

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

## LOS ANGELES REGION

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**ORDER NO. R4-2011-0050**  
**NPDES NO. CA0056065**

### WASTE DISCHARGE REQUIREMENTS FOR THE PARAMOUNT PETROLEUM CORPORATION PARAMOUNT PETROLEUM REFINERY

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

**Table 1. Discharger Information**

<b>Discharger</b>	Paramount Petroleum Corporation
<b>Name of Facility</b>	Paramount Petroleum Refinery
<b>Facility Address</b>	14700 Downey Avenue
	Paramount, CA 90723
	Los Angeles County
The U.S. Environmental Protection Agency (USEPA) and the Regional Water Quality Control Board have classified this discharge as a minor discharge.	

The discharge by Paramount Petroleum Corporation from the discharge points identified below is subject to waste discharge requirements as set forth in this Order:

**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° 45' 18" N	118° 12' 48" W	Storm Drain to Los Cerritos Channel

**Table 3. Administrative Information**

This Order was adopted by the Regional Water Quality Control Board on:	<b>March 3, 2011</b>
This Order shall become effective on:	<b>April 2, 2011</b>
This Order shall expire on:	<b>February 10, 2016</b>
The Discharger shall file a Report of Waste Discharge in accordance with title 23, California Code of Regulations, as application for issuance of new waste discharge requirements no later than:	<b>180 days prior to the Order expiration date</b>

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 3, 2011.

*Samuel Unger*

Samuel Unger, Executive Officer

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**I. FACILITY INFORMATION**

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

**Table 4. Facility Information**

<b>Discharger</b>	Paramount Petroleum Corporation
<b>Name of Facility</b>	Paramount Petroleum Refinery
<b>Facility Address</b>	14700 Downey Avenue
	Paramount, CA 90723
	Los Angeles County
<b>Facility Contact, Title, and Phone</b>	Ms. Kathryn Gleeson, Manager Environmental (562) 748-4613
<b>Mailing Address</b>	Same
<b>Type of Facility</b>	Industrial ( <i>Petroleum Refinery - SIC 2911</i> )
<b>Facility Design Flow</b>	0.144 million gallons per day (MGD) emergency discharge

## II. FINDINGS

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

**A. Background.** Paramount Petroleum Corporation (hereinafter Discharger), is currently discharging pursuant to Order No. R4-2005-0082 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0056065. The Paramount Petroleum Refinery (hereinafter Facility) is owned by the Paramount Petroleum Corporation. The Discharger submitted a Report of Waste Discharge, received May 17, 2010, and applied for a NPDES permit renewal to discharge up to 0.144 MGD of storm water runoff from the Facility. On December 2, 2010, the application was determined to be incomplete and additional information was requested. The requested information was received on December 23, 2010. The application was deemed complete on January 12, 2011.

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. Facility Description.** The Discharger owns and operates a petroleum oil refinery. The refinery processes approximately 50,000 barrels per day of crude oil into various products including motor fuels, diesel, jet fuel, and asphalt products. Storm water runoff from the non-processing areas and parking lots flows along the refinery's north road and is covered by the general permit for Discharges of Storm Water Associated with Industrial Activities (State Water Resources Control Board Water Quality Order No. 97-03-DWQ, NPDES General Permit No. CAS000001).

Storm water runoff from the processing areas generally flows towards the south of the facility. The processing areas are divided into two sections, an old processing area and a new processing area. The old processing area includes the crude units. The Facility discharges storm water from the old processing area after treatment to the local sanitation district sewer line. The newer processing area includes hydro-processing plant (including clean fuels), asphalt plant (including emulsion, asphalt air blowing, and polymer modified asphalt plants), and tank farm area. The storm water from the new processing area is sent to a holding pond. Storm water going into the holding pond is injected with a polymer to clarify any suspended solids that may have accumulated in the storm water. Prior to discharge, solids and oils are controlled by a weir and a skirted boom that surround the discharge pump area. The storm water in the holding pond is treated prior to discharge. The storm water treatment system consists of two sediment filters, a bag filter, and a mechanical polishing filter, which are used to remove fine particulate prior to entry to the carbon adsorption units. The carbon adsorption units treat the storm water through two activated carbon vessels in series. The effluent from the storm water treatment system may be recycled back to the holding pond or to the refinery process wastewater treatment system for additional treatment if the effluent does not comply with the discharge requirements. The treated storm water from the pond is normally discharged to the same local sanitation district sewer line, in accordance with its wastewater discharge permit requirements. However, during emergency conditions when the holding capacity of the tanks and pond is exceeded, the

Facility will discharge up to 0.144 MGD of treated storm water through Discharge Point 001 (see table on cover page) to the storm drain on Downey Avenue and then into the Los Cerritos Channel, a water of the United States. Attachment B provides a map of the area around the Facility. Attachment C provides a storm water flow schematic of the Facility.

- C. Legal Authorities.** This Order is 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 California Water Code (commencing with section 13370). It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260).
- D. Background and Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and 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.
- E. California Environmental Quality Act (CEQA).** Under California Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code sections 21100-21177.
- F. Technology-based Effluent Limitations.** Section 301(b) of the CWA and implementing USEPA permit regulations at park 122.44, title 40 of the Code of Federal Regulations<sup>1</sup>, 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 section 125.3. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet (Attachment F).
- G. Water Quality-Based Effluent Limitations.** Section 301(b) of the CWA and 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.

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)

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<sup>1</sup> All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.

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).

**H. Watershed Management Approach and Total Maximum Daily Loads (TMDLs).** The Regional Water Board has implemented the Watershed Management Approach to address water quality issues in the region. Watershed management may include diverse issues as defined by stakeholders to identify comprehensive solutions to protect, maintain, enhance, and restore water quality and beneficial uses. To achieve this goal, the Watershed Management Approach integrates the Regional Water Board's many diverse programs, particularly TMDLs, to better assess cumulative impacts of pollutants from all point and non-point sources. A TMDL is a tool for implementing water quality standards and is based on the relationship between pollution sources and in-stream water quality conditions. The TMDL establishes the allowable loadings or other quantifiable parameters for a waterbody and thereby provides the basis to establish water quality-based controls. These controls should provide the pollution reduction necessary for a waterbody to meet water quality standards. This process facilitates the development of watershed-specific solutions that balance the environmental and economic impacts within the watershed. The TMDLs will establish waste load allocations (WLAs) and load allocations (LAs) for point and non-point sources, respectively, and will result in achieving water quality standards for the waterbody.

USEPA approved the State Water Resources Control Board's (State Water Board) 2006 California 303(d) List of impaired water bodies on June 28, 2007. Certain receiving waters in the Los Angeles and Ventura Counties' watersheds do not fully support beneficial uses and therefore have been classified as impaired on the 2006 303(d) list and have been scheduled for TMDL development. The Paramount Petroleum Refinery discharges into the Los Cerritos Channel at Del Amo Boulevard. The 2006 State Water Board's 303(d) list classifies the Los Cerritos Channel as impaired. The pollutants of concern in this water body include ammonia, bis(2ethylhexyl)phthalate/DEHP, chlordane (sediment), coliform bacteria, copper, lead, zinc and trash.

On March 17, 2010, the USEPA established the Los Cerritos Channel Total Maximum Daily Loads for Metals. The TMDL states that concentration-based WLAs are established for the minor NPDES permits that discharge to the Los Cerritos Channel to ensure that these point sources do not contribute to exceedances of the CTR limits. The concentration-based WLA for dry weather is equal to the dry-weather numeric target of 19.1 µg/L for copper expressed as total recoverable metals. Section 4.1.2.1 of the TMDL indicates that the Paramount facility is permitted for intermittent discharges of storm water and discharges during dry weather are not permitted. The TMDL also establishes wet-weather WLAs, which apply to any day when the maximum daily flow measured at the Stearns Street monitoring station located within the Los Cerritos Channel above the tidal prism is equal to or greater than 23 cubic feet per second (cfs). The concentration-based WLAs for wet weather are equal to the wet-weather numeric targets of 9.8 µg/L and 95.6 µg/L for copper and zinc expressed as total recoverable metals, respectively. The TMDL states, *"For lead, where existing loads (based on the*

*observed average concentration of 55.8 µg/L), are less than the loading capacity (based on the translated CTR total load concentration of 213.2 µg/L), the TMDL and allocations are set at the existing load level.”* Therefore, as the TMDL presents in Table 6-2, the concentration-based wet-weather WLA for lead is 55.8 µg/L expressed as total recoverable metal.

**Metals TMDL for Los Cerritos Channel:** The TMDL for metals in the Los Cerritos Channel developed by the USEPA was approved on March 17, 2010. The metals TMDL establishes numeric water quality targets that are based on objectives established by USEPA in the CTR. The discharge from the Facility occurs during the wet season. This Order includes wet weather effluent limitations for copper, lead, and zinc based on the Los Cerritos Channel Metals TMDL.

The effluent limitations in the permit for constituents with reasonable potential are established to protect the beneficial uses of the Los Cerritos Channel and to ensure the discharge does not degrade its water quality. This permit requires receiving water monitoring for priority pollutants, when there is a discharge from the Facility. This information will be used to complete a reasonable potential analysis (RPA) of all priority pollutants. This permit also includes a Reopener Provision, which allows revision of effluent limitations for toxic pollutants based on the results of the RPA.

- I. Water Quality Control Plans.** The 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. In addition, the Basin Plan implements State Water Board Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Beneficial uses applicable to the Los Cerritos Channel are as follows:

**Table 5. Basin Plan Beneficial Uses**

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Los Cerritos Channel (Hydrologic Unit No. 405.15)	<u>Existing:</u> Wildlife Habitat (WILD) <u>Intermittent:</u> Non-Contact Water Recreation (REC-2); and Warm Freshwater Habitat (WARM) <u>Potential:</u> Municipal and Domestic Supply (MUN); Contact Water Recreation (REC-1)

Requirements of this Order implement the Basin Plan.

The State Water Board adopted the *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for inland and coastal surface waters. Requirements of this Order implement the Thermal Plan.

- J. Ammonia Basin Plan Amendment.** The 1994 Basin Plan provided water quality objectives for ammonia to protect aquatic life, in Table 3-1 through Table 3-4. However, those ammonia objectives were revised on April 25, 2002, by the Regional Water Board with the adoption of Resolution No. 2002-011, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters (Including Enclosed Bays, Estuaries and Wetlands) with Beneficial Use Designations for Protection of Aquatic Life*. The amendment reflects the revised water quality criteria developed by USEPA in the “1999 Update of Ambient Water Quality Criteria for Ammonia,” December 1999. The 1999 Update contains USEPA’s most recent freshwater aquatic life criteria for ammonia and supersedes all previous freshwater aquatic life criteria for ammonia. The ammonia Basin Plan amendment was approved by the State Water Board, the Office of Administrative Law, and USEPA on April 30, 2003, June 5, 2003, and June 19, 2003, respectively. Although the revised ammonia water quality objectives may be less stringent than those contained in the 1994 Basin Plan, they are still protective of aquatic life and are consistent with USEPA’s 1999 ammonia criteria update.
- K. 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.
- L. 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 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.
- M. Compliance Schedules and Interim Requirements.** Section 2.1 of the SIP provides that, based on a Discharger’s request and demonstration that it is infeasible for an existing Discharger to achieve immediate compliance with an effluent limitation derived from a CTR criterion, compliance schedules may be allowed in an NPDES permit. Unless an exception has been granted under section 5.3 of the SIP, a compliance schedule may not exceed 5 years from the date that the permit is issued or reissued, nor may it extend beyond 10 years from the effective date of the SIP (or May 18, 2010) to establish and comply with CTR criterion-based effluent limitations. Where a compliance schedule for a final effluent limitation exceeds 1 year, the Order must include interim numeric limitations for that constituent or parameter. Where allowed by the Water Quality Control Plan Los Angeles Region, compliance schedules and interim effluent limitations or discharge specifications may also be granted to allow time to



implement a new or revised water quality objective. This Order does not include compliance schedules or interim effluent limitations.

- N. Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes. (40 C.F.R. § 131.21; 65 Fed. Reg. 24641 (April 27, 2000).) Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000 may be used for CWA purposes, whether or not approved by USEPA.
- O. Stringency of Requirements for Individual Pollutants.** This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The water quality-based effluent limitations consist of restrictions on copper, lead, and zinc. The technology-based effluent limitations consist of restrictions on oil and grease, TOC, arsenic, cadmium, chromium (VI), mercury, selenium, silver, benzene, ethylbenzene, toluene, phenolic compounds, xylene, and TPH. Restrictions on these pollutants are discussed in Section IV.B of the Fact Sheet (Attachment F). This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.
- P. Antidegradation Policy.** 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 No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. As discussed in detail in the Fact Sheet the permitted discharge is consistent with the antidegradation provision of section 131.12 and State Water Board Resolution No. 68-16.
- Q. Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40, Code of Federal Regulations 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. Some effluent limitations in this Order are less stringent than those in the previous Order. As discussed in detail in the Fact Sheet, this revision of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations.
- R. Endangered Species Act.** 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 sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. sections 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. The Discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

**S. Monitoring and Reporting.** Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorizes the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and State requirements. This Monitoring and Reporting Program is provided in Attachment E.

**T. Standard and Special Provisions.** Standard Provisions, which apply to all NPDES permits in accordance with section 122.41, and additional conditions applicable to specified categories of permits in accordance with 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 section 122.42. The Regional Water Board has also included in this Order special provisions applicable to the Discharger. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet.

**U. Provisions and Requirements Implementing State Law.** The provisions/requirements in subsections VI.C.2 and VI.C.3. of this Order are included to implement state law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.

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

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

THEREFORE, IT IS HEREBY ORDERED, that this Order supersedes Order No. R4-2005-0082 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 federal Clean Water Act (CWA) and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order.

### III. DISCHARGE PROHIBITIONS

**A.** Wastes discharged shall be limited to a maximum of 0.144 MGD of storm water runoff through Discharge Point 001. 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 Los Cerritos Channel, or other waters of the State, are prohibited.

- C. Neither the treatment nor the discharge of pollutants shall create a pollution, contamination, or 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. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the Federal CWA, and amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.
- 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 MRP (Attachment E):

**Table 6. Effluent Limitations**

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
pH	S.U.	—	—	6.5	8.5
BOD <sub>5</sub> @ 20 °C	mg/L	—	30	—	—
	lbs/day <sup>1</sup>	—	36	—	—
Total Suspended Solids (TSS)	mg/L	—	75	—	—
	lbs/day <sup>1</sup>	—	90	—	—
Oil and Grease	mg/L	—	15	—	—
Temperature	°F	—	—	—	86
Arsenic, Total Recoverable	µg/L	—	50	—	—
	lbs/day <sup>1</sup>	—	0.06	—	—
Cadmium, Total Recoverable	µg/L	—	3.7	—	—
	lbs/day <sup>1</sup>	—	0.004	—	—
Chromium, Hexavalent	µg/L	—	15	—	—
	lbs/day <sup>1</sup>	—	0.02	—	—

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Copper, Total Recoverable	µg/L	—	9.8	—	—
Lead, Total Recoverable	µg/L	—	56	—	—
Mercury, Total Recoverable	µg/L	—	2	—	—
	lbs/day <sup>1</sup>	—	0.0024	—	—
Selenium, Total Recoverable	µg/L	—	10	—	—
	lbs/day <sup>1</sup>	—	0.01	—	—
Silver, Total Recoverable	µg/L	—	3.4	—	—
	lbs/day <sup>1</sup>	—	0.004	—	—
Zinc, Total Recoverable	µg/L	—	96	—	—
Benzene	µg/L	—	1	—	—
	lbs/day <sup>1</sup>	—	0.001	—	—
Ethylbenzene	µg/L	—	700	—	—
	lbs/day <sup>1</sup>	—	0.84	—	—
Toluene	µg/L	—	150	—	—
	lbs/day <sup>1</sup>	—	0.18	—	—
Phenolic Compounds <sup>2</sup>	µg/L	—	1	—	—
	lbs/day <sup>1</sup>	—	0.001	—	—
Total Organic Carbon (TOC)	µg/L	—	110	—	—
Xylene	µg/L	—	1750	—	—
	lbs/day <sup>1</sup>	—	2.10	—	—
Total Petroleum Hydrocarbons	µg/L	—	100	—	—
	lbs/day <sup>1</sup>	—	0.12	—	—

<sup>1</sup> The mass-based effluent limitations are based on a maximum design flow of 0.144 MGD and are calculated as follows: Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day. The actual mass for a pollutant shall be calculated based on the actual measured flow of the discharge.

<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.

**b. Acute Toxicity:** There shall be no acute toxicity in the discharge. The acute toxicity of the effluent shall be such that:

- i. The average survival of undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, and
- ii. No single test producing less than 70% survival.

Compliance with the toxicity objectives will be determined by the method described in section V of the MRP.

## 2. Interim Effluent Limitations – Not Applicable

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

**C. Reclamation 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 Los Cerritos Channel:

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

**i. Geometric Mean Limits**

**(a)** E. coli density shall not exceed 126/100 ml.

**(b)** Fecal coliform density shall not exceed 200/100 ml.

**ii. Single Sample Maximum (SSM)**

**(a)** E. coli density shall not exceed 235/100 ml.

**(b)** Fecal coliform density shall not exceed 400/100 ml.

4. Depress the concentration of dissolved oxygen to fall below 5.0 mg/L anytime, and the median dissolved oxygen concentration for any three consecutive months shall not be less than 80 percent of the dissolved oxygen content at saturation.
5. Exceed total ammonia (as N) concentrations specified in the Regional Water Board Resolution No. 2002-011. Resolution No. 2002-011 revised the ammonia water quality objectives for inland surface waters characteristic of freshwater in the 1994 Basin Plan, to be consistent with the *“1999 Update of Ambient Water Quality Criteria for Ammonia”*. Adopted on April 28, 2002, Resolution No. 2002-011 was approved by State Water Board, Office of Administrative Law (OAL) and USEPA on April 30, 2003, June 5, 2003, and June 19, 2003, respectively and is now in effect.

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, nor cause formation of sludge deposits on flood control structures or facilities nor overload the design capacity.
16. Degrade 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. Create nuisance, or adversely effect 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. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the CWA, or amendments thereto, the Regional Water Board will revise or modify this Order in accordance with such standards.

## **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. Regional Water Board Standard Provisions. The Discharger shall comply with the following provisions:
  - a. This Order may be modified, revoked, reissued, or terminated in accordance with the provisions of 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 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 that 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 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 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 Regional Water Board of such change and shall notify the succeeding owner or operator of the existence of this Order by letter, copy of which shall be forwarded to the Regional Water Board.
- 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 Regional Water Board by telephone (213) 576-6616 within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in writing within five days, unless the 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. (Water 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 will revise and modify this Order in accordance with such more stringent standards.
- b. This Order may be reopened to include effluent limitations for toxic constituents determined to be present in significant amounts in the discharge through a more comprehensive monitoring program included as part of this Order and based on the results of the RPA.
- c. This Order may be reopened and modified, to incorporate in accordance with the provisions set forth in 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 Los Cerritos Channel.
- 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 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).

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

- 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 discharge to surface waters.
  - iii. A Spill Prevention Control and Countermeasure (SPCC) Plan that shall describe the preventive (failsafe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events.

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 their SWPPP, BMPP, and SPCC within 10 days of the approval by the Executive Officer. 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**

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. 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.

**F. 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.

**G. 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).

**H. 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.

### **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 title 40 of the Code of Federal Regulations, 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 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 Regional Water Board.

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

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. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the 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 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 .....	Paramount Petroleum Corporation
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 .....	Paramount Petroleum Corporation
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
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 – MAP**



Paramount Petroleum Refinery  
14700 Downey Avenue  
Paramount, CA 90723





## **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 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
  - i. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility [section 122.41(m)(1)(i)].
  - ii. "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 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 Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below [section 122.41(m)(4)(i)(C)].
4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the 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 Regional Water Board. The 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 Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in 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 Part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer 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 Regional Water Board, State Water Board, or USEPA within a reasonable time, any information which the Regional Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Regional Water Board, State Water Board, or USEPA copies of records required to be kept by this Order [section 122.41(h)] [Water Code section 13267].

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

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with 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 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 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 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 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 Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in 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 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 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 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 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 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 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 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 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
  - d.** The level established by the Regional Water Board in accordance with section 122.44(f) [section 122.42(a)(1)(iv)].
- 2.** That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" [section 122.42(a)(2)]:
  - a.** 500 micrograms per liter ( $\mu\text{g/L}$ ) [section 122.42(a)(2)(i)];
  - b.** 1 milligram per liter ( $\text{mg/L}$ ) for antimony [section 122.42(a)(2)(ii)];

- c. Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge [section 122.42(a)(2)(iii)]; or
- d. The level established by the Regional Water Board in accordance with section 122.44(f) [section 122.42(a)(2)(iv)].

## ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP) NO. 6038

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## **ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP) NO. 6038**

The Code of Federal Regulations section 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 (Regional Water Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements, which implement the federal and California regulations.

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

- A.** An effluent sampling station shall be established for the point of discharge to the storm drain (Discharge Point 001, Latitude 33° 45' 18" N, Longitude 118° 12' 48" W) at the effluent sampling port located at the storm water treatment system and shall be located where representative samples of that effluent can be obtained.
- B.** Effluent samples shall be taken downstream of any addition to treatment works and prior to mixing with the receiving waters.
- C.** The 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 sections 136.3, 136.4, and 136.5 (revised May 14, 1999); or, where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board. Laboratories analyzing effluent samples and receiving water samples shall be certified by the California Department of 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, March 2, 2000.

- 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 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 Regional Water Board agree to include in the permit a test method that is more sensitive than that specified in Part 136 (revised March 12, 2007);
  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 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 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. The annual monitoring report required in Section X.D shall also summarize the QA activities for the previous year. Duplicate chemical analyses must be conducted on a minimum of ten percent (10%) of the samples, or at least one sample per sampling period, whichever is greater. A similar frequency shall be maintained for analyzing spiked samples.
- M.** When requested by the 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, 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	At the discharge point from the storm water treatment system, effluent sampling port, located where representative samples of the treated effluent discharged to the storm drain can be obtained [Latitude 33° 45' 18" N, Longitude 118° 12' 48" W]
—	RSW-001	At a location in the receiving water (Los Cerritos Channel) at least 50 feet upstream of the discharge point into the receiving water

**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 at Monitoring Location EFF-001**

Parameter	Units	Sample Type	Minimum Sampling Frequency <sup>1</sup>	Required Analytical Test Method
Total Waste Flow	Gallons	Metered	1/Day <sup>2</sup>	--
pH	S.U.	Grab	1 / Discharge Event	<sup>2</sup>
BOD <sub>5</sub> 20°C	mg/L	Grab	1 / Discharge Event	<sup>2</sup>
Total Suspended Solids	mg/L	Grab	1 / Discharge Event	<sup>2</sup>
Oil & Grease	mg/L	Grab	1 / Discharge Event	<sup>2</sup>
Temperature	°F	Grab	1 / Discharge Event	<sup>2</sup>
Hardness (as CaCO <sub>3</sub> )	mg/L	Grab	1 / Discharge Event	<sup>2</sup>
Ammonia	mg/L	Grab	1 / Discharge Event	<sup>2</sup>
E. Coli	MPN/100 mL	Grab	1 / Discharge Event	<sup>2</sup>
Fecal Coliform	MPN/100 mL	Grab	1 / Discharge Event	<sup>2</sup>

Parameter	Units	Sample Type	Minimum Sampling Frequency <sup>1</sup>	Required Analytical Test Method
Arsenic, Total Recoverable	µg/L	Grab	1 / Discharge Event	<sup>2</sup>
Cadmium, Total Recoverable	µg/L	Grab	1 / Discharge Event	<sup>2</sup>
Chromium, Hexavalent	µg/L	Grab	1 / Discharge Event	<sup>2</sup>
Copper, Total Recoverable	µg/L	Grab	1 / Discharge Event	<sup>2</sup>
Lead, Total Recoverable	µg/L	Grab	1 / Discharge Event	<sup>2</sup>
Mercury, Total Recoverable	µg/L	Grab	1 / Discharge Event	<sup>2</sup>
Selenium, Total Recoverable	µg/L	Grab	1 / Discharge Event	<sup>2</sup>
Silver, Total Recoverable	µg/L	Grab	1 / Discharge Event	<sup>2</sup>
Zinc, Total Recoverable	µg/L	Grab	1 / Discharge Event	<sup>2</sup>
Benzene	µg/L	Grab	1 / Discharge Event	<sup>2</sup>
Ethylbenzene	µg/L	Grab	1 / Discharge Event	<sup>2</sup>
Toluene	µg/L	Grab	1 / Discharge Event	<sup>2</sup>
Phenolic Compounds <sup>3</sup>	µg/L	Grab	1 / Discharge Event	<sup>2</sup>
Total Organic Carbon	µg/L	Grab	1 / Discharge Event	<sup>2</sup>
Xylene	µg/L	Grab	1 / Discharge Event	<sup>2</sup>
Tertiary butyl alcohol (TBA)	µg/L	Grab	1 / Discharge Event	<sup>2</sup>
Di-isopropyl ether (DIPE)	µg/L	Grab	1 / Discharge Event	<sup>2</sup>
Tertiary amyl methyl ether (TAME)	µg/L	Grab	1 / Discharge Event	<sup>2</sup>
Ethyl tertiary butyl ether (ETBE)	µg/L	Grab	1 / Discharge Event	<sup>2</sup>
Total Petroleum Hydrocarbons (TPH)	µg/L	Grab	1 / Discharge Event	<sup>2</sup>
Methyl tertiary butyl ether (MTBE)	µg/L	Grab	1 / Discharge Event	<sup>2</sup>
Acute Toxicity <sup>4</sup>	% survival	Grab	1 / Year	<sup>2</sup>
TCDD Equivalents <sup>5</sup>	µg/L	Grab	1 / Year	<sup>2</sup>
Remaining Priority Pollutants <sup>6</sup>	µg/L	Grab	1 / Year	<sup>2</sup>

<sup>1</sup> During periods of extended rainfall, no more than one sample per week need to be taken.

<sup>2</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, where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board.

<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> Refer to Section V, Whole Effluent Toxicity Testing Requirements

<sup>5</sup> TCDD equivalents shall be calculated using the following formula, where the Minimum Levels (MLs), toxicity equivalency factors (TEFs), and bioaccumulation equivalency factors (BEFs) 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 minimum levels to zero. USEPA method 1613 may be used to analyze dioxin and furan congeners.



$$\text{Dioxin-TEQ (TCDD equivalents)} = \sum (C_x * TEF_x * BEF_x)$$

Where:

$C_x$  = concentration of dioxin or furan congener  $x$

$TEF_x$  = TEF for congener  $x$

$BEF_x$  = BEF for congener  $x$

Dioxin or Furan Congeners	Minimum Level (pg/L)	Toxicity Equivalency Factor (TEF)	Bioaccumulation Equivalency Factor (BEF)
2,3,7,8-tetra CDD	10	1.0	1.0
1,2,3,7,8-penta CDD	50	1.0	0.9
1,2,3,4,7,8-hexa CDD	50	0.1	0.3
1,2,3,6,7,8-hexa CDD	50	0.1	0.1
1,2,3,7,8,9-hexa CDD	50	0.1	0.1
1,2,3,4,6,7,8-hepta CDD	50	0.01	0.05
Octa CDD	100	0.0001	0.01
2,3,7,8-tetra CDF	10	0.1	0.8
1,2,3,7,8-penta CDF	50	0.05	0.2
2,3,4,7,8-penta CDF	50	0.5	1.6
1,2,3,4,7,8-hexa CDF	50	0.1	0.08
1,2,3,6,7,8-hexa CDF	50	0.1	0.2
1,2,3,7,8,9-hexa CDF	50	0.1	0.6
2,3,4,6,7,8-hexa CDF	50	0.1	0.7
1,2,3,4,6,7,8-hepta CDF	50	0.01	0.01
1,2,3,4,7,8,9-hepta CDF	50	0.01	0.4
Octa CDF	100	0.0001	0.02

<sup>6</sup> Priority Pollutants as defined by the California Toxics Rule (CTR) defined in Finding II.K of the Limitations and Discharge Requirements of this Order, and included as Attachment I. Annual samples shall be collected during the first hour of discharge from the first storm event of the wet season (October 1 – May 30).

## V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

### A. Acute Toxicity

#### 1. Definition of Acute Toxicity.

Acute toxicity is a measure of primarily lethal effects that occur over a 96-hour period. Acute toxicity shall be measured in percent survival measured in undiluted (100%) effluent.

- a. The average survival in the undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, and
- b. No single test shall produce less than 70% survival.

#### 2. Acute Toxicity Effluent Monitoring Program.

- a. Method. The Discharger shall conduct acute toxicity tests on 24-hour composite 100% effluent samples, generally by methods specified in Part 136 which cites USEPA's *Methods for Measuring the Acute Toxicity of Effluents and Receiving*

*Waters to Freshwater and Marine Organisms*, Fifth Edition, October 2002, USEPA, Office of Water, Washington D.C. (EPA/821-R-02-012) or a more recent edition to ensure compliance. Effluent samples shall be collected after all treatment processes and before discharge to the receiving water.

- b. Test Species. The fathead minnow, *Pimephales promelas* (Acute Toxicity Test Method 2000.0), shall be used as the test species for fresh water discharges and the topsmelt, *Atherinops affinis*, shall be used as the test species for brackish effluent. However, if the salinity of the receiving water is between 1 to 32 parts per thousand (ppt), the Discharger may have the option of using the inland silverside, *Menidia beryllina* (Acute Toxicity Test Method 2006.0), instead of the topsmelt. The method for topsmelt (Larval Survival and Growth Test Method 1006.0) is found in USEPA's *Short-term Method for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms*, First Edition, August 1995 (EPA/600/R-95/136).
- c. Alternate Reporting. For the acute toxicity testing with topsmelt, the Discharger may elect to report the results or endpoint from the first 96 hours of the chronic toxicity test as the results of the acute toxicity test, using USEPA's August 1995 method (EPA/600/R-95/136) to conduct the chronic toxicity test.
- d. Acute Toxicity Accelerated Monitoring. If either of the above requirements (sections 1.a and 1.b) is not met, the Discharger shall conduct six additional tests, approximately every two weeks, over a 12-week period. The Discharger shall ensure that they receive results of a failing toxicity test within 24 hours of the close of the test and the additional tests shall begin within 5 business days of the receipt of the result. If the additional tests indicate compliance with the toxicity limitation, the Discharger may resume regular testing.
- e. Toxicity Identification Evaluation (TIE).
  - i. If the results of any two of the six accelerated tests are less than 90% survival, then the Discharger shall immediately begin a Toxicity Identification Evaluation (TIE) and implement the Initial Investigation Toxicity Reduction Evaluation (TRE) workplan. The TIE shall include all reasonable steps to identify the sources of toxicity. Once the sources are identified, the Discharger shall take all reasonable steps to reduce toxicity to meet the requirements.
  - ii. If the initial test and any of the additional six acute toxicity bioassay test results are less than 70% survival, the Discharger shall immediately begin a TIE and implement the Initial Investigation TRE workplan. Once the sources are identified, the Discharger shall take all reasonable steps to reduce toxicity to meet the requirements.

## **B. Quality Assurance**

- 1. Concurrent testing with a reference toxicant shall be conducted. Reference toxicant tests shall be conducted using the same test conditions as the effluent toxicity tests (e.g., same test duration, etc).

2. If either the reference toxicant test or effluent test does not meet all test acceptability criteria (TAC) as specified in the test methods manuals (EPA/600/4-91/002 and EPA/821-R-02-014), then the Discharger must re-sample and re-test at the earliest time possible.
3. Control and dilution water should be receiving water or laboratory water, as appropriate, as described in the manual. If the dilution water used is different from the culture water, a second control using culture water shall be used.

### **C. Preparation of an Initial Investigation TRE Workplan**

The Discharger shall prepare and submit a copy of the Discharger's Initial Investigation TRE workplan to the Executive Officer of the Regional Water Board for approval **within 90 days** of the effective date of this permit. If the Executive Officer does not disapprove the workplan within 60 days, the workplan shall become effective. The Discharger shall use USEPA manuals EPA/600/2-88/070 (industrial) or EPA/833B-99/002 (municipal) as guidance. This workplan shall describe the steps the Discharger intends to follow if toxicity is detected, and should include, at a minimum:

1. A description of the investigation and evaluation techniques that will be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency.
2. A description of the Facility's methods of maximizing in-house treatment efficiency and good housekeeping practices, and a list of all chemicals used in the operation of the Facility; and,
3. If a TIE is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor). See MRP Section V.E.3., for guidance manuals.

### **D. Steps in Toxicity Reduction Evaluation (TRE) and Toxicity Identification Evaluation (TIE)**

1. If the results of the implementation of the Facility's Initial Investigation TRE workplan indicate the need to continue the TRE/TIE, the Discharger shall expeditiously develop a more detailed TRE workplan for submittal to the Executive Officer within 30 days of completion of the Initial Investigation TRE. The detailed workplan shall include, but not be limited to:
  - a. Further actions to investigate and identify the cause of toxicity;
  - b. Actions the Discharger will take to mitigate the impact of the discharge and prevent the recurrence of toxicity; and
  - c. A schedule for these actions.
2. The following section summarizes the stepwise approach used in conducting the TRE:

- a. Step 1 includes basic data collection. Data collected for the accelerated monitoring requirements may be used to conduct the TRE;
- b. Step 2 – Evaluates optimization of the treatment system operation, facility housekeeping, and the selection and use of in-plant process chemicals;
- c. If Steps 1 and 2 are unsuccessful, Step 3 implements TIE and employment of all reasonable efforts using currently available TIE methodologies. The objective of the TIE shall be to identify the substance or combination of substances causing the observed toxicity;
- d. Assuming successful identification or characterization of the toxicant(s), Step 4 evaluates final effluent treatment options;
- e. Step 5 evaluates in-plant treatment options; and,
- f. Step 6 consists of confirmation once a toxicity control method has been implemented.

Many recommended TRE elements parallel source control, pollution prevention, and storm water control program best management practices (BMPs). To prevent duplication of efforts, evidence of compliance with those requirements may be sufficient to comply with TRE requirements. By requiring the first steps of a TRE to be accelerated testing and review of the Facility's TRE workplan, a TRE may be ended in its early stages. All reasonable steps shall be taken to reduce toxicity to the required level. The TRE may be ended at any stage if monitoring indicates there is no longer toxicity (or six consecutive chronic toxicity test results are less than or equal to 1.0 TU<sub>c</sub> or six consecutive acute toxicity test results are greater than 90% survival).

3. The Discharger shall initiate a TIE as part of the TRE process to identify the cause(s) of toxicity. The Discharger shall use the USEPA acute manual, chronic manual, EPA/600/6-91/005F (Phase I)/EPA/600/R-96-054 (for marine), EPA/600/R-92/080 (Phase II), and EPA/600/R-92/081 (Phase III) as guidance.
4. If a TRE/TIE is initiated prior to completion of the accelerated testing schedule required V.A.2.d and V.B.2.b of this MRP, then the accelerated testing schedule may be terminated, or used as necessary in performing the TRE/TIE, as determined by the Executive Officer.
5. Toxicity tests conducted as part of a TRE/TIE may also be used for compliance determination, if appropriate.
6. The Regional Water Board recognizes that toxicity may be episodic and identification of causes of and reduction of sources of toxicity may not be successful in all cases. Consideration of enforcement action by the Board will be based, in part, on the Discharger's actions and efforts to identify and control or reduce sources of consistent toxicity.

## E. Ammonia Removal

1. Except with prior approval from the Executive Officer of the Regional Water Board, ammonia shall not be removed from bioassay samples. The Discharger must demonstrate the effluent toxicity is caused by ammonia *because of* increasing test pH when conducting the toxicity test. It is important to distinguish the potential toxic effects of ammonia from other pH-sensitive chemicals, such as certain heavy metals, sulfide, and cyanide. The following may be steps to demonstrate that the toxicity is caused by ammonia and not other toxicants before the Executive Officer would allow for control of pH in the test.
  - a. There is consistent toxicity in the effluent and the maximum pH in the toxicity test is in the range to cause toxicity due to increased pH.
  - b. Chronic ammonia concentrations in the effluent are greater than 4 mg/L total ammonia.
  - c. Conduct graduated pH tests as specified in the TIE methods. For example, mortality should be higher at pH 8 and lower at pH 6.
  - d. Treat the effluent with a zeolite column to remove ammonia. Mortality in the zeolite-treated effluent should be lower than the non-zeolite-treated effluent. Then add ammonia back to the zeolite-treated samples to confirm toxicity due to ammonia.
2. When it has been demonstrated that toxicity is due to ammonia because of increasing test pH, pH may be controlled using appropriate procedures, which do not significantly alter the nature of the effluent, after submitting a written request to the Regional Water Board, and receiving written permission expressing approval from the Executive Officer of the Regional Water Board.

## F. Reporting

The Discharger shall submit a full report of the toxicity test results, including any accelerated testing conducted during the month as required by this permit. Test results shall be reported as % survival for acute toxicity test results and as  $TU_c$  for chronic toxicity test results with the self-monitoring reports (SMR) for the month in which the test is conducted. If an initial investigation indicates the source of toxicity and accelerated testing is unnecessary, then those results also shall be submitted with the SMR for the period in which the investigation occurred.

If an initial investigation indicates the source of toxicity and accelerated testing is unnecessary, pursuant to Sections V.A.2.d. and V.B.2.b., then those results also shall be submitted with the SMR for the period in which the investigation occurred.

1. The full report shall be submitted on or before the end of the month in which the SMR is submitted.
2. The full report shall consist of (1) the results; (2) the dates of sample collection and initiation of each toxicity test; (3) the acute toxicity average limit or chronic toxicity

limit or trigger and (4) printout of the ToxCalc or CETIS (Comprehensive Environmental Toxicity Information System) program results.

3. Test results for toxicity tests also shall be reported according to the appropriate manual chapter on Report Preparation and shall be attached to the SMR. Routine reporting shall include, at a minimum, as applicable, for each test:
  - a. Sample date(s);
  - b. Test initiation date;
  - c. Test species;
  - d. End point values for each dilution (e.g., number of young, growth rate, percent survival);
  - e. LC<sub>50</sub> value(s) in percent effluent;
  - f. NOEC value(s) in percent effluent;
  - g. IC<sub>15</sub>, IC<sub>25</sub>, IC<sub>40</sub> and IC<sub>50</sub> values in percent effluent;
  - h. Mean percent mortality (+standard deviation) after 96 hours in 100% effluent (if applicable);
  - i. NOEC and LOEC values for reference toxicant test(s);
  - j. IC<sub>25</sub> value for reference toxicant test(s);
  - k. Any applicable charts; and
  - l. Available water quality measurements for each test (e.g., pH, D.O., temperature, conductivity, hardness, salinity, ammonia).
4. The Discharger shall provide a compliance summary, which includes a summary table of toxicity data from all samples collected during that year.
5. The Discharger shall notify by telephone or electronically, this Regional Water Board of any toxicity exceedance of the limit or trigger within 24 hours of receipt of the results followed by a written report within 14 calendar days of receipt of the results. The verbal or electronic notification shall include the exceedance and the plan the Discharger has taken or will take to investigate and correct the cause(s) of toxicity. It may also include a status report on any actions required by the permit, with a schedule for actions not yet completed. If no actions have been taken, the reasons shall be given.

- VI. LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE**
- VII. RECLAMATION MONITORING REQUIREMENTS – NOT APPLICABLE**
- VIII. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER AND GROUNDWATER**

**A. Monitoring Location RSW-001 (Upstream)**

1. The Discharger shall monitor the Los Cerritos Channel 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	1, 2
Temperature	°F	Grab	1 / Year	1, 2
Hardness	mg/L	Grab	1 / Year	1, 2
TCDD Equivalents <sup>3</sup>	µg/L	Grab	1 / Year	1
Priority Pollutants <sup>4</sup>	µg/L	Grab	1 / Year	1, 2

- <sup>1</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>2</sup> Receiving water pH, hardness, and temperature shall be analyzed at the same time the samples are collected for Priority Pollutants analysis.
- <sup>3</sup> TCDD equivalents shall be calculated using the following formula, where the Minimum Levels (MLs), toxicity equivalency factors (TEFs), and bioaccumulation equivalency factors (BEFs) 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 minimum levels to zero. USEPA method 1613 may be used to analyze dioxin and furan congeners.

$$\text{Dioxin-TEQ (TCDD equivalents)} = \sum (C_x * TEF_x * BEF_x)$$

Where:

$C_x$  = concentration of dioxin or furan congener  $x$

$TEF_x$  = TEF for congener  $x$

$BEF_x$  = BEF for congener  $x$

Dioxin or Furan Congener	Minimum Level (pg/L)	Toxicity Equivalency Factor (TEF)	Bioaccumulation Equivalency Factor (BEF)
2,3,7,8-tetra CDD	10	1.0	1.0
1,2,3,7,8-penta CDD	50	1.0	0.9
1,2,3,4,7,8-hexa CDD	50	0.1	0.3
1,2,3,6,7,8-hexa CDD	50	0.1	0.1
1,2,3,7,8,9-hexa CDD	50	0.1	0.1
1,2,3,4,6,7,8-hepta CDD	50	0.01	0.05
Octa CDD	100	0.0001	0.01
2,3,7,8-tetra CDF	10	0.1	0.8
1,2,3,7,8-penta CDF	50	0.05	0.2
2,3,4,7,8-penta CDF	50	0.5	1.6
1,2,3,4,7,8-hexa CDF	50	0.1	0.08
1,2,3,6,7,8-hexa CDF	50	0.1	0.2
1,2,3,7,8,9-hexa CDF	50	0.1	0.6
2,3,4,6,7,8-hexa CDF	50	0.1	0.7
1,2,3,4,6,7,8-hepta CDF	50	0.01	0.01
1,2,3,4,7,8,9-hepta CDF	50	0.01	0.4
Octa CDF	100	0.0001	0.02

- <sup>4</sup> Priority Pollutants as defined by the California Toxics Rule (CTR) defined in Finding II.K of the Limitations and Discharge Requirements of this Order. Annual samples shall be collected during the discharge from the first storm event of the wet season (October 1 – May 30).

## IX. OTHER MONITORING REQUIREMENTS

### A. Storm Water Monitoring

- 1. Rainfall Monitoring.** The Discharger shall measure and record the rainfall on each day of the month or submit the data obtained from the nearest city/county operated rain gauge monitoring station. This information shall be included in the monitoring report for that quarter.



- 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.

## **B. SWPPP, BMPP, and SPCC 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 SPCC Plan to the Executive Officer of the Regional Water Board for approval 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 SPCC Plan required under Special Provision VI.C.3 of this Order. The SWPPP, BMPP, and SPCC Plan shall be reviewed at a minimum once per year and updated as needed to ensure all actual or potential sources of pollutants in wastewater and storm water discharged from the facility are addressed in the SWPPP, BMPP, and SPCC Plan. All changes or revisions to the SWPPP, BMPP, and SPCC Plan will be summarized in the annual report required under Attachment E, Monitoring and Reporting, Section X.C.

## **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 report shall so state.
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 hard copy SMRs. 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. 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 / Day	April 2, 2011	(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.	May 1 August 1 November 1 February 1
1/ Discharge Event	April 2, 2011	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	April 2, 2011	January 1 through December 31	February 1

4. Reporting Protocols. The Discharger shall report with each sample result the applicable reported Minimum Level (ML) and the current Method Detection Limit (MDL), as determined by the procedure in 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 reported ML shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
  - b. Sample results less than the 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 as well as the words "Estimated Concentration" (may be shortened to "Est. Conc."). The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (+ a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.



for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.

- c. SMRs must be submitted to the Regional Water Board, signed and certified as required by the Standard Provisions (Attachment D), to the address listed below:

**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. The Discharger shall report the results of any special studies, acute toxicity testing, TRE/TIE, SWPPP, and BMPP required by Special Provisions – VI.C.2 and 3 of this Order. The Discharger shall report the progress in satisfaction of compliance schedule dates specified in Special Provisions – VI.C.7 of this Order. The Discharger shall submit reports with the first monthly SMR scheduled to be submitted on or immediately following the report due date.
2. Within 90 days of the effective date of this permit, the Discharger is required to submit the following to the Regional Water Board:
  - a. Initial Investigation TRE workplan
  - b. Updated SWPPP
  - c. BMPP
  - d. Updated SPCC Plan
3. By February 1 of each year, the Discharger shall submit an annual report to the Regional Water Board. The report shall contain the following:
  - a. Both tabular and graphical summaries of the monitoring data obtained during the previous year,
  - b. A discussion on the compliance record and the corrective actions taken or planned to bring the discharge into full compliance with the waste discharge requirements,
  - c. A report discussing the following: 1) operation/maintenance problems; 2) changes to the facility operations and activities; 3) potential discharge of the pollutants associated with the changes and how these changes are addressed in the BMPP; 3) calibration of flow meters or other equipment/device used to demonstrate compliance with effluent limitations of this Order.
  - d. A report summarizing the quantities of all chemicals, listed by both trade and chemical names, which are used at the facility and which are discharged or

have the potential to be discharged (See Section IX.B of the MRP, Attachment E).

- e. A report on the status of the implementation and the effectiveness of the SWPPP, BMPP, and SPCC Plan.
- 4. As discussed in Section IX.C of the MRP, Attachment E, the Discharger shall submit to the Regional Water Board, together with the first monitoring report required by this permit, a list of all chemicals and proprietary additives, which could affect this waste discharge, including quantities of each. Any subsequent changes in types and/or quantities shall be reported promptly.

## ATTACHMENT F – FACT SHEET

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**ATTACHMENT F – FACT SHEET**

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

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>	4B192348001
<b>Discharger</b>	Paramount Petroleum Corporation
<b>Name of Facility</b>	Paramount Petroleum Refinery
<b>Facility Address</b>	14700 Downey Avenue
	Paramount, CA 90723
	Los Angeles County
<b>Facility Contact, Title and Phone</b>	Kathryn Gleeson, (562) 748-4613
<b>Authorized Person to Sign and Submit Reports</b>	Ed Juno, Vice President West Coast Refining
<b>Mailing Address</b>	Same
<b>Billing Address</b>	Same
<b>Type of Facility</b>	Petroleum Refinery
<b>Major or Minor Facility</b>	Minor
<b>Threat to Water Quality</b>	2
<b>Complexity</b>	B
<b>Pretreatment Program</b>	No
<b>Reclamation Requirements</b>	No
<b>Facility Permitted Flow</b>	0.144 MGD
<b>Facility Design Flow</b>	0.144 MGD
<b>Watershed</b>	Los Cerritos Channel Watershed
<b>Receiving Water</b>	Los Cerritos Channel
<b>Receiving Water Type</b>	Inland Surface Water

**A.** Paramount Petroleum Corporation is the owner and operator of a petroleum refinery located at 14700 Downey Avenue, Paramount, California. Paramount Petroleum Corporation is hereinafter referred to as Discharger.

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 Los Cerritos Channel, a water of the United States, and is currently regulated by Order No. R4-2005-0082, which was adopted on December 1, 2005 and expired on November 10, 2010. The terms and conditions of the current Order have been automatically continued and remain in effect until new Waste Discharge Requirements and NPDES permit are adopted pursuant to this Order.
- C.** The Discharger filed a report of waste discharge and submitted an application for renewal of its Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permit on May 17, 2010. A site visit was conducted on July 15, 2010, to observe operations and collect additional data to develop permit limitations and conditions.

## **II. FACILITY DESCRIPTION**

The Discharger operates the Paramount Petroleum Refinery located at 14700 Downey Avenue, Paramount, California. Paramount Petroleum Refinery is a petroleum refining facility.

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

The refinery occupies an area in the city of Paramount, California, which is bounded by Lakewood Boulevard to the east, Somerset Avenue and a railroad right-of-way to the south, Downey Avenue to the west, and Contreras Street, residential and commercial properties to the north. This property contains the offices, petroleum refining process units, above ground storage tanks and refined product distribution racks associated with the Paramount operation.

The refinery processes approximately 50,000 barrels per day of crude oil into various products, including motor fuels, diesel, jet fuel, and asphalt products. The total area of the Facility is approximately 65 acres. There are four processing areas, including the crude units, hydroprocessing (including clean fuel processing) and two asphalt plants (including emulsion, asphalt air blowing, and polymer modified asphalt plants). Approximately 120 above ground storage tanks are on-site, mostly bounding the north and east areas of the refinery. There are 26 loading and/or unloading truck racks on the site, and two rail car loading facilities. Most of the crude oil received at the refinery is via underground pipeline, and approximately 50% of Paramount's finished product is shipped out via underground pipeline. The site operates 24 hours a day, 7 days a week except during maintenance shutdowns. Activities to support the refining process, such as maintenance activities, including vehicle and equipment repair, also take place at the site. Maintenance activities generally occur 8 hours a day, 5 days a week.

Storm water in the processing areas generally flows towards the south of the facility while storm water from the nonprocessing areas flows along the refinery's north road. The processing area is subdivided into two sections; an old processing area and a new processing area. The old processing area includes the crude units. The newer processing area includes hydroprocessing plant (including clean fuels processing), asphalt plant (including emulsion, asphalt air blowing, and polymer modified asphalt plants), and a tank farm area. Storm water from the old processing area is directed to the wastewater

treatment system (which treats both storm water from the old processing area and process water from the refinery) prior to discharge to the local sanitation district sewer line. In 2006, the Discharger installed a new storm water treatment system designed to remove solids and volatile organic compounds (VOCs) from storm water from the new processing area, following retention in a storm water holding pond.

This permit addresses the discharge to the storm water drain only in an emergency. The Discharger's normal procedure is to discharge storm water to the wastewater outfall going to the Los Angeles County Sanitation District (LACSD) according to our wastewater discharge permit requirements. Discharge to the storm water drain (to Los Cerritos Channel) would occur when the Facility could not contain storm water in the pond and the wastewater tanks are full; the Discharger would subsequently run the storm water treatment system immediately and discharge to the storm water drain on the west side of the holding pond. Storm water entering the pond is injected with a polymer at the PolyBlend unit; the polymer removes or clarifies any suspended solids that may have accumulated in the storm water. The storm water treatment system for discharge from the pond includes two sediment filters; a bag filter and a mechanical polishing filter, which are used to remove fine particulate prior to entry to the carbon adsorption units. Activated carbon adsorption units are used to remove total organic carbon. The carbon adsorption system will treat the storm water using two carbon vessels; the inlet stream will go through two activated carbon vessels in series. When the vessels reach break-through, the water is directed through a second series of two carbon vessels. Activated carbon change-outs occur as needed. The system also allows for storm water recycling back to the pond or to the refinery process wastewater treatment system for additional treatment if it does not appear to be in compliance with discharge requirements.

During heavy rains and in emergency conditions, when the holding capacity of the tanks and pond is exceeded, the maximum emergency storm water that will be discharged from the pond after treatment to the storm drain on Downey Avenue through Discharge Point 001 is 0.144 million gallons per day (MGD). The maximum volume discharged during the previous permit term was 20 gallons on January 25, 2008.

## **B. Discharge Points and Receiving Waters**

Storm water is discharged from Discharge Point 001 to the Los Cerritos Channel, a water of the United States. Discharge Point 001 is located at Latitude 33° 45' 18" North and Longitude 118° 12' 48" West.

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

Effluent limitations contained in the existing Order and monitoring data for the single discharge event from Discharge Point No. 001 (Monitoring Location EFF-001) are as follows:

**Table F-2. Historic Effluent Limitations and SMR Data**

Parameter	Units	Effluent Limitations				Monitoring Data (1/25/08 discharge event <sup>1</sup> )
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Flow	GPD		400,000			20
pH	S.U.	—		6.5	8.5	5.9
BOD <sub>5</sub> @ 20°C	mg/L	—	30	—	—	<3
Total Suspended Solids (TSS)	mg/L	—	75	—	—	16
Oil and Grease	mg/L	—	15	—	—	<1
Temperature	°F	—	—	—	86	NS
Arsenic, Total Recoverable	µg/L	—	50	—	—	<10
Cadmium, Total Recoverable	µg/L	—	3.7	—	—	<10
Chromium, Hexavalent	µg/L	—	15	—	—	0.3
Copper, Total Recoverable	µg/L	—	17	—	—	35
Lead, Total Recoverable	µg/L	—	8.3	—	—	<10
Mercury, Total Recoverable	µg/L	—	2.0	—	—	<0.5
Selenium, Total Recoverable	µg/L	—	10	—	—	<20
Silver, Total Recoverable	µg/L	—	3.4	—	—	<20
Zinc, Total Recoverable	µg/L	—	110	—	—	458
Benzene	µg/L	—	1	—	—	<1
Ethylbenzene	µg/L	—	700	—	—	<1
Toluene	µg/L	—	150	—	—	<1
Phenolic Compounds	µg/L	—	1	—	—	<0.1
Total Organic Carbon (TOC)	µg/L	—	110	—	—	1
Xylene	µg/L	—	1750	—	—	<1
Total Petroleum Hydrocarbons	µg/L	—	100	—	—	NS <sup>2</sup>

<sup>1</sup> The Facility discharged to surface waters once during the previous permit term on January 25, 2008.

<sup>2</sup> NS=Not sampled

**D. Compliance Summary**

Monitoring data from January 2006 through September 2010, indicate that the Discharger has complied with the final effluent limitations of Order No. R4-20005-0082, except for the following exceedances of copper and zinc:

Date	Monitoring Period	Violation Type	Pollutant	Reported Value	Permit Limitation	Units
1/25/08	1Q 2008	Daily Maximum	Copper	35	17	µg/L
1/25/08	1Q 2008	Daily Maximum	Zinc	458	110	µg/L

On May 23, 2008, the Water Board issued a notice of violation (NOV) to the Facility for reporting and effluent limitation violations which occurred during the period January 2003 through March 2005 and during January 2008. The Discharger submitted a response to the NOV on June 25, 2008, which contested several of the violations. The Water Board issued Settlement Offer No. R4-2008-0064-M on September 26, 2008. The Discharger submitted a request for alleged violation review on October 23, 2008, which contested a number of the violations. On November 19, 2008, the Water Board issued a response to this request, which rescinded some violations cited in Settlement Offer No. R4-2008-0064-M; however, retained the two violations from the previous permit term. The Discharger accepted the offer to participate in an expedited payment program and submitted payment per the Settlement Offer No. R4-2008-00064-M on February 26, 2009, which included \$6,000 for the violations that occurred during the previous permit term.

**E. Planned Changes**

There has been no indication of planned changes at the Facility.

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

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

**A. Legal Authorities**

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

**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 Regulations, Policies, and Plans**

**1. Water Quality Control Plans.** The 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. In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Beneficial uses applicable to the Los Cerritos Channel are as follows:

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

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Los Cerritos Channel (Hydrologic Unit No. 405.15)	<u>Existing:</u> Wildlife Habitat (WILD) <u>Intermittent:</u> Non-Contact Water Recreation (REC-2); and Warm Freshwater Habitat (WARM) <u>Potential:</u> Municipal and Domestic Supply (MUN); Contact Water Recreation (REC-1)

Requirements of this Order implement the Basin Plan.

- 2. Thermal Plan.** The State Water Board adopted a Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for surface waters. The Thermal Plan cites temperature objectives for the Los Cerritos Channel. This Order shall incorporate by reference the objectives described in Section 5.A of the Thermal Plan. Requirements of this Order implement the Thermal Plan.
- 3. Ammonia Basin Plan Amendment.** The 1994 Basin Plan provided water quality objectives for ammonia to protect aquatic life, in Table 3-1 through Table 3-4. However, those ammonia objectives were revised on April 25, 2002, by the Regional Water Board with the adoption of Resolution No. 2002-011, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters (Including Enclosed Bays, Estuaries and Wetlands) with Beneficial Use Designations for Protection of Aquatic Life*. The amendment reflects the revised water quality criteria developed by USEPA in the “1999 Update of Ambient Water Quality Criteria for Ammonia,” December 1999. The 1999 Update contains USEPA’s most recent freshwater aquatic life criteria for ammonia and supersedes all previous freshwater aquatic life criteria for ammonia. The ammonia Basin Plan amendment was approved by the State Water Board, the Office of Administrative Law, and USEPA on April 30, 2003, June 5, 2003, and June 19, 2003, respectively. Although the revised ammonia water quality objectives may be less stringent than those contained in the 1994 Basin Plan, they are still protective of aquatic life and are consistent with USEPA’s 1999 ammonia criteria update.

- 4. 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.
- 5. 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 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.
- 6. Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes (40 C.F.R. § 131.21, 65 Fed. Reg. 24641 (April 27, 2000)). Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.
- 7. Antidegradation Policy.** 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 No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The 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 section 131.12 and State Water Board Resolution No. 68-16.
- 8. Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40, Code of Federal Regulations<sup>1</sup> 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.

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<sup>1</sup> All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.

## 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 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.

USEPA approved the State Water Board's 2006 California 303(d) List of impaired water bodies on June 28, 2007. Certain receiving waters in the Los Angeles and Ventura Counties' watersheds do not fully support beneficial uses and therefore have been classified as impaired on the 2006 303(d) list and have been scheduled for TMDL development. The Paramount Petroleum Refinery discharges into the Los Cerritos Channel at Del Amo Boulevard. The 2006 State Water Board's 303(d) list classifies the Los Cerritos Channel as impaired. The pollutants of concern in this water body include ammonia, bis(2ethylhexyl)phthalate/DEHP, chlordane (sediment), coliform bacteria, copper, lead, zinc and trash.

**Los Cerritos Channel Metals TMDL.** On March 17, 2010, the USEPA established the Los Cerritos Channel TMDL for Metals<sup>2</sup>. The TMDL establishes a dry-weather WLA for copper and wet-weather WLAs for copper, lead, and zinc applicable to all sources in the watershed. Therefore, the TMDL is applicable to this discharge and will be implemented in this permit.

The TMDL states that concentration-based WLAs are established for the minor NPDES permits that discharge to the Los Cerritos Channel to ensure that these point sources do not contribute to exceedances of the CTR limits. The concentration-based WLA for dry weather is equal to the dry-weather numeric target of 19.1 µg/L for copper expressed as total recoverable metals. Section 4.1.2.1 of the TMDL indicates that the Paramount facility is permitted for intermittent discharges of storm water and discharges during dry weather are not permitted. The TMDL also establishes wet-weather WLAs, which apply to any day when the maximum daily flow measured at the Stearns Street monitoring station located within the Los Cerritos Channel above the tidal prism is equal to or greater than 23 cubic feet per second (cfs). The concentration-based WLAs for wet weather are equal to the wet-weather numeric targets of 9.8 µg/L and 95.6 µg/L for copper and zinc expressed as total recoverable metals, respectively. The TMDL states, *"For lead, where existing loads (based on the observed average concentration of 55.8 µg/L), are less than the loading capacity (based on the translated CTR total load concentration of 213.2 µg/L), the TMDL and allocations are set at the existing load level."* Therefore, as the TMDL presents in Table 6-2, the concentration-based wet-weather WLA for lead is 55.8 µg/L expressed as total recoverable metal. This Order establishes wet weather effluent limitations for copper, lead, and zinc based on the Los Cerritos Channel Metals TMDL.

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<sup>2</sup> The TMDL is available at: <http://epa.gov/region9/water/tmdl/los-cerritos/03-18-10LosCerritosChannel-metalsTMDLs.pdf>.

## **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, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the Code of Federal Regulations: section 122.44(a) requires that permits include applicable technology-based limitations and standards; and 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 petroleum refinery that processes crude oil into various products, including motor fuels, diesel, jet fuel, and asphalt products. The discharge consists of storm water from the refinery to the storm drain through Discharge Point 001. Typical pollutants present in these waste streams may include solids, oil and grease, organic compounds, and metals. Solids are commonly present in storm water of industrial facilities and therefore, BOD and TSS are pollutants of concern. In addition, the Facility deals with crude oil and refinery products that are a potential source of oil and grease, organic compounds, and metals. Organic pollutants from petroleum facilities typically include benzene, ethylbenzene, toluene, phenolic compounds, xylene, and other organic compounds. Also, pH and temperature are pollutants of concern because the discharge of industrial storm water also has the potential to affect the pH and temperature of the receiving water body. When the existing permit was issued in 2005, BOD, oil and grease, pH, TSS, arsenic, cadmium, chromium (VI), copper, lead, mercury, selenium, silver, zinc, benzene, ethylbenzene, toluene, phenolic compounds, total organic carbon (TOC), xylene and total petroleum hydrocarbons (TPH) were considered pollutants of concern and were regulated in the existing permit. The Facility operation has not changed significantly since the existing permit was issued; therefore, these pollutants are also considered pollutants of concern for the tentative permit.

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 limitation on a case-by-case basis limitation based on mass are infeasible because the mass or pollutant cannot be related to a measure of production. The limitations, however, must ensure that dilution will not be used as a substitute for treatment.

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

The discharge prohibitions are based on the requirements of the Basin Plan, State Water Board's plans and policies, the Water Code, and previous permit provisions, and are consistent with the requirements set for other discharges regulated by NPDES permit to the Los Cerritos Channel.



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

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

Section 301(b) of the CWA and implementing USEPA permit regulations at section 122.44, title 40 of the Code of Federal Regulations, 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 Part 125, 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 performance by plants 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 the “cost reasonableness” of the relationship between the cost of attaining a reduction in effluent discharge and the benefits that would result, and also the cost effectiveness of additional industrial treatment beyond BPT.
- d.** New source performance standards (NSPS) represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

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

### **2. Applicable Technology-Based Effluent Limitations**

This NPDES permit is for a petroleum refinery facility and it only addresses storm water runoff discharged from the Facility. National ELGs have been developed for petroleum refineries, as contained in Part 419. Based on the type of operation,

Paramount Refinery is categorized as a topping refinery as defined in section 419.10 (*Effluent Limitation Guidelines and Standards for the Petroleum Refining Point Source Category*). Because the discharge through Discharge Point 001 consists of contaminated runoff, effluent limitations for contaminated runoff established in sections 419.12, 419.13, and 419.14 are applicable to the discharge. Sections 419.12, 419.13, and 419.14 establish effluent limitations of 15 mg/L for oil and grease and 110 mg/L for TOC for contaminated runoff. The ELGs state that when the discharge exceeds the effluent limitation of oil and grease or TOC specified above, then effluent limitations for BOD, oil and grease, pH, TSS, chromium, chromium (VI), phenols, and chemical oxygen demand (COD), also established in sections 419.12, 419.13, and 419.14, are applicable. The existing permit contains effluent limitation of 15 mg/L for oil and grease and 110 mg/L for TOC and the data submitted by the Discharger shows that the discharge has met the effluent limitation of 15 mg/L for oil and grease and 110 mg/L for TOC over the two previous permit terms.

Therefore, for the tentative permit, effluent limitations of 15 mg/L for oil and grease and 110 mg/L for TOC are carried forward from the existing permit.

The tentative Order also carries forward technology-based effluent limitations based on BPJ in accordance with section 125.3 for BOD, arsenic, cadmium, chromium (VI), copper, lead, mercury, selenium, silver, zinc, benzene, ethylbenzene, toluene, phenolic compounds, xylene, and TPH. Section 402(0) of the CWA and section 122.44(1) require that effluent limitations or conditions in reissued Orders be at least as stringent as those in the existing Orders.

Based on BPJ, effluent limitations for all the above pollutants are carried over from the existing Order (Order No. R4-2005-0082). Removal of these numeric limitations would constitute backsliding under CWA Section 402(0). The Regional Water Board has determined that these numeric effluent limitations continue to be applicable to the Facility and that backsliding is not appropriate. Summaries of the technology-based effluent limitations are described in Table F-4.

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. Because storm water discharges do occur at the Paramount Petroleum Corporation Paramount Petroleum Corporation facility and make up the entire discharge, this Order will require the Discharger to update and continue to implement their SWPPP (Attachment G).

This Order also requires that the Discharger develop and implement a Best Management Practices Plan (BMPP). 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 BMPP should demonstrate the Discharger’s continued effective implementation of the SWPPP. This Order will also require the Discharger to update and continue to implement their Spill Prevention Control and Countermeasure (SPCC) Plan.

The combination of the SWPPP, BMPP, SPCC Plan, 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			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
BOD <sub>5</sub> @ 20 °C	mg/L	—	30	—	—
	lbs/day <sup>1</sup>	—	36	—	—
Total Suspended Solids (TSS)	mg/L	—	75	—	—
	lbs/day <sup>1</sup>	—	90	—	—
Oil and Grease	mg/L	—	15	—	—
Arsenic, Total Recoverable	µg/L	—	50	—	—
	lbs/day <sup>1</sup>	—	0.06	—	—
Cadmium, Total Recoverable	µg/L	—	3.7	—	—
	lbs/day <sup>1</sup>	—	0.004	—	—
Chromium, Hexavalent	µg/L	—	15	—	—
	lbs/day <sup>1</sup>	—	0.02	—	—
Mercury, Total Recoverable	µg/L	—	2	—	—
	lbs/day <sup>1</sup>	—	0.0024	—	—
Selenium, Total Recoverable	µg/L	—	10	—	—
	lbs/day <sup>1</sup>	—	0.01	—	—
Silver, Total Recoverable	µg/L	—	3.4	—	—
	lbs/day <sup>1</sup>	—	0.004	—	—
Benzene	µg/L	—	1	—	—
	lbs/day	—	0.001	—	—
Ethylbenzene	µg/L	—	700	—	—
	lbs/day <sup>1</sup>	—	0.84	—	—
Toluene	µg/L	—	150	—	—
	lbs/day <sup>1</sup>	—	0.18	—	—
Phenolic Compounds <sup>2</sup>	µg/L	—	1	—	—
	lbs/day <sup>1</sup>	—	0.001	—	—
Total Organic Carbon (TOC)	mg/L	—	110	—	—
Xylene	µg/L	—	1750	—	—
	lbs/day <sup>1</sup>	—	2.10	—	—
Total Petroleum Hydrocarbons	µg/L	—	100	—	—
	lbs/day <sup>1</sup>	—	0.12	—	—

- <sup>1</sup> The mass-based effluent limitations are based on a maximum design flow of 0.144 MGD and are calculated as follows:  $\text{Flow (MGD)} \times \text{Concentration (mg/L)} \times 8.34$  (conversion factor) = lbs/day. The actual mass for a pollutant shall be calculated based on the actual measured flow of the discharge.
- <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.

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

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

Section 301(b) of the CWA and 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.

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).

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, 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 TSD states that "an analogous approach developed by a regulatory authority can be used to determine the reasonable potential" (for storm water discharges). The 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 also be used to evaluate reasonable potential and calculate WQBELs for storm water discharges. Hence, in this Order, the Regional Water Board determines the SIP methodology is appropriate 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 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 Los Cerritos Channel 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.

As stated previously, On March 17, 2010, USEPA approved the Los Cerritos Channel Metals TMDL. The TMDL establishes WLAs for copper, lead, and zinc. The TMDL allocates concentration-based WLAs to minor point sources enrolled under NPDES or WDR permits including but not limited to the Paramount Facility.

The TMDL establishes concentration-based dry-weather WLAs in Los Cerritos Channel for copper. Section 4.1.2.1 of the TMDL highlights the Paramount facility is permitted for an intermittent discharge and discharges during dry weather are not permitted. In addition, the TMDL establishes wet-weather WLAs for copper, lead, and zinc in Los Cerritos Channel. Wet-weather WLAs established for Los Cerritos Channel are applicable *“any day when the maximum daily flow measured at a location within the Los Cerritos Channel above the tidal prism (Stearns Street Monitoring Station) is equal to or greater than 23 cubic feet per second (cfs).”* Wet-weather WLAs established for Los Cerritos Channel for copper, lead, and zinc apply to this discharge because the discharge is to Los Cerritos Channel during wet weather.

The wet-weather WLAs in the TMDL for metals in the Los Cerritos Channel are based on the CTR criteria for the protection of aquatic life. Median hardness values were used to calculate reach-specific targets for lead in the Los Cerritos Channel (i.e., 27 mg/L as CaCO<sub>3</sub>). For lead, where the existing loads (based on the observed average concentration of 55.8 µg/L) are less than the loading capacity (based on the translated CTR total lead concentration of 213.2 µg/L), the TMDL and WLAs are set at the existing load level, 55.8 µg/L. The TMDL targets, and resulting WLAs, are expressed in terms of total recoverable metals; attainment of numeric targets expressed as total recoverable metals will ensure attainment of the dissolved CTR criterion. The concentration-based wet-weather WLAs for copper and zinc in the Los Cerritos Channel are 9.8 µg/L and 95.6 µg/L, respectively. Section 7 of the TMDL, Implementation Recommendations, notes that permit writers could translate applicable WLAs into effluent limitations by applying the effluent limitation procedures in Section 1.4 of the SIP or other applicable engineering practices authorized under federal regulations. Further, the TMDL indicates wet-weather WLAs will not be used to determine monthly permit limits, but will only be used in a determination of a daily limit.

Priority pollutant water quality criteria in the CTR are applicable to the Los Cerritos Channel. 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 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. The CTR criteria for freshwater 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 Los Cerritos Channel, 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 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. The 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 B 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 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 data are not sufficient, the Discharger will be required to gather the appropriate data for the Regional Water Board to conduct the RPA. Upon review of the data, and if the Regional Water Board determines that WQBELs are needed to protect the beneficial uses, the permit will be reopened for appropriate modification.

There was only one discharge from the Facility to surface waters during this permit term and further, no data were provided representing storm water discharged to the sanitary sewer to characterize the potential discharge from the Facility. Therefore, the RPA was not performed for the priority pollutants regulated in the CTR.

Pursuant to the Los Cerritos Channel Metals TMDL, WQBELs for copper, lead and zinc are established in Order No. R4-2011-0050.

#### 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:
  - i. If applicable and available, use of the wasteload allocation (WLA) established as part of a total maximum daily load (TMDL).
  - ii. Use of a steady-state model to derive maximum daily effluent limitations (MDELs) and average monthly effluent limitations (AMELs).
  - iii. Where sufficient effluent and receiving water data exist, use of a dynamic model, which has been approved by the Regional Water Board.
- b. WQBELs for copper, lead, and zinc are based on TMDLs developed for the Los Cerritos Channel.
- c. Since many of the streams in the Region have minimal upstream flows, mixing zones and dilution credits are usually not appropriate. Therefore, in this proposed Order, no dilution credit is being allowed. However, in accordance with the reopener provision in Section VI.C.1.e in the proposed 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

Using copper as an example, the following demonstrates how WQBELs are established from the TMDL WLAs.

##### Concentration-Based Effluent Limitations

MDEL values are calculated separately based upon the TMDL WLA.

*Calculation of aquatic life MDEL based on WLA:*

**Step 1:** For each constituent requiring an effluent limit, identify the applicable water quality criteria or objective. For each parameter, 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. In this case, the concentration-based WLA from the TMDL (a median hardness value of 27 mg/L as CaCO<sub>3</sub>) was used in the development of WLAs for copper and zinc).

- D = The dilution credit, and
- B = The ambient background concentration

As discussed above, for this Order, dilution was not allowed; therefore:

$$ECA = C$$

For copper, the applicable water quality criteria are:

- ECA<sub>acute</sub> = 9.8 µg/L
- ECA<sub>chronic</sub> = Not applicable (The TMDL requires only WQBELs based upon acute standards)

**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. 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.

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

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

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 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 99</sub>	ECA Multiplier <sub>chronic 99</sub>
4	0.6	0.32	NA

$$LTA_{acute} = 9.8 \mu\text{g/L} \times 0.32 = 3.15 \mu\text{g/L}$$

$$LTA_{chronic} = \text{Not applicable}$$

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



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

For copper, the most limiting LTA was the  $LTA_{\text{acute}}$

$$LTA = 3.15 \mu\text{g/L}$$

**Step 4:** Calculate the WQBELs by multiplying the LTA by a factor (multiplier). WQBELs are expressed as Average Monthly Effluent Limitations (AMEL) and Maximum Daily Effluent Limitation (MDEL). The multiplier is a statistically based factor that adjusts the LTA for the averaging periods and exceedance frequencies of the criteria/objectives and the effluent limitations. The value of the multiplier varies depending on the probability basis, the coefficient of variation (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.

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

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

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 copper, the following data was used to develop the AMEL and MDEL for aquatic life using equations provided in Section 1.4, Step 5 of the SIP (Table 2 of the SIP also provides this data up to two decimals):

No. of Samples Per Month	CV	Multiplier <sub>MDEL 99</sub>	Multiplier <sub>AMEL 95</sub>
4 <sup>1</sup>	0.6	3.11	NA

<sup>1</sup> When the LTA is based on water quality criteria developed in a TMDL, and site-specific data are not the basis for reasonable potential, the number of samples per month is equal to 4.

$$AMEL_{\text{aquatic life}} = \text{Not applicable}$$

$$MDEL_{\text{aquatic life}} = 3.15 \times 3.11 = 9.8 \mu\text{g/L}$$

For parameters with applicable TMDLs expressed as concentration-based WLAs, the WLA was used as the ECA for the calculations of the WQBELs, as detailed in Section 5.4 of the USEPA TSD.

TMDLs are applicable for copper, lead, and zinc; therefore, the MDEL is based on WLAs established to achieve the criteria specified in the TMDL. Pursuant to the TMDL for Metals in the Los Cerritos Channel, WQBELs for copper, lead, zinc are only applicable to the Facility during wet-weather events.

## 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 carried forward from the previous Order.

The Basin Plan lists temperature requirements for the receiving waters and references the Thermal Plan. Based on the requirements of the Thermal Plan and 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*, a maximum effluent temperature limitation of 86 °F is included in the proposed permit. The white paper evaluated the optimum temperatures for steelhead, topsmelt, ghost shrimp, brown rock crab, jackknife clam, and blue mussel. The new temperature effluent limit is reflective of new information available that indicates that the 100°F temperature is not protective of aquatic organisms. A survey was completed for several kinds of fish and the 86°F temperature was found to be protective. The effluent limitation for temperature is carried forward from the previous Order.

## 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.

### a. Acute Toxicity Limitation:

This Order includes acute toxicity limitations and requires acute toxicity monitoring. In accordance with the Basin Plan, the acute toxicity objective for discharges dictates that the average survival in undiluted effluent for any three consecutive 96-

hour static or continuous flow bioassay tests shall be at least 90%, with no single test having less than 70% survival. Acute toxicity provisions in the Order are derived from the Basin Plan's toxicity standards (Basin Plan 3-16 and 3-17). The provisions require the Discharger to accelerate acute toxicity monitoring and take further actions to identify the source of toxicity and to reduce acute toxicity.

b. Chronic Toxicity Trigger and Requirements:

In addition to the Basin Plan requirements, section 4 of the SIP states that a chronic toxicity effluent limitation is required in permits for all discharges that will cause, have the reasonable potential to cause, or contribute to chronic toxicity in receiving waters. The discharge from Discharge Point 001 has been determined to not have the reasonable potential to contribute chronic toxicity in receiving waters due to the non-continuous, emergency-only nature of the discharge.

However, the circumstances warranting a numeric chronic toxicity effluent limitation when there is reasonable potential were under review by the State Water Resources Control Board (State Water Board) in SWRCB/OCC Files A-1496 & A-1496(a) [Los Coyotes/Long Beach Petitions]. On September 16, 2003, at a public hearing, the State Water Board adopted Order No. 2003-0012 deferring the issue of numeric chronic toxicity effluent limitations until a subsequent Phase of the SIP is adopted. In the meantime, the State Water Board replaced the numeric chronic toxicity limit with a narrative effluent limitation and a 1 TUc trigger, in the Long Beach and Los Coyotes WRP NPDES permits. This permit contains a similar narrative chronic toxicity effluent limitation with a numeric trigger for accelerated monitoring. Phase II of the SIP has been adopted, however, the toxicity control provisions were not revised.

On January 17, 2006, the State Board Division of Water Quality held a California Environmental Quality Act (CEQA) scoping meeting to seek input on the scope and content of the environmental information that should be considered in the planned revisions of the Toxicity Control Provisions of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP). However, the Toxicity Control Provisions of the SIP continue unchanged.

This Order contains a reopener to allow the Regional Water Board to modify the permit, if necessary, consistent with any new policy, law, or regulation. Until such time, this Order will have toxicity limitations that are consistent with the State Board's precedential decision.

Chronic toxicity provisions in the Order are derived from the Basin Plan's toxicity standards (Basin Plan 3-16 and 3-17). The provisions require the Discharger to accelerate chronic toxicity monitoring and take further actions to identify the source of toxicity and to reduce chronic toxicity. The monthly median trigger of 1.0 TUc for chronic toxicity is based on USEPA Regions 9 & 10 Guidance for Implementing Whole Effluent Toxicity (WET) Programs Final May 31, 1996 (Chapter 2 – Developing WET Permitting Conditions, page 2-8). In cases where effluent receives no dilution or where mixing zones are not allowed, the 1.0 TUc chronic criterion should be expressed as a monthly median. The “median” is defined as the middle

value in a distribution, above which and below which lie an equal number of values. For example, if the results of the WET testing for a month were 1.5, 1.0, and 1.0 TUc, the median would be 1.0 TUc.

The USEPA Regions 9 & 10 Guidance for Implementing Whole Effluent Toxicity (WET) Programs Final May 31, 1996 (Chapter 2 – Developing WET Permitting Conditions, page 2-8) recommends two alternatives for setting up maximum daily limit: using 2.0 TUc as the maximum daily limit; or using a statistical approach outlined in the TSD to develop a maximum daily effluent limitation. In this permit, neither a maximum daily limitation nor a trigger for chronic toxicity is prescribed.

**7. Final WQBELs**

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

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Temperature	°F	--	--	--	86
pH	s.u.	--	--	6.5	8.5
Copper	µg/L	--	9.8	--	--
Lead	µg/L	--	56	--	--
Zinc	µg/L	--	96	--	--

**D. Final Effluent Limitations**

Section 402(o) of the CWA and section 122.44(l) require that effluent limitations or conditions in reissued Orders be at least as stringent as those in the existing Orders based on the submitted sampling data. Effluent limitations for BOD, oil and grease, pH, TSS, arsenic, cadmium, chromium (VI), mercury, selenium, silver, benzene, ethylbenzene, toluene, phenolic compounds, temperature, TOC, xylene, TPH and acute toxicity are being carried over from the previous Order (Order No. R4-2005-0082). Removal of these numeric limitations would constitute backsliding under CWA section 402(o). The Regional Water Board has determined that these numeric effluent limitations continue to be applicable to the Facility and that backsliding is not appropriate.

Effluent limitations for copper, lead, and zinc are revised to implement the WLA specified in the TMDL. Pursuant to the Los Cerritos Channel Metals TMDL, WQBELs for copper, lead, and zinc are applicable to the Facility during wet-weather conditions.

**1. Satisfaction of Anti-Backsliding Requirements**

Some effluent limitations in this Order are less stringent than the effluent limitations in the previous Order. The previous Order established effluent limitations for copper, lead, and zinc that were based upon best professional judgment. This Order establishes individual effluent limitations for copper, lead, and zinc based upon the Los Cerritos Channel Metals TMDL. The effluent limitation for lead is less stringent than the previous effluent limitations for lead. The relaxation of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal

regulations, based on Section 303(d)(4)(A) of the CWA. The receiving water has not yet achieved the applicable water quality standard (e.g., lead) and the existing effluent limitation is based on CTR water quality criteria. Therefore, based on Section 303(d)(4)(A) of the CWA, less stringent WQBELs may be established because they are based on a TMDL which will assure the attainment of water quality standards for lead.

All other effluent limitations are at least as stringent as the effluent limitations in the previous Order.

## **2. Satisfaction of Antidegradation Policy**

Section 131.12 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 No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies.

The permitted discharge is consistent with the antidegradation provision of section 131.12 and State Water Board Resolution No. 68-16 and the final limitations in this Order are in compliance with antidegradation requirements and meet the requirements of the SIP because these limits hold the Discharger to performance levels that will not cause or contribute to water quality impairment or further quality degradation that could result from and increase in permitted design flow or a reduction in the level of treatment. This Order does not provide for an increase in the permitted design flow or allow for a reduction in the level of treatment. Further, compliance with these requirements will result in the use of best practicable treatment or control of the discharge.

The Order continues the status quo with respect to the level of discharge authorized in the previous permit and thus there will be no change in water quality beyond the level that was authorized in the last permit. Findings authorizing degradation are thus not appropriate.

## **3. Stringency of Requirements for Individual Pollutants**

This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based effluent limitations consist of restrictions on oil and grease, TOC, BOD, TSS, arsenic, cadmium, chromium (VI), mercury, selenium, silver, benzene, ethylbenzene, toluene, phenolic compounds, xylene, and TPH. 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 sections 419.12, 419.13, and 419.14.

WQBELs for copper, lead, and zinc 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 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>
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
pH	S.U.	—	—	6.5	8.5	E, BP
BOD <sub>5</sub> @ 20°C	mg/L	—	30	—	—	E, BPJ
	lbs/day	—	36	—	—	
Total Suspended Solids (TSS)	mg/L	—	75	—	—	E, BPJ
	lbs/day	—	90	—	—	
Oil and Grease	mg/L	—	15	—	—	E, ELG
Temperature	°F	—	—	—	86	E, TP
Arsenic, Total Recoverable	µg/L	—	50	—	—	E, BPJ
	lbs/day	—	0.06	—	—	
Cadmium, Total Recoverable	µg/L	—	3.7	—	—	E, BPJ
	lbs/day	—	0.004	—	—	
Chromium, Hexavalent	µg/L	—	15	—	—	E, BPJ
	lbs/day	—	0.02	—	—	
Copper, Total Recoverable	µg/L	—	9.8	—	—	TMDL
Lead, Total Recoverable	µg/L	—	56	—	—	TMDL
Mercury, Total Recoverable	µg/L	—	2	—	—	E, BPJ
	lbs/day	—	0.0024	—	—	
Selenium, Total Recoverable	µg/L	—	10	—	—	E, BPJ
	lbs/day	—	0.01	—	—	
Silver, Total Recoverable	µg/L	—	3.4	—	—	E, BPJ
	lbs/day	—	0.004	—	—	
Zinc, Total Recoverable	µg/L	—	96	—	—	TMDL
Benzene	µg/L	—	1	—	—	E, BPJ
	lbs/day	—	0.001	—	—	
Ethylbenzene	µg/L	—	700	—	—	E, BPJ
	lbs/day	—	0.84	—	—	

Parameter	Units	Effluent Limitations				Basis <sup>1</sup>
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Toluene	µg/L	—	150	—	—	E, BPJ
	lbs/day	—	0.18	—	—	
Phenolic Compounds <sup>2</sup>	µg/L	—	1	—	—	E, BPJ
	lbs/day	—	0.001	—	—	
Total Organic Carbon (TOC)	µg/L	—	110	—	—	E, ELG
Xylene	µg/L	—	1750	—	—	E, BPJ
	lbs/day	—	2.10	—	—	
Total Petroleum Hydrocarbons	µg/L	—	100	—	—	E, BPJ
	lbs/day	—	0.12	—	—	
Acute Toxicity	% survival	3				E, BP

<sup>1</sup> BP: Basin Plan; BPJ = Best Professional Judgment; ELG = Effluent Limitation Guidelines found at 40 CFR 419.12, 419.13 and 419.14; E = Existing Limitation; TP = Thermal Plan; TMDL = Los Cerritos Metals TMDL

<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 acute toxicity of the effluent shall be such that:

- i. the average survival in the undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, and
- ii. No single test producing less than 70% survival.

**4. Mass-based Effluent Limitations**

Mass-based effluent limitations based upon a storm water treatment system design flow of 0.144 MGD.

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

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

**G. Reclamation 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 (section 131.12) and State Water Board Resolution No. 68-16. Receiving water limitations in this Order are included to ensure protection of beneficial uses of the receiving water and are based on the water quality objectives contained in the Basin Plan.

## **B. Groundwater – Not Applicable**

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

Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorizes the 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 Locations EFF-001 at Discharge Point 001 will be required as shown in the proposed MRP. To determine compliance with effluent limitations, the proposed monitoring plan carries forward monitoring requirements from previous Order No. R4-2005-0082 with some modifications. In the proposed permit, monitoring requirements for BOD<sub>5</sub> 20°C, oil and grease, pH, TSS, arsenic, cadmium, chromium (VI), copper, lead, mercury, selenium, silver, zinc, benzene, ethylbenzene, toluene, phenolic compounds, temperature, flow, TOC, xylene, TBA, DIPE, TAME, ETBE, TPH, and MTBE are being carried forward from the previous Order; monitoring for these parameters is performed once per discharge event. New monitoring requirements for Monitoring for E. coli, and fecal coliform are also being proposed once per discharge event is required. Finally, annual monitoring for acute toxicity is carried forward from the previous Order.

According to the SIP, the Discharger is required to monitor the effluent for the CTR priority pollutants, to determine reasonable potential. Accordingly, the Regional Water Board is requiring that the Discharger conduct effluent monitoring of the CTR priority pollutants. The monitoring requirements and frequencies of the priority pollutants in the proposed permit are carried over from the previous permit.

## **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. This Order includes limitations for acute toxicity, and therefore, monitoring requirements are included in the MRP to determine compliance with the effluent limitations established in Limitations and Discharge Requirements, Effluent Limitations, Section IV.A.1.b.

## **D. Receiving Water Monitoring**

### **1. Surface Water**

The Regional Water Board is requiring that the Discharger conduct upstream receiving water for the CTR priority pollutants at RSW-001, 50 feet upstream of the



discharge point of the storm drain to the receiving water, the Los Cerritos Channel. Further, the Discharger must analyze temperature, pH, salinity, and hardness of the upstream receiving water at the same time the samples are collected for priority pollutants analysis.

## **2. Groundwater – Not Applicable**

### **E. Other Monitoring Requirements – Not Applicable**

## **VII. RATIONALE FOR PROVISIONS**

### **A. Standard Provisions**

Standard Provisions, which apply to all NPDES permits in accordance with section 122.41, and additional conditions applicable to specified categories of permits in accordance with 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 section 122.42.

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. Section 123.25(a)(12) allows the state to omit or modify conditions to impose more stringent requirements. In accordance with section 123.25, this Order omits federal conditions that address enforcement authority specified in 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 section 123 and the previous Order. The 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 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.

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

The objective of this Order is to protect the beneficial uses of the receiving waters. To meet this objective, this Order requires the Discharger to update and continue to implement an updated SWPPP and address storm water runoff to the storm drain that discharges to the Los Cerritos Channel. This is consistent with the SWPPP requirements in the NPDES General Permit for Storm Water Discharges Associated with Industrial Activity (State Water Board Order No. 97-03-DWQ, NPDES Permit No. CAS000001). A SWPPP outlines site-specific management processes for minimizing storm water runoff contamination and for preventing contaminated storm water runoff from being discharged directly into surface waters. Storm water discharges do occur at the Facility, and best management practices are identified as one method to reduce contamination of storm water.

This provision is based on section 122.44(k) and includes the requirement to develop a SWPPP.

The Discharger uses, stores, handles and disposes of materials, chemicals, and wastes at the facility, and conducts operational and maintenance activities to its facility and equipment that are potential or existing sources of pollutants in wastewater discharged from the facility to the receiving water. In addition, this Order prohibits the Discharger from causing or threatening to cause a pollution or nuisance and degrading groundwater. Therefore, this Order requires the Discharger to develop and implement a BMPP that includes site-specific plans, procedures, and practices to minimize the amount of pollutants entering wastewater discharges from materials being stored and activities being conducted throughout the entire facility. To ensure the Discharger considers and implements appropriate and effective BMPs, the discharger is required to consider implementing BMPs contained in the USEPA *Guidance Manual for Developing Best Management Practices (BMPs)* (EPA 833-B-93-004) or equivalent alternatives when developing its BMPP.

### **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 Paramount Petroleum Corporation – Paramount Petroleum Corporation. As a step in the WDR

adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

#### **A. Notification of Interested Parties**

The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with 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 Regional Water Board at the address above on the cover page of this Order.

To be fully responded to by staff and considered by the Regional Water Board, written comments must be received at the Regional Water Board offices by 12:00 p.m. (Noon) on February 14, 2011.

#### **C. Public Hearing**

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

Date: March 3, 2011  
Time: 9:00 AM  
Location: Metropolitan Water District of Southern California  
700 North Alameda Street  
Los Angeles, CA

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

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

#### **D. 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. Paramount Petroleum Corporation**

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

Regional Board staff is not a party to the proceeding; their participation in this proceeding exists for the purpose of advising and assisting the Regional Board.

### **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 the above address. 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 12:00 p.m. (Noon) on February 14, 2011. 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 board meeting, of which this hearing is 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 three (3) minutes or less for each interested person, depending on the number of interested 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 Rebecca Christmann. 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.

## **H. Waste Discharge Requirements Petitions**

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

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

## **I. Information and Copying**

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

## **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 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 Rebecca Christmann at (213) 576-6756.

## **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, over-head 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 8-1/2 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
<b>IMPLEMENTATION PHASE</b>

Train employees Implement BMPs Conduct recordkeeping and reporting
--

<b>EVALUATION / MONITORING</b>  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		
1,4 Dichlorobenzene (semivolatile)	2	1		



Table 2b - SEMI-VOLATILE SUBSTANCES*	GC	GCMS	LC	COLOR
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
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
PCB 1242	0.5
PCB 1248	0.5
PCB 1254	0.5
PCB 1260	0.5

Table 2d – PESTICIDES – PCBs*	GC
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**

<b>CTR Number</b>	<b>Parameter</b>	<b>CAS Number</b>	<b>Suggested Analytical Methods</b>
1	Antimony	7440360	EPA 6020/200.8
2	Arsenic	7440382	EPA 1632
3	Beryllium	7440417	EPA 6020/200.8
4	Cadmium	7440439	EPA 1638/200.8
5a	Chromium (III)	16065831	EPA 6020/200.8
5a	Chromium (VI)	18540299	EPA 7199/1636
6	Copper	7440508	EPA 6020/200.8
7	Lead	7439921	EPA 1638
8	Mercury	7439976	EPA 1669/1631
9	Nickel	7440020	EPA 6020/200.8
10	Selenium	7782492	EPA 6020/200.8
11	Silver	7440224	EPA 6020/200.8
12	Thallium	7440280	EPA 6020/200.8
13	Zinc	7440666	EPA 6020/200.8
14	Cyanide	57125	EPA 9012A
15	Asbestos	1332214	EPA/600/R-93/116(PCM)
16	2,3,7,8-TCDD	1746016	EPA 8290 (HRGC) MS
17	Acrolein	107028	EPA 8260B
18	Acrylonitrile	107131	EPA 8260B
19	Benzene	71432	EPA 8260B
20	Bromoform	75252	EPA 8260B
21	Carbon Tetrachloride	56235	EPA 8260B
22	Chlorobenzene	108907	EPA 8260B
23	Chlorodibromomethane	124481	EPA 8260B
24	Chloroethane	75003	EPA 8260B
25	2-Chloroethylvinyl Ether	110758	EPA 8260B
26	Chloroform	67663	EPA 8260B
27	Dichlorobromomethane	75274	EPA 8260B
28	1,1-Dichloroethane	75343	EPA 8260B
29	1,2-Dichloroethane	107062	EPA 8260B
30	1,1-Dichloroethylene	75354	EPA 8260B
31	1,2-Dichloropropane	78875	EPA 8260B
32	1,3-Dichloropropylene	542756	EPA 8260B
33	Ethylbenzene	100414	EPA 8260B
34	Methyl Bromide	74839	EPA 8260B
35	Methyl Chloride	74873	EPA 8260B
36	Methylene Chloride	75092	EPA 8260B
37	1,1,2,2-Tetrachloroethane	79345	EPA 8260B
38	Tetrachloroethylene	127184	EPA 8260B
39	Toluene	108883	EPA 8260B
40	1,2-Trans-Dichloroethylene	156605	EPA 8260B
41	1,1,1-Trichloroethane	71556	EPA 8260B
42	1,1,2-Trichloroethane	79005	EPA 8260B
43	Trichloroethylene	79016	EPA 8260B
44	Vinyl Chloride	75014	EPA 8260B

<b>CTR Number</b>	<b>Parameter</b>	<b>CAS Number</b>	<b>Suggested Analytical Methods</b>
45	2-Chlorophenol	95578	EPA 8270C
46	2,4-Dichlorophenol	120832	EPA 8270C
47	2,4-Dimethylphenol	105679	EPA 8270C
48	2-Methyl-4,6-Dinitrophenol	534521	EPA 8270C
49	2,4-Dinitrophenol	51285	EPA 8270C
50	2-Nitrophenol	88755	EPA 8270C
51	4-Nitrophenol	100027	EPA 8270C
52	3-Methyl-4-Chlorophenol	59507	EPA 8270C
53	Pentachlorophenol	87865	EPA 8270C
54	Phenol	108952	EPA 8270C
55	2,4,6-Trichlorophenol	88062	EPA 8270C
56	Acenaphthene	83329	EPA 8270C
57	Acenaphthylene	208968	EPA 8270C
58	Anthracene	120127	EPA 8270C
59	Benzidine	92875	EPA 8270C
60	Benzo(a)Anthracene	56553	EPA 8270C
61	Benzo(a)Pyrene	50328	EPA 8270C
62	Benzo(b)Fluoranthene	205992	EPA 8270C
63	Benzo(ghi)Perylene	191242	EPA 8270C
64	Benzo(k)Fluoranthene	207089	EPA 8270C
65	Bis(2-Chloroethoxy)Methane	111911	EPA 8270C
66	Bis(2-Chloroethyl)Ether	111444	EPA 8270C
67	Bis(2-Chloroisopropyl)Ether	108601	EPA 8270C
68	Bis(2-Ethylhexyl)Phthalate	117817	EPA 8270C
69	4-Bromophenyl Phenyl Ether	101553	EPA 8270C
70	Butylbenzyl Phthalate	85687	EPA 8270C
71	2-Chloronaphthalene	91587	EPA 8270C
72	4-Chlorophenyl Phenyl Ether	7005723	EPA 8270C
73	Chrysene	218019	EPA 8270C
74	Dibenzo(a,h)Anthracene	53703	EPA 8270C
75	1,2-Dichlorobenzene	95501	EPA 8260B
76	1,3-Dichlorobenzene	541731	EPA 8260B
77	1,4-Dichlorobenzene	106467	EPA 8260B
78	3,3'-Dichlorobenzidine	91941	EPA 8270C
79	Diethyl Phthalate	84662	EPA 8270C
80	Dimethyl Phthalate	131113	EPA 8270C
81	Di-n-Butyl Phthalate	84742	EPA 8270C
82	2,4-Dinitrotoluene	121142	EPA 8270C
83	2,6-Dinitrotoluene	606202	EPA 8270C
84	Di-n-Octyl Phthalate	117840	EPA 8270C
85	1,2-Diphenylhydrazine	122667	EPA 8270C
86	Fluoranthene	206440	EPA 8270C
87	Fluorene	86737	EPA 8270C
88	Hexachlorobenzene	118741	EPA 8260B
89	Hexachlorobutadiene	87863	EPA 8260B
90	Hexachlorocyclopentadiene	77474	EPA 8270C

<b>CTR Number</b>	<b>Parameter</b>	<b>CAS Number</b>	<b>Suggested Analytical Methods</b>
91	Hexachloroethane	67721	EPA 8260B
92	Indeno(1,2,3-cd)Pyrene	193395	EPA 8270C
93	Isophorone	78591	EPA 8270C
94	Naphthalene	91203	EPA 8260B
95	Nitrobenzene	98953	EPA 8270C
96	N-Nitrosodimethylamine	62759	EPA 8270C
97	N-Nitrosodi-n-Propylamine	621647	EPA 8270C
98	N-Nitrosodiphenylamine	86306	EPA 8270C
99	Phenanthrene	85018	EPA 8270C
100	Pyrene	129000	EPA 8270C
101	1,2,4-Trichlorobenzene	120821	EPA 8260B
102	Aldrin	309002	EPA 8081A
103	alpha-BHC	319846	EPA 8081A
104	beta-BHC	319857	EPA 8081A
105	gamma-BHC	58899	EPA 8081A
106	delta-BHC	319868	EPA 8081A
107	Chlordane	57749	EPA 8081A
108	4,4'-DDT	50293	EPA 8081A
109	4,4'-DDE	72559	EPA 8081A
110	4,4'-DDD	72548	EPA 8081A
111	Dieldrin	60571	EPA 8081A
112	alpha-Endosulfan	959988	EPA 8081A
113	beta-Endosulfan	33213659	EPA 8081A
114	Endosulfan Sulfate	1031078	EPA 8081A
115	Endrin	72208	EPA 8081A
116	Endrin Aldehyde	7421934	EPA 8081A
117	Heptachlor	76448	EPA 8081A
118	Heptachlor Epoxide	1024573	EPA 8081A
119	PCB-1016	12674112	EPA 8082
120	PCB-1221	11104282	EPA 8082
121	PCB-1232	11141165	EPA 8082
122	PCB-1242	53469219	EPA 8082
123	PCB-1248	12672296	EPA 8082
124	PCB-1254	11097691	EPA 8082
125	PCB-1260	11096825	EPA 8082
126	Toxaphene	8001352	EPA 8081A