresholds based on Sediment Interim Concentration-based Allocations in the Harbor Toxics TMDL for Sediment Monitoring of the Effluent. This Order implements the Harbor Toxics TMDL's interim sediment allocations (Long Beach Harbor) for copper, lead, zinc, DDT, PAHs, and PCBs as monitoring thresholds. Attainment with these thresholds shall be demonstrated in accordance with Table 5 of this Order. Regardless of these monitoring thresholds, the Discharger shall ensure that effluent concentrations and mass discharges do not exceed levels that can be attained by performance of the Facility's treatment technologies existing at the time of permit issuance, reissuance, or modification.

Harbor Toxics TMDL Water Column, Sediment, and Fish Tissue Monitoring for the Greater Los Angeles and Long Beach Harbor Waters Compliance Monitoring Program implements the Compliance Monitoring Program as required in the Harbor Toxics TMDL. The Compliance Monitoring Program include water column monitoring, sediment monitoring and fish tissue monitoring at monitoring stations in Fish Harbor.

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

**a. Storm Water Pollution Prevention Plan (SWPPP).** Order R4-2008-0016 required the Discharger update and implement a SWPPP. This Order requires the Discharger to update, as necessary, and continue to implement a SWPPP. The SWPPP will outline site-specific management processes for minimizing storm water runoff contamination and for preventing contaminated storm water runoff from being discharged directly into the Long Beach Inner Harbor. At a minimum, the management practices should ensure that raw materials and chemicals do not come into contact with storm water. SWPPP requirements are included as Attachment G, based on 40 CFR 122.44(k).

- b. Best Management Practices Plan (BMPP).** Order R4-2008-0016 required the Discharger to develop and implement BMPs in order to reduce the amount of pollutants entering the discharge. This Order requires the Discharger to update and continue to implement the BMPP, consistent with Order R4-2008-0016. The BMPP may be included as a component of the SWPPP. The purpose of the BMPP is to establish site-specific procedures that ensure proper operation and maintenance of equipment, to ensure that unauthorized non-storm water discharges (i.e., spills) do not occur at the Facility.

The Harbor Toxics TMDL addresses BMPs as follows:

*“When permits for responsible parties are revised, the permits should provide mechanisms to make adjustments to the required BMPs as necessary to ensure their adequate performance. If proposed structural and non-structural BMPs adequately implement the waste load allocations then additional controls will not be necessary. Alternatively, if the proposed structural and non-structural BMPs selected prove to be inadequate then additional structural and non-structural BMPs or additional controls may be required.”*

Special Provision VI.C.3 requires the Discharger to update and maintain a BMPP, as a component of the SWPPP, that incorporates requirements contained in Appendix G. Appendix G requires a discussion on the effectiveness of each BMP to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges.

- c. Spill Contingency Plan (SCP).** Order R4-2008-0016 required the Discharger to develop a SCP, or provide an updated Spill Prevention Control and Countermeasure (SPCC) Plan as a substitute for a SCP. This Order requires the Discharger to update and continue to implement a SCP to control the discharge of pollutants. The SCP shall include a technical report on the preventive (failsafe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events at the site. This provision is included in this Order to minimize and control the amount of pollutants discharged in case of a spill. The SCP shall be site specific and shall cover all areas of the Facility.

#### **4. Construction, Operation, and Maintenance Specifications**

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

**5. Special Provisions for Municipal Facilities (POTWs Only) – Not Applicable**

**6. Other Special Provisions – Not Applicable**

**7. Compliance Schedules – Not Applicable**

**VIII. PUBLIC PARTICIPATION**

The California Regional Water Quality Control Board, Los Angeles Region (Regional Water Board) is considering the issuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for Petro-Diamond Terminal Company – Petro-Diamond Marine Terminal. As a step in the WDR adoption process, the Los Angeles Regional Water Board staff has developed tentative WDRs. The Los Angeles Regional Water Board encourages public participation in the WDR adoption process.

**A. Notification of Interested Parties**

The Los Angeles Regional Water Board notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and provided an opportunity to submit their written comments and recommendations.

**B. Written Comments**

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments must be submitted either in person or by mail to the Executive Office at the Los Angeles Regional Water Board at 320 W. 4<sup>th</sup> Street, Suite 200, Los Angeles, CA.

To be fully responded to by staff and considered by the Los Angeles Regional Water Board, written comments must be received at the Los Angeles Regional Water Board offices by 5:00 p.m. on February 10, 2014.

**C. Public Hearing**

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

Date: March 6, 2014  
Location: Metropolitan Water District of Southern California  
700 North Alameda Street  
Los Angeles, California

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

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

#### **D. Nature of Hearing**

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

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

#### **E. Parties to the Hearing**

The following are the parties to this proceeding:

1. The applicant/permittee

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

#### **F. Public Comments and Submittal of Evidence**

Persons wishing to comment upon or object to the tentative waste discharge requirements, or submit evidence for the Board to consider, are invited to submit them in writing to [losangeles@waterboards.ca.gov](mailto:losangeles@waterboards.ca.gov) with a copy submitted to Mazhar Ali at [mazhar.ali@waterboards.ca.gov](mailto:mazhar.ali@waterboards.ca.gov). To be evaluated and responded to by staff, included in the Board's agenda folder, and fully considered by the Board, written comments must be received no later than 5 p.m. on February 10, 2014. Comments or evidence received after that date will be submitted, ex agenda, to the Board for consideration, but only included in administrative record with express approval of the Chair during the hearing. Additionally, if the Board receives only supportive comments, the permit may be placed on the Board's consent calendar, and approved without an oral testimony.

#### **G. Hearing Procedure**

The meeting, in which the hearing will be a part of, will start at 9:00 a.m. Interested persons are invited to attend. Staff will present the matter under consideration, after which oral statements from parties or interested persons will be heard. For accuracy of the record, all important testimony should be in writing. The Board will include in the administrative record written transcriptions of oral testimony that is actually presented at the hearing. Oral testimony may be limited to 3 minutes maximum or less for each speaker, depending on the number of persons wishing to be heard. Parties or persons with similar concerns or opinions are encouraged to choose one representative to

speak. At the conclusion of testimony, the Board will deliberate in open or close session, and render a decision.

Parties or persons with special procedural requests should contact staff. Any procedure not specified in this hearing notice will be waived pursuant to section 648(d) of title 23 of the California Code of Regulations. Objections to any procedure to be used during this hearing must be submitted in writing not later than close of 15 business days prior to the date of the hearing. Procedural objections will not be entertained at the hearing.

If there should not be a quorum on the scheduled date of this meeting, all cases will be automatically continued to the next scheduled meeting on March 6, 2014. A continuance will not extend any time set forth herein.

#### **H. Reconsideration of Waste Discharge Requirements**

Any person aggrieved by this action of the Regional Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must *receive* the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:

[http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality](http://www.waterboards.ca.gov/public_notices/petitions/water_quality)

or will be provided upon request.

The State Water Board's mailing address is the following:

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

#### **I. Information and Copying**

The Report of Waste Discharge, other supporting documents, and comments received are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Los Angeles Regional Water Board by calling (213) 576- 6600.

#### **J. Register of Interested Persons**

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

**K. Additional Information**

Requests for additional information or questions regarding this Order should be directed to Mazhar Ali at (213) 576-6652.

## **ATTACHMENT G – STORM WATER POLLUTION PREVENTION PLAN REQUIREMENTS**

### **I. Implementation Schedule**

A storm water pollution prevention plan (SWPPP) shall be developed and submitted to the Regional Water Board within 90 days following the adoption of this Order. The SWPPP shall be implemented for each facility covered by this Permit within 10 days of approval from the Regional Water Board, or 6-months from the date of the submittal of the SWPPP to the Regional Water Board (whichever comes first).

### **II. Objectives**

The SWPPP has two major objectives: (a) to identify and evaluate sources of pollutants associated with industrial activities that may affect the quality of storm water discharges and authorized non-storm water discharges from the facility; and (b) to identify and implement site-specific best management practices (BMPs) to reduce or prevent pollutants associated with industrial activities in storm water discharges and authorized non-storm water discharges. BMPs may include a variety of pollution prevention measures or other low-cost and pollution control measures. They are generally categorized as non-structural BMPs (activity schedules, prohibitions of practices, maintenance procedures, and other low-cost measures) and as structural BMPs (treatment measures, run-off controls, overhead coverage.) To achieve these objectives, facility operators should consider the five phase process for SWPPP development and implementation as shown in Table A.

The SWPPP requirements are designed to be sufficiently flexible to meet the needs of various facilities. SWPPP requirements that are not applicable to a facility should not be included in the SWPPP.

A facility's SWPPP is a written document that shall contain a compliance activity schedule, a description of industrial activities and pollutant sources, descriptions of BMPs, drawings, maps, and relevant copies or references of parts of other plans. The SWPPP shall be revised whenever appropriate and shall be readily available for review by facility employees or Regional Water Board inspectors.

### **III. Planning and Organization**

#### **A. Pollution Prevention Team**

The SWPPP shall identify a specific individual or individuals and their positions within the facility organization as members of a storm water pollution prevention team responsible for developing the SWPPP, assisting the facility manager in SWPPP implementation and revision, and conducting all monitoring program activities required in Attachment E of this Permit. The SWPPP shall clearly identify the Permit related responsibilities, duties, and activities of each team member. For small facilities, storm water pollution prevention teams may consist of one individual where appropriate.

#### **B. Review Other Requirements and Existing Facility Plans**



The SWPPP may incorporate or reference the appropriate elements of other regulatory requirements. Facility operators should review all local, State, and Federal requirements that impact, complement, or are consistent with the requirements of this General Permit. Facility operators should identify any existing facility plans that contain storm water pollutant control measures or relate to the requirements of this Permit. As examples, facility operators whose facilities are subject to Federal Spill Prevention Control and Countermeasures' requirements should already have instituted a plan to control spills of certain hazardous materials. Similarly, facility operators whose facilities are subject to air quality related permits and regulations may already have evaluated industrial activities that generate dust or particulates.

#### IV. Site Map

The SWPPP shall include a site map. The site map shall be provided on an 8-½ x 11 inch or larger sheet and include notes, legends, and other data as appropriate to ensure that the site map is clear and understandable. If necessary, facility operators may provide the required information on multiple site maps.

**TABLE A  
FIVE PHASES FOR DEVELOPING AND IMPLEMENTING INDUSTRIAL  
STORM WATER POLLUTION PREVENTION PLANS**

<b>PLANNING AND ORGANIZATION</b>  Form Pollution Prevention Team Review other plans
<b>ASSESSMENT PHASE</b>  Develop a site map Identify potential pollutant sources Inventory of materials and chemicals List significant spills and leaks Identify non-storm water discharges Assess pollutant risks
<b>BEST MANAGEMENT PRACTICES IDENTIFICATION PHASE</b>  Non-structural BMPs Structural BMPs Select activity and site-specific BMPs

**IMPLEMENTATION PHASE**

Train employees  
Implement BMPs  
Conduct recordkeeping and reporting

**EVALUATION / MONITORING**

Conduct annual site evaluation  
Review monitoring information  
Evaluate BMPs  
Review and revise SWPPP

The following information shall be included on the site map:

- A.** The facility boundaries; the outline of all storm water drainage areas within the facility boundaries; portions of the drainage area impacted by run-on from surrounding areas; and direction of flow of each drainage area, on-site surface water bodies, and areas of soil erosion. The map shall also identify nearby water bodies (such as rivers, lakes, and ponds) and municipal storm drain inlets where the facility's storm water discharges and authorized non-storm water discharges may be received.
- B.** The location of the storm water collection and conveyance system, associated points of discharge, and direction of flow. Include any structural control measures that affect storm water discharges, authorized non-storm water discharges, and run-on. Examples of structural control measures are catch basins, berms, detention ponds, secondary containment, oil/water separators, diversion barriers, etc.
- C.** An outline of all impervious areas of the facility, including paved areas, buildings, covered storage areas, or other roofed structures.
- D.** Locations where materials are directly exposed to precipitation and the locations where significant spills or leaks identified in Section A.6.a.iv. below have occurred.
- E.** Areas of industrial activity. This shall include the locations of all storage areas and storage tanks, shipping and receiving areas, fueling areas, vehicle and equipment storage/maintenance areas, material handling and processing areas, waste treatment and disposal areas, dust or particulate generating areas, cleaning and rinsing areas, and other areas of industrial activity which are potential pollutant sources.

**V. List of Significant Materials**

The SWPPP shall include a list of significant materials handled and stored at the site. For each material on the list, describe the locations where the material is being stored, received, shipped, and handled, as well as the typical quantities and frequency. Materials

shall include raw materials, intermediate products, final or finished products, recycled materials, and waste or disposed materials.

## VI. Description of Potential Pollutant Sources

**A.** The SWPPP shall include a narrative description of the facility's industrial activities, as identified in Section A.4.e above, associated potential pollutant sources, and potential pollutants that could be discharged in storm water discharges or authorized non-storm water discharges. At a minimum, the following items related to a facility's industrial activities shall be considered:

- 1. Industrial Processes.** Describe each industrial process, the type, characteristics, and quantity of significant materials used in or resulting from the process, and a description of the manufacturing, cleaning, rinsing, recycling, disposal, or other activities related to the process. Where applicable, areas protected by containment structures and the corresponding containment capacity shall be described.
- 2. Material Handling and Storage Areas.** Describe each handling and storage area, type, characteristics, and quantity of significant materials handled or stored, description of the shipping, receiving, and loading procedures, and the spill or leak prevention and response procedures. Where applicable, areas protected by containment structures and the corresponding containment capacity shall be described.
- 3. Dust and Particulate Generating Activities.** Describe all industrial activities that generate dust or particulates that may be deposited within the facility's boundaries and identify their discharge locations; the characteristics of dust and particulate pollutants; the approximate quantity of dust and particulate pollutants that may be deposited within the facility boundaries; and a description of the primary areas of the facility where dust and particulate pollutants would settle.
- 4. Significant Spills and Leaks.** Describe materials that have spilled or leaked in significant quantities in storm water discharges or non-storm water discharges since April 17, 1994. Include toxic chemicals (listed in 40 CFR, Part 302) that have been discharged to storm water as reported on U.S. Environmental Protection Agency (USEPA) Form R, and oil and hazardous substances in excess of reportable quantities (see 40 Code of Federal Regulations [CFR], Parts 110, 117, and 302).

The description shall include the type, characteristics, and approximate quantity of the material spilled or leaked, the cleanup or remedial actions that have occurred or are planned, the approximate remaining quantity of materials that may be exposed to storm water or non-storm water discharges, and the preventative measures taken to ensure spill or leaks do not reoccur. Such list shall be updated as appropriate during the term of this Permit.

- 5. Non-Storm Water Discharges.** Facility operators shall investigate the facility to identify all non-storm water discharges and their sources. As part of this

investigation, all drains (inlets and outlets) shall be evaluated to identify whether they connect to the storm drain system.

All non-storm water discharges shall be described. This shall include the source, quantity, frequency, and characteristics of the non-storm water discharges and associated drainage area.

Non-storm water discharges (other boiler blowdown and boiler condensate permitted under the Order) that contain significant quantities of pollutants or that do not meet the conditions provided in Special Conditions D of the storm water general permit are prohibited by this Permit (Examples of prohibited non-storm water discharges are contact and non-contact cooling water, rinse water, wash water, etc.). Non-storm water discharges that meet the conditions provided in Special Condition D of the general storm water permit are authorized by this Permit. The SWPPP must include BMPs to prevent or reduce contact of non-storm water discharges with significant materials or equipment.

**6. Soil Erosion.** Describe the facility locations where soil erosion may occur as a result of industrial activity, storm water discharges associated with industrial activity, or authorized non-storm water discharges.

**B.** The SWPPP shall include a summary of all areas of industrial activities, potential pollutant sources, and potential pollutants. This information should be summarized similar to Table B. The last column of Table B, "Control Practices", should be completed in accordance with Section A.8. below.

## VII. Assessment of Potential Pollutant Sources

**A.** The SWPPP shall include a narrative assessment of all industrial activities and potential pollutant sources as described in A.6. above to determine:

1. Which areas of the facility are likely sources of pollutants in storm water discharges and authorized non-storm water discharges, and
2. Which pollutants are likely to be present in storm water discharges and authorized non-storm water discharges. Facility operators shall consider and evaluate various factors when performing this assessment such as current storm water BMPs; quantities of significant materials handled, produced, stored, or disposed of; likelihood of exposure to storm water or authorized non-storm water discharges; history of spill or leaks; and run-on from outside sources.

**B.** Facility operators shall summarize the areas of the facility that are likely sources of pollutants and the corresponding pollutants that are likely to be present in storm water discharges and authorized non-storm water discharges.

Facility operators are required to develop and implement additional BMPs as appropriate and necessary to prevent or reduce pollutants associated with each pollutant source. The BMPs will be narratively described in Section 8 below.

### **VIII. Storm Water Best Management Practices**

The SWPPP shall include a narrative description of the storm water BMPs to be implemented at the facility for each potential pollutant and its source identified in the site assessment phase (Sections A.6. and 7. above). The BMPs shall be developed and implemented to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Each pollutant and its source may require one or more BMPs. Some BMPs may be implemented for multiple pollutants and their sources, while other BMPs will be implemented for a very specific pollutant and its source.

**TABLE B**  
**EXAMPLE**  
**ASSESSMENT OF POTENTIAL POLLUTION SOURCES AND**  
**CORRESPONDING BEST MANAGEMENT PRACTICES**  
**SUMMARY**

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Vehicle & Equipment Fueling	Fueling	Spills and leaks during delivery.  Spills caused by topping off fuel tanks.  Hosing or washing down fuel oil fuel area.  Leaking storage tanks.  Rainfall running off fuel oil, and rainfall running onto and off fueling area.	fuel oil	Use spill and overflow protection.  Minimize run-on of storm water into the fueling area.  Cover fueling area.  Use dry cleanup methods rather than hosing down area.  Implement proper spill prevention control program.  Implement adequate preventative maintenance program to preventive tank and line leaks.  Inspect fueling areas regularly to detect problems before they occur.  Train employees on proper fueling, cleanup, and spill response techniques.

The description of the BMPs shall identify the BMPs as (1) existing BMPs, (2) existing BMPs to be revised and implemented, or (3) new BMPs to be implemented. The description shall also include a discussion on the effectiveness of each BMP to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. The SWPPP shall provide a summary of all BMPs implemented for each pollutant source. This information should be summarized similar to Table B.

Facility operators shall consider the following BMPs for implementation at the facility:

**A. Non-Structural BMPs**

Non-structural BMPs generally consist of processes, prohibitions, procedures, schedule of activities, etc., that prevent pollutants associated with industrial activity from contacting with storm water discharges and authorized non-storm water discharges. They are considered low technology, cost-effective measures. Facility operators should consider all possible non-structural BMPs options before considering additional

structural BMPs (see Section A.8.b. below). Below is a list of non-structural BMPs that should be considered:

- 1. Good Housekeeping.** Good housekeeping generally consist of practical procedures to maintain a clean and orderly facility.
- 2. Preventive Maintenance.** Preventive maintenance includes the regular inspection and maintenance of structural storm water controls (catch basins, oil/water separators, etc.) as well as other facility equipment and systems.
- 3. Spill Response.** This includes spill clean-up procedures and necessary clean-up equipment based upon the quantities and locations of significant materials that may spill or leak.
- 4. Material Handling and Storage.** This includes all procedures to minimize the potential for spills and leaks and to minimize exposure of significant materials to storm water and authorized non-storm water discharges.
- 5. Employee Training.** This includes training of personnel who are responsible for (1) implementing activities identified in the SWPPP, (2) conducting inspections, sampling, and visual observations, and (3) managing storm water. Training should address topics such as spill response, good housekeeping, and material handling procedures, and actions necessary to implement all BMPs identified in the SWPPP. The SWPPP shall identify periodic dates for such training. Records shall be maintained of all training sessions held.
- 6. Waste Handling/Recycling.** This includes the procedures or processes to handle, store, or dispose of waste materials or recyclable materials.
- 7. Recordkeeping and Internal Reporting.** This includes the procedures to ensure that all records of inspections, spills, maintenance activities, corrective actions, visual observations, etc., are developed, retained, and provided, as necessary, to the appropriate facility personnel.
- 8. Erosion Control and Site Stabilization.** This includes a description of all sediment and erosion control activities. This may include the planting and maintenance of vegetation, diversion of run-on and runoff, placement of sandbags, silt screens, or other sediment control devices, etc.
- 9. Inspections.** This includes, in addition to the preventative maintenance inspections identified above, an inspection schedule of all potential pollutant sources. Tracking and follow-up procedures shall be described to ensure adequate corrective actions are taken and SWPPPs are made.
- 10. Quality Assurance.** This includes the procedures to ensure that all elements of the SWPPP and Monitoring Program are adequately conducted.

**B. Structural BMPs.**

Where non-structural BMPs as identified in Section A.8.a. above are not effective, structural BMPs shall be considered. Structural BMPs generally consist of structural devices that reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Below is a list of structural BMPs that should be considered:

1. **Overhead Coverage.** This includes structures that provide horizontal coverage of materials, chemicals, and pollutant sources from contact with storm water and authorized non-storm water discharges.
2. **Retention Ponds.** This includes basins, ponds, surface impoundments, bermed areas, etc. that do not allow storm water to discharge from the facility.
3. **Control Devices.** This includes berms or other devices that channel or route run-on and runoff away from pollutant sources.
4. **Secondary Containment Structures.** This generally includes containment structures around storage tanks and other areas for the purpose of collecting any leaks or spills.
5. **Treatment.** This includes inlet controls, infiltration devices, oil/water separators, detention ponds, vegetative swales, etc. that reduce the pollutants in storm water discharges and authorized non-storm water discharges.

#### **IX. Annual Comprehensive Site Compliance Evaluation**

The facility operator shall conduct one comprehensive site compliance evaluation (evaluation) in each reporting period (July 1-June 30). Evaluations shall be conducted within 8-16 months of each other. The SWPPP shall be revised, as appropriate, and the revisions implemented within 90 days of the evaluation. Evaluations shall include the following:

- A. A review of all visual observation records, inspection records, and sampling and analysis results.
- B. A visual inspection of all potential pollutant sources for evidence of, or the potential for, pollutants entering the drainage system.
- C. A review and evaluation of all BMPs (both structural and non-structural) to determine whether the BMPs are adequate, properly implemented and maintained, or whether additional BMPs are needed. A visual inspection of equipment needed to implement the SWPPP, such as spill response equipment, shall be included.
- D. An evaluation report that includes, (i) identification of personnel performing the evaluation, (ii) the date(s) of the evaluation, (iii) necessary SWPPP revisions, (iv) schedule, as required in Section A.10.e, for implementing SWPPP revisions, (v) any incidents of non-compliance and the corrective actions taken, and (vi) a certification that



the facility operator is in compliance with this Permit. If the above certification cannot be provided, explain in the evaluation report why the facility operator is not in compliance with this General Permit. The evaluation report shall be submitted as part of the annual report, retained for at least five years, and signed and certified in accordance with Standard Provisions V.D.5 of Attachment D.

#### **X. SWPPP General Requirements**

- A.** The SWPPP shall be retained on site and made available upon request of a representative of the Regional Water Board and/or local storm water management agency (local agency) which receives the storm water discharges.
- B.** The Regional Water Board and/or local agency may notify the facility operator when the SWPPP does not meet one or more of the minimum requirements of this Section. As requested by the Regional Water Board and/or local agency, the facility operator shall submit an SWPPP revision and implementation schedule that meets the minimum requirements of this section to the Regional Water Board and/or local agency that requested the SWPPP revisions. Within 14 days after implementing the required SWPPP revisions, the facility operator shall provide written certification to the Regional Water Board and/or local agency that the revisions have been implemented.
- C.** The SWPPP shall be revised, as appropriate, and implemented prior to changes in industrial activities which (i) may significantly increase the quantities of pollutants in storm water discharge, (ii) cause a new area of industrial activity at the facility to be exposed to storm water, or (iii) begin an industrial activity which would introduce a new pollutant source at the facility.
- D.** The SWPPP shall be revised and implemented in a timely manner, but in no case more than 90 days after a facility operator determines that the SWPPP is in violation of any requirement(s) of this Permit.
- E.** When any part of the SWPPP is infeasible to implement due to proposed significant structural changes, the facility operator shall submit a report to the Regional Water Board prior to the applicable deadline that (i) describes the portion of the SWPPP that is infeasible to implement by the deadline, (ii) provides justification for a time extension, (iii) provides a schedule for completing and implementing that portion of the SWPPP, and (iv) describes the BMPs that will be implemented in the interim period to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Such reports are subject to Regional Water Board approval and/or modifications. Facility operators shall provide written notification to the Regional Water Board within 14 days after the SWPPP revisions are implemented.
- F.** The SWPPP shall be provided, upon request, to the Regional Water Board. The SWPPP is considered a report that shall be available to the public by the Regional Water Board under Section 308(b) of the Clean Water Act.

**ATTACHMENT H – STATE WATER BOARD MINIMUM LEVELS**

The Minimum Levels (MLs) in this appendix are for use in reporting and compliance determination purposes in accordance with section 2.4 of the State Implementation Policy. These MLs were derived from data for priority pollutants provided by State certified analytical laboratories in 1997 and 1998. These MLs shall be used until new values are adopted by the State Water Board and become effective. The following tables (Tables 2a - 2d) present MLs for four major chemical groupings: volatile substances, semi-volatile substances, inorganics, and pesticides and PCBs.

Table 2a - VOLATILE SUBSTANCES*	GC	GCMS
1,1 Dichloroethane	0.5	1
1,1 Dichloroethylene	0.5	2
1,1,1 Trichloroethane	0.5	2
1,1,2 Trichloroethane	0.5	2
1,1,2,2 Tetrachloroethane	0.5	1
1,2 Dichlorobenzene (volatile)	0.5	2
1,2 Dichloroethane	0.5	2
1,2 Dichloropropane	0.5	1
1,3 Dichlorobenzene (volatile)	0.5	2
1,3 Dichloropropene (volatile)	0.5	2
1,4 Dichlorobenzene (volatile)	0.5	2
Acrolein	2.0	5
Acrylonitrile	2.0	2
Benzene	0.5	2
Bromoform	0.5	2
Methyl Bromide	1.0	2
Carbon Tetrachloride	0.5	2
Chlorobenzene	0.5	2
Chlorodibromo-methane	0.5	2
Chloroethane	0.5	2
Chloroform	0.5	2
Chloromethane	0.5	2
Dichlorobromo-methane	0.5	2
Dichloromethane	0.5	2
Ethylbenzene	0.5	2
Tetrachloroethylene	0.5	2
Toluene	0.5	2
Trans-1,2 Dichloroethylene	0.5	1
Trichloroethene	0.5	2
Vinyl Chloride	0.5	2

\*The normal method-specific factor for these substances is 1; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.

Table 2b - SEMI-VOLATILE SUBSTANCES*	GC	GCMS	LC	COLOR
Benzo (a) Anthracene	10	5		
1,2 Dichlorobenzene (semivolatile)	2	2		
1,2 Diphenylhydrazine		1		
1,2,4 Trichlorobenzene	1	5		
1,3 Dichlorobenzene (semivolatile)	2	1		

Table 2b - SEMI-VOLATILE SUBSTANCES*	GC	GCMS	LC	COLOR
1,4 Dichlorobenzene (semivolatile)	2	1		
2 Chlorophenol	2	5		
2,4 Dichlorophenol	1	5		
2,4 Dimethylphenol	1	2		
2,4 Dinitrophenol	5	5		
2,4 Dinitrotoluene	10	5		
2,4,6 Trichlorophenol	10	10		
2,6 Dinitrotoluene		5		
2- Nitrophenol		10		
2-Chloroethyl vinyl ether	1	1		
2-Chloronaphthalene		10		
3,3' Dichlorobenzidine		5		
Benzo (b) Fluoranthene		10	10	
3-Methyl-Chlorophenol	5	1		
4,6 Dinitro-2-methylphenol	10	5		
4- Nitrophenol	5	10		
4-Bromophenyl phenyl ether	10	5		
4-Chlorophenyl phenyl ether		5		
Acenaphthene	1	1	0.5	
Acenaphthylene		10	0.2	
Anthracene		10	2	
Benzidine		5		
Benzo(a) pyrene		10	2	
Benzo(g,h,i)perylene		5	0.1	
Benzo(k)fluoranthene		10	2	
bis 2-(1-Chloroethoxyl) methane		5		
bis(2-chloroethyl) ether	10	1		
bis(2-Chloroisopropyl) ether	10	2		
bis(2-Ethylhexyl) phthalate	10	5		
Butyl benzyl phthalate	10	10		
Chrysene		10	5	
di-n-Butyl phthalate		10		
di-n-Octyl phthalate		10		
Dibenzo(a,h)-anthracene		10	0.1	
Diethyl phthalate	10	2		
Dimethyl phthalate	10	2		
Fluoranthene	10	1	0.05	
Fluorene		10	0.1	
Hexachloro-cyclopentadiene	5	5		
Hexachlorobenzene	5	1		
Hexachlorobutadiene	5	1		
Hexachloroethane	5	1		
Indeno(1,2,3,cd)-pyrene		10	0.05	
Isophorone	10	1		
N-Nitroso diphenyl amine	10	1		
N-Nitroso-dimethyl amine	10	5		
N-Nitroso -di n-propyl amine	10	5		
Naphthalene	10	1	0.2	
Nitrobenzene	10	1		
Pentachlorophenol	1	5		
Phenanthrene		5	0.05	
Phenol **	1	1		50

Table 2b - SEMI-VOLATILE SUBSTANCES*	GC	GCMS	LC	COLOR
Pyrene		10	0.05	

\* With the exception of phenol by colorimetric technique, the normal method-specific factor for these substances is 1,000; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance multiplied by 1,000.

\*\* Phenol by colorimetric technique has a factor of 1.

Table 2c – INORGANICS*	FAA	GFAA	ICP	ICPMS	SPGFAA	HYDRIDE	CVAA	COLOR	DCP
Antimony	10	5	50	0.5	5	0.5			1,000
Arsenic		2	10	2	2	1		20	1,000
Beryllium	20	0.5	2	0.5	1				1,000
Cadmium	10	0.5	10	0.25	0.5				1,000
Chromium (total)	50	2	10	0.5	1				1,000
Chromium VI	5							10	
Copper	25	5	10	0.5	2				1,000
Cyanide								5	
Lead	20	5	5	0.5	2				10,000
Mercury				0.5			0.2		
Nickel	50	5	20	1	5				1,000
Selenium		5	10	2	5	1			1,000
Silver	10	1	10	0.25	2				1,000
Thallium	10	2	10	1	5				1,000
Zinc	20		20	1	10				1,000

\* The normal method-specific factor for these substances is 1; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.

Table 2d – PESTICIDES – PCBs*	GC
4,4'-DDD	0.05
4,4'-DDE	0.05
4,4'-DDT	0.01
a-Endosulfan	0.02
alpha-BHC	0.01
Aldrin	0.005
b-Endosulfan	0.01
Beta-BHC	0.005
Chlordane	0.1
Delta-BHC	0.005
Dieldrin	0.01
Endosulfan Sulfate	0.05
Endrin	0.01
Endrin Aldehyde	0.01
Heptachlor	0.01
Heptachlor Epoxide	0.01
Gamma-BHC (Lindane)	0.02
PCB 1016	0.5
PCB 1221	0.5
PCB 1232	0.5

Table 2d – PESTICIDES – PCBs*	GC
PCB 1242	0.5
PCB 1248	0.5
PCB 1254	0.5
PCB 1260	0.5
Toxaphene	0.5

\* The normal method-specific factor for these substances is 100; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance multiplied by 100.

**Techniques:**

GC - Gas Chromatography

GCMS - Gas Chromatography/Mass Spectrometry

HRGCMS - High Resolution Gas Chromatography/Mass Spectrometry (i.e., EPA 1613, 1624, or 1625)

LC - High Pressure Liquid Chromatography

FAA - Flame Atomic Absorption

GFAA - Graphite Furnace Atomic Absorption

HYDRIDE - Gaseous Hydride Atomic Absorption

CVAA - Cold Vapor Atomic Absorption

ICP - Inductively Coupled Plasma

ICPMS - Inductively Coupled Plasma/Mass Spectrometry

SPGFAA - Stabilized Platform Graphite Furnace Atomic Absorption (i.e., EPA 200.9)

DCP - Direct Current Plasma

COLOR – Colorimetric

**ATTACHMENT I – LIST OF PRIORITY POLLUTANTS**

CTR Number	Parameter	CAS Number	Suggested Analytical Methods
1	Antimony	7440360	1
2	Arsenic	7440382	1
3	Beryllium	7440417	1
4	Cadmium	7440439	1
5a	Chromium (III)	16065831	1
5a	Chromium (VI)	18540299	1
6	Copper	7440508	1
7	Lead	7439921	1
8	Mercury	7439976	1
9	Nickel	7440020	1
10	Selenium	7782492	1
11	Silver	7440224	1
12	Thallium	7440280	1
13	Zinc	7440666	1
14	Cyanide	57125	1
15	Asbestos	1332214	1
16	2,3,7,8-TCDD	1746016	1
17	Acrolein	107028	1
18	Acrylonitrile	107131	1
19	Benzene	71432	1
20	Bromoform	75252	1
21	Carbon Tetrachloride	56235	1
22	Chlorobenzene	108907	1
23	Chlorodibromomethane	124481	1
24	Chloroethane	75003	1
25	2-Chloroethylvinyl Ether	110758	1
26	Chloroform	67663	1
27	Dichlorobromomethane	75274	1
28	1,1-Dichloroethane	75343	1
29	1,2-Dichloroethane	107062	1
30	1,1-Dichloroethylene	75354	1
31	1,2-Dichloropropane	78875	1
32	1,3-Dichloropropylene	542756	1
33	Ethylbenzene	100414	1
34	Methyl Bromide	74839	1
35	Methyl Chloride	74873	1
36	Methylene Chloride	75092	1
37	1,1,2,2-Tetrachloroethane	79345	1
38	Tetrachloroethylene	127184	1
39	Toluene	108883	1
40	1,2-Trans-Dichloroethylene	156605	1
41	1,1,1-Trichloroethane	71556	1
42	1,1,2-Trichloroethane	79005	1
43	Trichloroethylene	79016	1

CTR Number	Parameter	CAS Number	Suggested Analytical Methods
44	Vinyl Chloride	75014	1
45	2-Chlorophenol	95578	1
46	2,4-Dichlorophenol	120832	1
47	2,4-Dimethylphenol	105679	1
48	2-Methyl-4,6-Dinitrophenol	534521	1
49	2,4-Dinitrophenol	51285	1
50	2-Nitrophenol	88755	1
51	4-Nitrophenol	100027	1
52	3-Methyl-4-Chlorophenol	59507	1
53	Pentachlorophenol	87865	1
54	Phenol	108952	1
55	2,4,6-Trichlorophenol	88062	1
56	Acenaphthene	83329	1
57	Acenaphthylene	208968	1
58	Anthracene	120127	1
59	Benzidine	92875	1
60	Benzo(a)Anthracene	56553	1
61	Benzo(a)Pyrene	50328	1
62	Benzo(b)Fluoranthene	205992	1
63	Benzo(ghi)Perylene	191242	1
64	Benzo(k)Fluoranthene	207089	1
65	Bis(2-Chloroethoxy)Methane	111911	1
66	Bis(2-Chloroethyl)Ether	111444	1
67	Bis(2-Chloroisopropyl)Ether	108601	1
68	Bis(2-Ethylhexyl)Phthalate	117817	1
69	4-Bromophenyl Phenyl Ether	101553	1
70	Butylbenzyl Phthalate	85687	1
71	2-Chloronaphthalene	91587	1
72	4-Chlorophenyl Phenyl Ether	7005723	1
73	Chrysene	218019	1
74	Dibenzo(a,h)Anthracene	53703	1
75	1,2-Dichlorobenzene	95501	1
76	1,3-Dichlorobenzene	541731	1
77	1,4-Dichlorobenzene	106467	1
78	3,3'-Dichlorobenzidine	91941	1
79	Diethyl Phthalate	84662	1
80	Dimethyl Phthalate	131113	1
81	Di-n-Butyl Phthalate	84742	1
82	2,4-Dinitrotoluene	121142	1
83	2,6-Dinitrotoluene	606202	1
84	Di-n-Octyl Phthalate	117840	1
85	1,2-Diphenylhydrazine	122667	1
86	Fluoranthene	206440	1
87	Fluorene	86737	1
88	Hexachlorobenzene	118741	1

CTR Number	Parameter	CAS Number	Suggested Analytical Methods
89	Hexachlorobutadiene	87863	1
90	Hexachlorocyclopentadiene	77474	1
91	Hexachloroethane	67721	1
92	Indeno(1,2,3-cd)Pyrene	193395	1
93	Isophorone	78591	1
94	Naphthalene	91203	1
95	Nitrobenzene	98953	1
96	N-Nitrosodimethylamine	62759	1
97	N-Nitrosodi-n-Propylamine	621647	1
98	N-Nitrosodiphenylamine	86306	1
99	Phenanthrene	85018	1
100	Pyrene	129000	1
101	1,2,4-Trichlorobenzene	120821	1
102	Aldrin	309002	1
103	alpha-BHC	319846	1
104	beta-BHC	319857	1
105	gamma-BHC	58899	1
106	delta-BHC	319868	1
107	Chlordane	57749	1
108	4,4'-DDT	50293	1
109	4,4'-DDE	72559	1
110	4,4'-DDD	72548	1
111	Dieldrin	60571	1
112	alpha-Endosulfan	959988	1
113	beta-Endosulfan	33213659	1
114	Endosulfan Sulfate	1031078	1
115	Endrin	72208	1
116	Endrin Aldehyde	7421934	1
117	Heptachlor	76448	1
118	Heptachlor Epoxide	1024573	1
119	PCB-1016	12674112	1
120	PCB-1221	11104282	1
121	PCB-1232	11141165	1
122	PCB-1242	53469219	1
123	PCB-1248	12672296	1
124	PCB-1254	11097691	1
125	PCB-1260	11096825	1
126	Toxaphene	8001352	1

<sup>1</sup> Pollutants shall be analyzed using the methods described in 40 CFR Part 136.



Petro - Diamond Marine Terminal CA0059358  
 Reasonable Potential Analysis (Per Sections 1.3 and 1.4 of SIP)

CTR#	Parameters	Units	CV	MEC	CTR Water Quality Criteria (ug/L)					REASONABLE POTENTIAL ANALYSIS (RPA)					
					Freshwater		Saltwater		Human Health for consumption of:		MEC >= Lowest C	Tier 1 - Need limit?	If B>C, effluent limit required	Tier 3 - other info. ?	RPA Result - Need Limit?
					C chronic = CCC tot	C acute = CMC tot	C chronic = CCC tot	Water & organisms	Organisms only	Lowest C					
1	Antimony	ug/L	0.6					4300.00	4300.00			No detected value of B, Step 7		no	
2	Arsenic	ug/L	0.6			69.00	36.00		36.00			No detected value of B, Step 7		no	
3	Beryllium	ug/L	0.6	No Criteria					No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Uc	
4	Cadmium	ug/L	0.6			42.25	9.36		9.36			No detected value of B, Step 7		no	
5a	Chromium (III)		0.6	No Criteria					No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Uc	
5b	Chromium (VI)	ug/L	0.6			1107.75	50.35		50.35			No detected value of B, Step 7		no	
6	Copper	ug/L	0.6			5.78	3.73		3.73			No detected value of B, Step 7		no	
7	Lead	ug/L	0.6			220.82	8.52		8.52			No detected value of B, Step 7		no	
8	Mercury	ug/L	0.6			Reserved	Reserved		0.051	0.051		No detected value of B, Step 7		no	
9	Nickel	ug/L	0.6			74.75	8.28		4600.00	8.28		No detected value of B, Step 7		no	
10	Selenium	ug/L	0.6			290.58	71.14		Narrative	71.14		No detected value of B, Step 7		no	
11	Silver	ug/L	0.6			2.24				2.24		No detected value of B, Step 7		no	
12	Thallium	ug/L	0.6							6.30		No detected value of B, Step 7		no	
13	Zinc	ug/L	0.6			95.14	85.62			85.62		No detected value of B, Step 7		no	
14	Cyanide	ug/L	0.6			1.00	1.00			220000.00	1.00	No detected value of B, Step 7		no	
15	Asbestos	Fibers/L	0.6	No Criteria					No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Uc	
16	2,3,7,8 TCDD	ug/L	0.6						0.000000014	0.000000014		No detected value of B, Step 7		no	
17	Acrolein	ug/L	0.6						780	780		No detected value of B, Step 7		no	
18	Acrylonitrile	ug/L	0.6						0.66	0.660		No detected value of B, Step 7		no	
19	Benzene	ug/L	0.6						71	71.0		No detected value of B, Step 7		no	
20	Bromoform	ug/L	0.6						360	360.0		No detected value of B, Step 7		no	
21	Carbon Tetrachloride	ug/L	0.6						4.4	4.40		No detected value of B, Step 7		no	
22	Chlorobenzene	ug/L	0.6						21000	21000		No detected value of B, Step 7		no	
23	Chlorodibromomethane	ug/L	0.6						34	34.00		No detected value of B, Step 7		no	
24	Chloroethane	ug/L	0.6	No Criteria					No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Uc	
25	2-Chloroethylvinyl ether	ug/L	0.6	No Criteria					No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Uc	
26	Chloroform	ug/L	0.6	No Criteria					No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Uc	
27	Dichlorobromomethane	ug/L	0.6						46	46.00		No detected value of B, Step 7		no	
28	1,1-Dichloroethane	ug/L	0.6	No Criteria					No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Uc	
29	1,2-Dichloroethane	ug/L	0.6						99	99.00		No detected value of B, Step 7		no	
30	1,1-Dichloroethylene	ug/L	0.6						3.2	3.200		No detected value of B, Step 7		no	
31	1,2-Dichloropropane	ug/L	0.6						39	39.00		No detected value of B, Step 7		no	
32	1,3-Dichloropropylene	ug/L	0.6						1700	1700		No detected value of B, Step 7		no	
33	Ethylbenzene	ug/L	0.6						29000	29000		No detected value of B, Step 7		no	
34	Methyl Bromide	ug/L	0.6						4000	4000		No detected value of B, Step 7		no	
35	Methyl Chloride	ug/L	0.6	No Criteria					No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Uc	
36	Methylene Chloride	ug/L	0.6						1600	1600.0		No detected value of B, Step 7		no	
37	1,1,2,2-Tetrachloroethane	ug/L	0.6						11	11.00		No detected value of B, Step 7		no	
38	Tetrachloroethylene	ug/L	0.6						8.85	8.9		No detected value of B, Step 7		no	
39	Toluene	ug/L	0.6						200000	200000		No detected value of B, Step 7		no	
40	1,2-Trans-Dichloroethylene	ug/L	0.6						140000	140000		No detected value of B, Step 7		no	
41	1,1,1-Trichloroethane	ug/L	0.6	No Criteria					No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Uc	
42	1,1,2-Trichloroethane	ug/L	0.6						42	42.0		No detected value of B, Step 7		no	
43	Trichloroethylene	ug/L	0.6						81	81.0		No detected value of B, Step 7		no	
44	Vinyl Chloride	ug/L	0.6						525	525		No detected value of B, Step 7		no	
45	2-Chlorophenol	ug/L	0.6						400	400		No detected value of B, Step 7		no	
46	2,4-Dichlorophenol	ug/L	0.6						790	790		No detected value of B, Step 7		no	
47	2,4-Dimethylphenol	ug/L	0.6						2300	2300		No detected value of B, Step 7		no	
48	4,6-dinitro-o-resol (aka 2-methyl-4,6-Dinitrophenol)	ug/L	0.6						765	765.0		No detected value of B, Step 7		no	
49	2,4-Dinitrophenol	ug/L	0.6						14000	14000		No detected value of B, Step 7		no	
50	2-Nitrophenol	ug/L	0.6	No Criteria					No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Uc	
51	4-Nitrophenol	ug/L	0.6	No Criteria					No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Uc	
52	3-Methyl-4-Chlorophenol (aka P-chloro-m-resol)	ug/L	0.6	No Criteria					No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Uc	
53	Pentachlorophenol	ug/L	0.6			13.00	7.90		8.2	7.90		No detected value of B, Step 7		no	
54	Phenol	ug/L	0.6						4600000	4600000		No detected value of B, Step 7		no	
55	2,4,6-Trichlorophenol	ug/L	0.6						6.5	6.5		No detected value of B, Step 7		no	
56	Acenaphthene	ug/L	0.6						2700	2700		No detected value of B, Step 7		no	
57	Acenaphthylene	ug/L	0.6	No Criteria					No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Uc	
58	Anthracene	ug/L	0.6						110000	110000		No detected value of B, Step 7		no	
59	Benzidine	ug/L	0.6						0.00054	0.00054		No detected value of B, Step 7		no	
60	Benzo(a)Anthracene	ug/L	0.6						0.049	0.0490		No detected value of B, Step 7		no	
61	Benzo(a)Pyrene	ug/L	0.6						0.049	0.0490		No detected value of B, Step 7		no	
62	Benzo(b)Fluoranthene	ug/L	0.6						0.049	0.0490		No detected value of B, Step 7		no	

CTR#	Parameters	Units	CV	MEC	CTR Water Quality Criteria (ug/L)					REASONABLE POTENTIAL ANALYSIS (RPA)					
					Freshwater		Saltwater		Human Health for consumption of:		MEC >= Lowest C	Tier 1 - Need limit?	If B>C, effluent limit required	Tier 3 - other info. ?	RPA Result - Need Limit?
					C chronic = CCC tot	C acute = CMC tot	C chronic = CCC tot	Water & organisms	Organisms only	Lowest C					
63	Benzo(ghi)Perylene	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	No Criteria	Uc	
64	Benzo(k)Fluoranthene	ug/L	0.6					0.049	0.0490	No Criteria	No Criteria	No detected value of B, Step 7		no	
65	Bis(2-Chloroethoxy)Methan	ug/L	0.6	No Criteria					No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Uc	
66	Bis(2-Chloroethyl)Ether	ug/L	0.6					1.4	1.400			No detected value of B, Step 7		no	
67	Bis(2-Chloroisopropyl)Ethe	ug/L	0.6					170000	170000			No detected value of B, Step 7		no	
68	Bis(2-Ethylhexyl)Phthalate	ug/L	0.6					5.9	5.9			No detected value of B, Step 7		no	
69	4-Bromophenyl Phenyl Ethe	ug/L	0.6	No Criteria					No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Uc	
70	Butylbenzyl Phthalate	ug/L	0.6					5200	5200			No detected value of B, Step 7		no	
71	2-Chloronaphthalene	ug/L	0.6					4300	4300			No detected value of B, Step 7		no	
72	4-Chlorophenyl Phenyl Ethe	ug/L	0.6	No Criteria					No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Uc	
73	Chrysene	ug/L	0.6					0.049	0.0490			No detected value of B, Step 7		no	
74	Dibenzo(a,h)Anthracene	ug/L	0.6					0.049	0.0490			No detected value of B, Step 7		no	
75	1,2-Dichlorobenzene	ug/L	0.6					17000	17000			No detected value of B, Step 7		no	
76	1,3-Dichlorobenzene	ug/L	0.6					2600	2600			No detected value of B, Step 7		no	
77	1,4-Dichlorobenzene	ug/L	0.6					2600	2600			No detected value of B, Step 7		no	
78	3,3 Dichlorobenzidine	ug/L	0.6					0.077	0.08			No detected value of B, Step 7		no	
79	Diethyl Phthalate	ug/L	0.6					120000	120000			No detected value of B, Step 7		no	
80	Dimethyl Phthalate	ug/L	0.6					2900000	2900000			No detected value of B, Step 7		no	
81	Di-n-Butyl Phthalate	ug/L	0.6					12000	12000			No detected value of B, Step 7		no	
82	2,4-Dinitrotoluene	ug/L	0.6					9.10	9.10			No detected value of B, Step 7		no	
83	2,6-Dinitrotoluene	ug/L	0.6	No Criteria					No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Uc	
84	Di-n-Octyl Phthalate	ug/L	0.6	No Criteria					No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Uc	
85	1,2-Diphenylhydrazine	ug/L	0.6					0.54	0.540			No detected value of B, Step 7		no	
86	Fluoranthene	ug/L	0.6					370	370			No detected value of B, Step 7		no	
87	Fluorene	ug/L	0.6					14000	14000			No detected value of B, Step 7		no	
88	Hexachlorobenzene	ug/L	0.6					0.00077	0.00077			No detected value of B, Step 7		no	
89	Hexachlorobutadiene	ug/L	0.6					50	50.00			No detected value of B, Step 7		no	
90	Hexachlorocyclopentadiene	ug/L	0.6					17000	17000			No detected value of B, Step 7		no	
91	Hexachloroethane	ug/L	0.6					8.9	8.9			No detected value of B, Step 7		no	
92	Indeno(1,2,3-cd)Pyrene	ug/L	0.6					0.049	0.0490			No detected value of B, Step 7		no	
93	Isophorone	ug/L	0.6					600	600.0			No detected value of B, Step 7		no	
94	Naphthalene	ug/L	0.6	No Criteria					No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Uc	
95	Nitrobenzene	ug/L	0.6					1900	1900			No detected value of B, Step 7		no	
96	N-Nitrosodimethylamine	ug/L	0.6					8.10	8.10000			No detected value of B, Step 7		no	
97	N-Nitrosodi-n-Propylamine	ug/L	0.6					1.40	1.400			No detected value of B, Step 7		no	
98	N-Nitrosodiphenylamine	ug/L	0.6					16	16.0			No detected value of B, Step 7		no	
99	Phenanthrene	ug/L	0.6	No Criteria					No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Uc	
100	Pyrene	ug/L	0.6					11000	11000			No detected value of B, Step 7		no	
101	1,2,4-Trichlorobenzene	ug/L	0.6	No Criteria					No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Uc	
102	Aldrin	ug/L	0.6					1.30				No detected value of B, Step 7		no	
103	alpha-BHC	ug/L	0.6					0.00014	0.00014			No detected value of B, Step 7		no	
104	beta-BHC	ug/L	0.6					0.013	0.0130			No detected value of B, Step 7		no	
105	gamma-BHC	ug/L	0.6					0.046	0.046			No detected value of B, Step 7		no	
106	delta-BHC	ug/L	0.6	No Criteria				0.063	0.063			No detected value of B, Step 7		no	
107	Chlordane	ug/L	0.6						No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Uc	
108	4,4'-DDT	ug/L	0.6			0.09	0.004		0.00059	0.00059			No detected value of B, Step 7		no
109	4,4'-DDE (linked to DDT)	ug/L	0.6			0.13	0.001		0.00059	0.00059			No detected value of B, Step 7		no
110	4,4'-DDD	ug/L	0.6						0.00084	0.00084			No detected value of B, Step 7		no
111	Dieldrin	ug/L	0.6			0.71	0.0019		0.00014	0.00014			No detected value of B, Step 7		no
112	alpha-Endosulfan	ug/L	0.6			0.034	0.0087		240	0.0087			No detected value of B, Step 7		no
113	beta-Endosulfan	ug/L	0.6			0.034	0.0087		240	0.0087			No detected value of B, Step 7		no
114	Endosulfan Sulfate	ug/L	0.6						240	240			No detected value of B, Step 7		no
115	Endrin	ug/L	0.6			0.037	0.0023		0.81	0.0023			No detected value of B, Step 7		no
116	Endrin Aldehyde	ug/L	0.6						0.81	0.81			No detected value of B, Step 7		no
117	Heptachlor	ug/L	0.6			0.053	0.0036		0.00021	0.00021			No detected value of B, Step 7		no
118	Heptachlor Epoxide	ug/L	0.6			0.053	0.0036		0.00011	0.00011			No detected value of B, Step 7		no
119-125	PCBs sum (2)	ug/L	0.6				0.03		0.00017	0.00017			No detected value of B, Step 7		no
126	Toxaphene	ug/L	0.6			0.21	0.0002		0.00075	0.0002			No detected value of B, Step 7		no

Notes:  
 Ud = Undetermined due to lack of data  
 Uc = Undetermined due to lack of CTR Water Quality Criteria  
 C = Water Quality Criteria  
 B = Background receiving water data

CTR#	Parameters	Reason	HUMAN HEALTH CALCULATIONS					AQUATIC LIFE CALCULATIONS					Recommendation	Comment
			AMEL MDEL/AMEL	MDEL hh	AMEL multiplier 95	AMEL aq life	MDEL multiplier 99	MDEL aq	Lowest AMEL	Lowest MDEL	LIMITS			
1	Antimony	ud. effluent ND, MDL>C & B>C											No Limit	
2	Arsenic	ud. effluent ND, MDL>C & B>C											No Limit	
3	Beryllium	No Criteria											No Limit	
4	Cadmium	ud. effluent ND, MDL>C & B>C											No Limit	
5a	Chromium (III)	No Criteria											No Limit	
5b	Chromium (VI)	ud. effluent ND, MDL>C & B>C											No Limit	
6	Copper	ud. effluent ND, MDL>C & B>C	2.01		1.55	3.05	3.11	6.13	3.1	6.1			No Limit	
7	Lead	ud. effluent ND, MDL>C & B>C	2.01		1.55	6.98	3.11	14.00	7.0	14.0			No Limit	
8	Mercury	ud. effluent ND, MDL>C & B>C											No Limit	
9	Nickel	ud. effluent ND, MDL>C & B>C											No Limit	
10	Selenium	ud. effluent ND, MDL>C & B>C											No Limit	
11	Silver	ud. effluent ND, MDL>C & B>C											No Limit	
12	Thallium	ud. effluent ND, MDL>C & B>C											No Limit	
13	Zinc	ud. effluent ND, MDL>C & B>C	2.01		1.55	70.09	3.11	140.61247	70.1	140.6			No Limit	
14	Cyanide	ud. effluent ND, MDL>C & B>C											No Limit	
15	Asbestos	No Criteria											No Limit	
16	2,3,7,8 TCDD	ud. effluent ND, MDL>C & B>C											No Limit	
17	Acrolein	ud. effluent ND, MDL>C & B>C											No Limit	
18	Acrylonitrile	ud. effluent ND, MDL>C & B>C											No Limit	
19	Benzene	ud. effluent ND, MDL>C & B>C											No Limit	
20	Bromofom	ud. effluent ND, MDL>C & B>C											No Limit	
21	Carbon Tetrachloride	ud. effluent ND, MDL>C & B>C											No Limit	
22	Chlorobenzene	ud. effluent ND, MDL>C & B>C											No Limit	
23	Chlorodibromomethane	ud. effluent ND, MDL>C & B>C											No Limit	
24	Chloroethane	No Criteria											No Limit	
25	2-Chloroethylvinyl ether	No Criteria											No Limit	
26	Chloroform	No Criteria											No Limit	
27	Dichlorobromomethane	ud. effluent ND, MDL>C & B>C											No Limit	
28	1,1-Dichloroethane	No Criteria											No Limit	
29	1,2-Dichloroethane	ud. effluent ND, MDL>C & B>C											No Limit	
30	1,1-Dichloroethylene	ud. effluent ND, MDL>C & B>C											No Limit	
31	1,2-Dichloropropane	ud. effluent ND, MDL>C & B>C											No Limit	
32	1,3-Dichloropropane	ud. effluent ND, MDL>C & B>C											No Limit	
33	Ethylbenzene	ud. effluent ND, MDL>C & B>C											No Limit	
34	Methyl Bromide	ud. effluent ND, MDL>C & B>C											No Limit	
35	Methyl Chloride	No Criteria											No Limit	
36	Methylene Chloride	ud. effluent ND, MDL>C & B>C											No Limit	
37	1,1,2,2-Tetrachloroethane	ud. effluent ND, MDL>C & B>C											No Limit	
38	Tetrachloroethylene	ud. effluent ND, MDL>C & B>C											No Limit	
39	Toluene	ud. effluent ND, MDL>C & B>C											No Limit	
40	1,2-Trans-Dichloroethylene	ud. effluent ND, MDL>C & B>C											No Limit	
41	1,1,1-Trichloroethane	No Criteria											No Limit	
42	1,1,2-Trichloroethane	ud. effluent ND, MDL>C & B>C											No Limit	
43	Trichloroethylene	ud. effluent ND, MDL>C & B>C											No Limit	
44	Vinyl Chloride	ud. effluent ND, MDL>C & B>C											No Limit	
45	2-Chlorophenol	ud. effluent ND, MDL>C & B>C											No Limit	
46	2,4-Dichlorophenol	ud. effluent ND, MDL>C & B>C											No Limit	
47	2,4-Dimethylphenol	ud. effluent ND, MDL>C & B>C											No Limit	
48	4,6-dinitro-o-resol (aka2-methyl-4,6-Dinitrophenol)	ud. effluent ND, MDL>C & B>C											No Limit	
49	2,4-Dinitrophenol	ud. effluent ND, MDL>C & B>C											No Limit	
50	2-Nitrophenol	No Criteria											No Limit	
51	4-Nitrophenol	No Criteria											No Limit	
52	3-Methyl-4-Chlorophenol (aka p-chloro-m-resol)	No Criteria											No Limit	
53	Pentachlorophenol	ud. effluent ND, MDL>C & B>C											No Limit	
54	Phenol	ud. effluent ND, MDL>C & B>C											No Limit	
55	2,4,6-Trichlorophenol	ud. effluent ND, MDL>C & B>C											No Limit	
56	Acenaphthene	ud. effluent ND, MDL>C & B>C											No Limit	
57	Acenaphthylene	No Criteria											No Limit	
58	Anthracene	ud. effluent ND, MDL>C & B>C											No Limit	
59	Benzo(a)Anthracene	ud. effluent ND, MDL>C & B>C											No Limit	
60	Benzo(a)Fluoranthene	ud. effluent ND, MDL>C & B>C											No Limit	
61	Benzo(b)Fluoranthene	ud. effluent ND, MDL>C & B>C											No Limit	
62	Benzo(k)Fluoranthene	ud. effluent ND, MDL>C & B>C											No Limit	

CTR#	Parameters	Reason	HUMAN HEALTH CALCULATIONS			AQUATIC LIFE CALCULATIONS			Recommendation	Comment
			AMEL hh = ECA = MDEL/AMEL	MDEL hh	AMEL multiplier 95	AMEL aq life	MDEL multiplier 99	MDEL aq life		
63	Benz[ghi]Perylene	No Criteria							No Limit	
64	Benzot(k)Fluoranthene	ud. effluent ND, MDL>C & B>C							No Limit	
65	Bis(2-Chloroethoxy)Methan	No Criteria							No Limit	
66	Bis(2-Chloroethyl)Ether	ud. effluent ND, MDL>C & B>C							No Limit	
67	Bis(2-Chloroisopropyl)Ethe	ud. effluent ND, MDL>C & B>C							No Limit	
68	Bis(2-Ethylhexyl)Phthalate	ud. effluent ND, MDL>C & B>C							No Limit	
69	4-Bromophenyl Phenyl Eth	No Criteria							No Limit	
70	Buylbenzyl Phthalate	ud. effluent ND, MDL>C & B>C							No Limit	
71	2-Chloronaphthalene	ud. effluent ND, MDL>C & B>C							No Limit	
72	4-Chlorophenyl Phenyl Eth	No Criteria							No Limit	
73	Chrysene	ud. effluent ND, MDL>C & B>C							No Limit	
74	Dibenz(a,h)Anthracene	ud. effluent ND, MDL>C & B>C							No Limit	
75	1,2-Dichlorobenzene	ud. effluent ND, MDL>C & B>C							No Limit	
76	1,3-Dichlorobenzene	ud. effluent ND, MDL>C & B>C							No Limit	
77	1,4-Dichlorobenzene	ud. effluent ND, MDL>C & B>C							No Limit	
78	3,3-Dichlorobenzidine	ud. effluent ND, MDL>C & B>C							No Limit	
79	Diethyl Phthalate	ud. effluent ND, MDL>C & B>C							No Limit	
80	Dimethyl Phthalate	ud. effluent ND, MDL>C & B>C							No Limit	
81	Di-n-Butyl Phthalate	ud. effluent ND, MDL>C & B>C							No Limit	
82	2,4-Dinitrotoluene	ud. effluent ND, MDL>C & B>C							No Limit	
83	2,6-Dinitrotoluene	No Criteria							No Limit	
84	Di-n-Octyl Phthalate	No Criteria							No Limit	
85	1,2-Diphenylhydrazine	ud. effluent ND, MDL>C & B>C							No Limit	
86	Fluoranthene	ud. effluent ND, MDL>C & B>C							No Limit	
87	Fluorene	ud. effluent ND, MDL>C & B>C							No Limit	
88	Hexachlorobenzene	ud. effluent ND, MDL>C & B>C							No Limit	
89	Hexachlorobutadiene	ud. effluent ND, MDL>C & B>C							No Limit	
90	Hexachlorocyclopentadiene	ud. effluent ND, MDL>C & B>C							No Limit	
91	Hexachloroethane	ud. effluent ND, MDL>C & B>C							No Limit	
92	Indeno(1,2,3-cd)Pyrene	ud. effluent ND, MDL>C & B>C							No Limit	
93	Isophorone	ud. effluent ND, MDL>C & B>C							No Limit	
94	Naphthalene	No Criteria							No Limit	
95	Nitrobenzene	ud. effluent ND, MDL>C & B>C							No Limit	
96	N-Nitrosodimethylamine	ud. effluent ND, MDL>C & B>C							No Limit	
97	N-Nitrosodi-n-Propylamine	ud. effluent ND, MDL>C & B>C							No Limit	
98	N-Nitrosodiphenylamine	ud. effluent ND, MDL>C & B>C							No Limit	
99	Phenanthrene	No Criteria							No Limit	
100	Pyrene	ud. effluent ND, MDL>C & B>C							No Limit	
101	1,2,4-Trichlorobenzene	No Criteria							No Limit	
102	Aldrin	ud. effluent ND, MDL>C & B>C							No Limit	
103	alpha-BHC	ud. effluent ND, MDL>C & B>C							No Limit	
104	beta-BHC	ud. effluent ND, MDL>C & B>C							No Limit	
105	gamma-BHC	ud. effluent ND, MDL>C & B>C							No Limit	
106	delta-BHC	No Criteria							No Limit	
107	Chlordane	ud. effluent ND, MDL>C & B>C							No Limit	
108	4,4-DDT	ud. effluent ND, MDL>C & B>C							No Limit	
109	4,4-DDE (linked to DDT)	ud. effluent ND, MDL>C & B>C							No Limit	
110	4,4-DDD	ud. effluent ND, MDL>C & B>C							No Limit	
111	Dieldrin	ud. effluent ND, MDL>C & B>C							No Limit	
112	alpha-Endosulfan	ud. effluent ND, MDL>C & B>C							No Limit	
113	beta-Endosulfan	ud. effluent ND, MDL>C & B>C							No Limit	
114	Endosulfan Sulfate	ud. effluent ND, MDL>C & B>C							No Limit	
115	Endrin	ud. effluent ND, MDL>C & B>C							No Limit	
116	Endrin Alderhyde	ud. effluent ND, MDL>C & B>C							No Limit	
117	Heptachlor	ud. effluent ND, MDL>C & B>C							No Limit	
118	Heptachlor Epoxide	ud. effluent ND, MDL>C & B>C							No Limit	
119-125	PCBs sum (2)	ud. effluent ND, MDL>C & B>C	0.00017	2.01	0.00034	1.55	3.11	0.00017	0.00034	
126	Toxaphene	ud. effluent ND, MDL>C & B>C							No Limit	

Notes:  
 Ud = Undetermined due to lack of data  
 Uc = Undetermined due to lack of CTR  
 C = Water Quality Criteria  
 B = Background receiving water data