

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

LOS ANGELES REGION

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ORDER NO. R4-2008-0202

NPDES NO. CA0060232

WASTE DISCHARGE REQUIREMENTS FOR THE BP WEST COAST PRODUCTS LLC, CARSON CRUDE TERMINAL

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

Table 1. Discharger Information

Discharger	BP West Coast Products LLC (<i>Owner</i>) and BP U.S. Pipelines and Logistics (<i>Operator</i>)
Name of Facility	Carson Crude Terminal
Facility Address	24696 South Wilmington Avenue
	Carson, CA 90745-6126
	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 the Operator from the discharge points identified below is subject to waste discharge requirements as set forth in this Order:

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	Storm water	33° 48' 29.83" N	118° 15' 17.72" W	Dominguez Channel Estuary

Table 3. Administrative Information

This Order was adopted by the Regional Water Quality Control Board on:	December 11, 2008
This Order shall become effective on:	January 10, 2009
This Order shall expire on:	November 10, 2013
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:	180 days prior to the Order expiration date (November 10, 2013)

October 14, 2008
Revised: November 20, 2008

IT IS HEREBY ORDERED, that Order No. R4-2002-0151 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the Water Code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.

I, Tracy J. Egoscue, 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 December 11, 2008.



Tracy J. Egoscue, Executive Officer

October 14, 2008
Revised: November 20, 2008

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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

Discharger	BP West Coast Products LLC (<i>Owner</i>) and BP U.S. Pipelines and Logistics (<i>Operator</i>)
Name of Facility	Carson Crude Terminal
Facility Address	24696 South Wilmington Avenue
	Carson, CA 90745-6126
	Los Angeles County
Facility Contact, Title, and Phone	Carla Talley, Environmental Coordinator, (562) 499-3373
Mailing Address	1300 Pier "B" Street, Long Beach, CA 90813
Type of Facility	Industrial (<i>SIC 5171: Petroleum Bulk Stations and Terminals</i>)
Facility Design Flow	500,000 gallons per day (GPD) of storm water discharge.

II. FINDINGS

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

A. **Background.** BP West Coast Products LLC (hereinafter Discharger) is currently discharging pursuant to Order No. R4-2002-0151 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0060232. The Discharger submitted a Report of Waste Discharge, dated February 8, 2007, and applied for an NPDES permit renewal to discharge intermittently up to 0.500 MGD of treated storm water from BP Carson Crude Terminal, hereinafter Facility. The application was deemed complete on December 1, 2007.

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 operates a petroleum crude oil transfer and storage facility (SIC 5171) located at 24696 South Wilmington Avenue in Carson, California. The Facility operates five above-ground storage tanks (ASTs) for crude oil storage: two ASTs with a capacity of 450,000 barrels (18.9 million gallons) each; and three ASTs with a capacity of 376,000 barrels (15.792 million gallons) each. Each of the ASTs is equipped with spill containment to capture any leakage from the tanks. A booster station also exists at the Facility and it is used to pump Jet-A fuel from the BP Carson Refinery to the Los Angeles International Airport. The Discharger also leases

three oil wells to Cooper and Brain Inc., which are located along the southern perimeter of the Facility; a swale located near these oil wells directs storm water to the Facility's on-site debris basin.

The treatment system consists of two storm water retention ponds: one located within the confines of the Facility (on-site holding pond) and the other adjacent to the Facility along the northwestern side (off-site holding pond). The on-site holding pond collects storm water runoff within the footprint of the Facility, operates as a sedimentation basin, and has a capacity of 1.638 million gallons. The off-site holding pond operates as a secondary retention basin if the Discharger decides not to discharge storm water from the on-site holding pond into the Dominguez Channel Estuary; the off-site holding pond also acts as an evaporation basin between wet weather events. If excess rainfall is experienced during the wet season and the off-site holding pond approaches capacity, the retained water may be discharged to surface waters.

The Discharger proposes to discharge up to 0.500 million gallons per day (MGD) of storm water runoff from the Carson Crude Terminal Facility through Discharge Point 001 (Latitude 33° 48' 29.83" North, Longitude 118° 15' 17.72" West) to the Dominguez Channel Estuary, a water of the United States, within the Dominguez Channel/Los Angeles-Long Beach Harbors Watershed Management Area. Attachment B provides a map of the area around the Facility. Attachment C provides a flow schematic of the facility.

In Order No. R4-2002-0151, the Facility's sole discharge outfall was designated as Outfall No. 024. Under this Order, this outfall shall be renamed Discharge Point 001.

- 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 J are also incorporated into this Order.
- E. **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 21100-21177.
- F. **Technology-based Effluent Limitations.** Section 301(b) of the CWA and implementing USEPA permit regulations at section 122.44, title 40 of the Code of

Federal Regulations¹, 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 Effluent Limitations Guidelines and Standards for the Oil and Gas Extraction Category in part 435 and Best Professional Judgment (BPJ) in accordance with part 125, 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) 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 USEPA approved the State's 2006 303(d) list of impaired water bodies on June 28, 2007. Certain receiving waters in the Los Angeles and Ventura County watersheds do not fully support beneficial uses and therefore have been classified as impaired on the 2006 303(d) list and have been scheduled for TMDL development. The BP West Coast Products, LLC, Carson Crude Terminal facility discharges into Dominguez Channel Estuary. The 2006 State Water Board's California 303(d) List classifies the Dominguez Channel Estuary (unlined portion below Vermont Ave) as impaired. The pollutants of concern in the estuary include ammonia, benthic community effects, benzo(a)pyrene (PAHs), benzo(a)anthracene, chlordane (tissue), chrysene (C1-C4), coliform bacteria, DDT (tissue & sediment), dieldrin (tissue), lead (tissue), PCBs (Polychlorinated biphenyls), phenanthrene, pyrene, and zinc (sediment). To date no TMDLs have been developed; therefore, no conditions in the tentative Order are based on TMDLs.

The effluent limits in the permit for constituents with reasonable potential are established to protect the beneficial uses of Dominguez Channel and to ensure that the discharge does not degrade its water quality. This permit requires receiving water monitoring for priority pollutants, when there is discharge from the Facility. This information will be used to complete a reasonable potential analysis (RPA) of all priority

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

pollutants. The permit also includes a Reopener Provision which allows revision of effluent limitations for toxic pollutants based on the results of RPA.

H. **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 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 Dominguez Channel Estuary are as follows:

Table 5. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Dominguez Channel estuary (Hydrologic Unit No. 405.12)	<u>Existing:</u> Water contact recreation; non-contact recreation; commercial and sport fishing; estuarine habitat; marine habitat; wildlife habitat; rare, threatened or endangered species; migration of aquatic organisms; and spawning, reproduction, and/or early development. <u>Potential:</u> Navigation.

Requirements of this Order implement the Basin Plan.

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

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

While the discharge from the BP West Coast Products, LLC, Carson Crude Terminal facility discharges into the Dominguez Channel, within the Estuary, the wastewater is comprised solely of storm water, and therefore is not considered to be industrial process

wastewater. Nonetheless, this Order contains provisions necessary to protect all beneficial uses of the receiving water.

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.

- I. **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 March 4, 2004, by the Regional Water Board with the adoption of Resolution No. 2004-022, Amendment to the Water Quality Plan for the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters Not Characteristic of Freshwater (including enclosed bays, estuaries and wetlands) with the Beneficial Use designations for protection of "Aquatic Life". The ammonia Basin Plan amendment was approved by the Office of Administrative Law on September 15, 2004, and by USEPA on May 19, 2005. The amendment revised the Basin Plan by updating the ammonia objectives for inland surface waters not characteristic of freshwater such that they are consistent with the USEPA "Ambient Water Quality Criteria for Ammonia (Saltwater) – 1989." The amendment revised the regulatory provisions of the Basin Plan by adding language to Chapter 3, "Water Quality Objectives."

The amendment contains an objective for a 1-hour average concentration of un-ionized ammonia of 0.233 mg/L. The objective is a fixed concentration of un-ionized ammonia, independent of pH, temperature, or salinity. The amendment also contains an implementation procedure to convert un-ionized ammonia objectives to total ammonia effluent limitations.

- J. **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.
- K. **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.

- L. **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 17, 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 include compliance schedules and interim effluent limitations. A detailed discussion of the basis for the compliance schedule(s) and interim effluent limitation(s) and/or discharge specifications is included in the Fact Sheet.
- M. **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.
- N. **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.
- O. **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 relaxation of effluent limitations in this Order is consistent with the exceptions to the anti-backsliding requirements of the CWA and federal regulations.

- P. **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.
- Q. **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.
- R. **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.
- S. **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.
- T. **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 of this Order.
- U. **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 of this Order.

THEREFORE, IT IS HEREBY ORDERED, that this Order supercedes Order No. R4-2002-0151 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

Wastes discharged shall be limited to a maximum of 500,000 gpd (0.5 MGD) of storm water from tank-diked containment areas and adjacent land as described in the findings. The discharge of wastes from accidental spills or other sources is prohibited.

- A. 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, Dominguez Channel Estuary, or other waters of the State, are prohibited.
- B. Neither the treatment nor the discharge of pollutants shall create pollution, contamination, or a nuisance as defined by Section 13050 of the Water Code.
- C. Wastes discharged shall not contain any substances in concentrations toxic to human, animal, plant, or aquatic life.
- D. 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.
- E. The discharge of any radiological, chemical, or biological warfare agent or high level radiological waste is prohibited.
- F. 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		
		Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Conventional Pollutants				
pH	S.U.	—	6.5	8.5
BOD ₅ @ 20°C	mg/L	30	—	—
TSS	mg/L	75	—	—
Oil and Grease	mg/L	15	—	—
Non-Conventional Pollutants				
Temperature	°F	—	—	86
Turbidity	NTU	75	—	—
Phenolics, Total	mg/L	1.0	—	—
Sulfides, Total	mg/L	1.0	—	—
Xylenes, Total	µg/L	1750	—	—
Methyl tertiary butyl ether (MTBE)	µg/L	5.0	—	—
Priority Pollutants				
Copper, Total Recoverable	µg/L	5.8	—	—
Lead, Total Recoverable	µg/L	14.8	—	—
Nickel, Total Recoverable	µg/L	13.4	—	—
Zinc, Total Recoverable	µg/L	95	—	—
TCDD-Equivalents	pg/L	0.03	—	—

- b. Acute Toxicity: there shall be no acute toxicity in the discharge. The acute toxicity of the effluent shall be such that:
- 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
 - no single test producing less than 70% survival.
- c. Ammonia: Total un-ionized ammonia (NH_3) water quality objective of 0.233 mg/L for the 1-hour average. This value is to be translated utilizing the implementation procedure included in Resolution No. 2004-022 which revised the saltwater ammonia water quality objectives in the 1994 Basin Plan.

The implementation procedure requires the following:

- Determine the downstream applicable water quality objectives for ammonia for the receiving water immediately downstream of the discharge (utilize the Determination of Freshwater, Brackish Water, or Saltwater Conditions included in the Implementation section of Resolution No. 2004-022).
- Since there is no mixing zone established:

$$\text{ECA} = \text{WQO}$$

- To adjust the un-ionized saltwater ammonia objective to an ECA expressed as total ammonia, the following equation shall be used:

$$[\text{NH}_4^+] + [\text{NH}_3] = [\text{NH}_3] + [\text{NH}_3]^{(pK_a^s + 0.0324(298 - T) + 0.0415 \frac{P}{T} - \text{pH})}$$

where: $[\text{NH}_3]$ = total un-ionized ammonia concentration (mg/L)
 $P = 1 \text{ atm}$
 T = receiving water temperature ($^{\circ}\text{K}$)
 pH = receiving water pH
 $pK_a^s = 0.116 \times i + 9.245$, the stoichiometric acid hydrolysis constant of ammonium ions in saltwater based on i
 $i = 19.9273 S (1000 - 1.005109 S)^{-1}$, the molal ionic strength of saltwater based on S
 S = receiving water salinity (g/kg)

(Per USEPA *Ambient Water Quality Criteria for Ammonia (Saltwater)* – 1989)

2. Interim Effluent Limitations

During the period beginning January 10, 2009, and ending on May 17, 2010, the Discharger shall maintain compliance with the following limitations at Discharge Point 001, with compliance measured at Monitoring Location EFF-001 as described

in the attached MRP. These interim effluent limitations shall apply in lieu of the corresponding final effluent limitations specified for the same parameters during the time period indicated in this provision.

Table 7. Interim Effluent Limitations

Parameter	Units	Interim Maximum Daily Effluent Limitation
Copper	µg/L	25.7
Lead	µg/L	16.4
Zinc	µg/L	448
TCDD Equivalents	pg/L	2.2

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 Dominguez Channel Estuary:

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

a. State/Regional Water Board Water Contact Standards

In marine water designated for water contact recreation (REC-I), the waste discharged shall not cause the following bacterial standards to be exceeded in the receiving water:

i. Geometric Mean Limits

- (a). Total coliform density shall not exceed 1,000/100 ml.
- (b). Fecal coliform density shall not exceed 200/100 ml.
- (c). Enterococcus density shall not exceed 35/100 ml.

ii. Single Sample Maximum (SSM)

- (a). Total coliform density shall not exceed 10,000/100 ml.

- (b).Fecal coliform density shall not exceed 400/100 ml.
 - (c).Enterococcus density shall not exceed 104/100 ml.
 - (d).Total coliform density shall not exceed 1,000/100 ml, when the fecal coliform/total coliform ratio exceeds 0.1.
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. 2004-022. Resolution No. 2004-022 revised the ammonia water quality objectives for inland surface waters not characteristic of freshwater in the 1994 Basin Plan, to be consistent with USEPA's *"Ambient Water Quality Criteria for Ammonia (Saltwater) – 1989."* Adopted on March 4, 2004, Resolution No. 2004-022 was approved by State Water Board, Office of Administrative Law (OAL) and USEPA on July 22, 2004, September 14, 2004, and May 19, 2005, 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 which may be applicable; they do not legalize this waste disposal facility, and they leave unaffected any further restraints on the disposal of wastes at this site which may be contained in other statutes or required by other agencies.
- f. Oil or oily material, chemicals, refuse, or other pollutionable materials shall not be stored or deposited in areas where they may be picked up by rainfall and carried off of the property and/or discharged to surface waters. Any such spill of such materials shall be contained and removed immediately.
- g. A copy of these waste discharge specifications shall be maintained at the discharge facility so as to be available at all times to operating personnel.
- h. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:
 - i. Violation of any term or condition contained in this Order;
 - ii. Obtaining this Order by misrepresentation, or failure to disclose all relevant facts;
 - iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- i. If there is any storage of hazardous or toxic materials or hydrocarbons at this facility and if the facility is not manned at all times, a 24-hour emergency response telephone number shall be prominently posted where it can easily be read from the outside.
- j. The Discharger shall notify the 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 at (213) 576-6600 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. (Wat. Code § 1211.)

B. Monitoring and Reporting Program (MRP) Requirements

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

C. Special Provisions

1. Reopener Provisions

- a. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal CWA, and amendments thereto, the Regional Water Board 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, in accordance with the provisions set forth in 40 CFR Parts 122 and 124, to include requirements for the implementation of the watershed management approach 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 Dominguez Channel Estuary.

- 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).
- b. Storm Water Monitoring. The Discharger shall measure and record the rainfall on each day of the month or submit the data obtained from the nearest city or county monitoring station. Make visual observations of the storm water discharge location at Discharge Point 001 during discharge in accordance with the specifications in Section IX.A of the MRP, Attachment E.

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 SWPPP shall be developed in accordance with the requirements in Attachment G.

- ii. Updated Best Management Practices Plan (BMPP) that entail 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 BMPs 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. An updated Spill Contingency Plan (SCP) that shall be site specific and shall cover all areas of the Facility including the tank yards. A Spill Control and Countermeasure Plan (SPCC), developed in accordance with 40 CFR Part 112, may be substituted for the SCP.

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 point; describe the activities in each area and the potential for contamination of storm water runoff and the discharge of hazardous waste/material; and address the feasibility of containment and/or treatment of storm water. The plans shall be reviewed annually and at the same time. Updated information shall be submitted within 30 days of revision.

b. Pollutant Minimization Program

The Discharger shall develop and conduct a Pollutant Minimization Program (PMP) to maintain effluent concentrations of copper, lead, zinc, and 2,3,7,8-TCDD (as *TCDD Equivalents*) as further described below when there is evidence (e.g., sample results reported as DNQ when the effluent limitation is less than the MDL, sample results from analytical methods more sensitive than those methods required by this Order, presence of whole effluent toxicity, health advisories for fish consumption, results of benthic or aquatic organism tissue sampling) that a priority pollutant is present in the effluent above an effluent limitation and either:

- i. A sample result is reported as DNQ and the effluent limitation is less than the RL; or
- ii. A sample result is reported as ND and the effluent limitation is less than the MDL, using definitions described in Attachment A and reporting protocols described in MRP section X.B.4.

The PMP shall include, but not be limited to, the following actions and submittals acceptable to the Regional Water Board:

- i. An annual review and semi-annual monitoring of potential sources of the reportable priority pollutant(s), which may include fish tissue monitoring and other bio-uptake sampling;

- ii. Submittal of a control strategy designed to proceed toward the goal of maintaining concentrations of the reportable priority pollutant(s) in the effluent at or below the effluent limitation;
 - iii. Implementation of appropriate cost-effective control measures for the reportable priority pollutant(s), consistent with the control strategy; and
 - iv. An annual status report that shall be sent to the Regional Water Board including that shall be sent to the Regional Water Board at the same time the annual summary report is submitted in accordance with section X.D of the MRP (Attachment E) and include:
 - (a). All PMP monitoring results for the previous year;
 - (b). A list of potential sources of the reportable priority pollutant(s)—copper, lead, zinc, and 2,3,7,8-TCDD;
 - (c). A summary of all actions undertaken pursuant to the control strategy; and
 - (d). A description of actions to be taken in the following year.
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
- a. The interim limitations stipulated in section IV.A.2 of this Order for copper, lead, zinc, and 2,3,7,8-TCDD (*as TCDD Equivalents*) shall be in effect for a period not to extend beyond May 18, 2010. Thereafter, the Discharger shall comply with the limitations specified for copper, lead, zinc, and 2,3,7,8-TCDD in section IV.A.1 of this Order.
 - b. The Discharger shall develop and submit, within 1 year of the effective date of this Order a compliance plan that will identify the measures that will be taken to reduce the concentrations of copper, lead, zinc, and 2,3,7,8-TCDD in their discharge. This plan must evaluate options to achieve compliance with the final effluent limitations for copper, lead, zinc, and 2,3,7,8-TCDD within the deadline specified above.

- c. The Discharger shall submit annual reports to describe the progress of studies and or actions undertaken to reduce copper, lead, zinc, and 2,3,7,8-TCDD in the effluent, and to achieve compliance with the limitations in this Order by the deadline specified above. The Regional Water Board shall receive the first annual progress report at the same time the annual summary report is due, as required in section X.D of the MRP (Attachment E).

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.

F. 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).

G. 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 (μ)

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: Σx 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 (σ)

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;

μ is the arithmetic mean of the observed values; and

n is the number of samples.

Toxicity Reduction Evaluation (TRE)

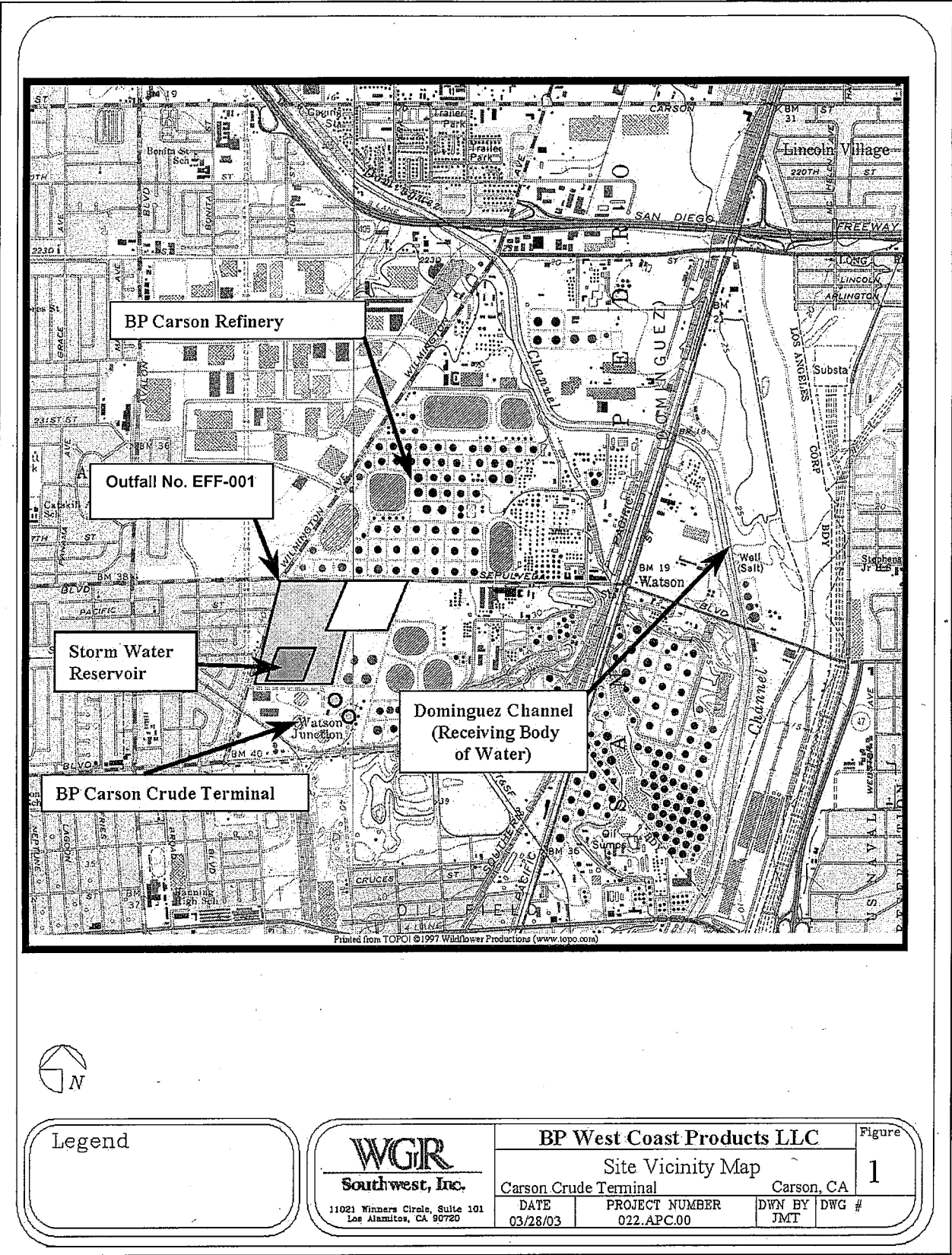
TRE is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection 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.)

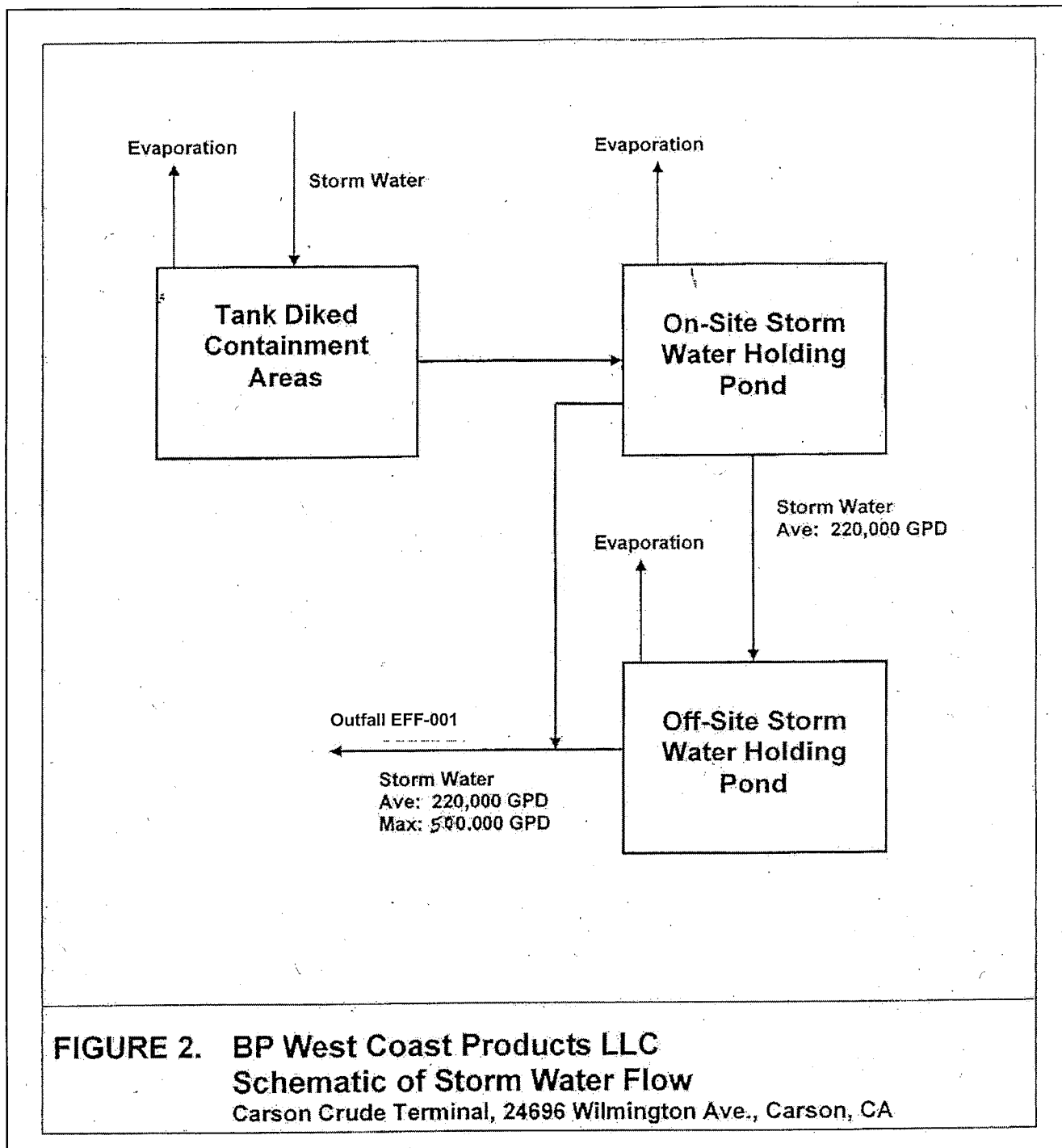
ACRONYMS AND ABBREVIATIONS

AMEL	Average Monthly Effluent Limitation
B.....	Background Concentration
BAT	Best Available Technology Economically Achievable
Basin Plan.....	<i>Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties</i>
BCT	Best Conventional Pollutant Control Technology
BMP	Best Management Practices
BMPPP.....	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.....	BP West Coast Products LLC
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	BP Carson Crude Terminal
g/kg	grams per kilogram
gpd	gallons per day
IC	Inhibition Coefficient
IC ₁₅	Concentration at which the organism is 15% inhibited
IC ₂₅	Concentration at which the organism is 25% inhibited
IC ₄₀	Concentration at which the organism is 40% inhibited
IC ₅₀	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

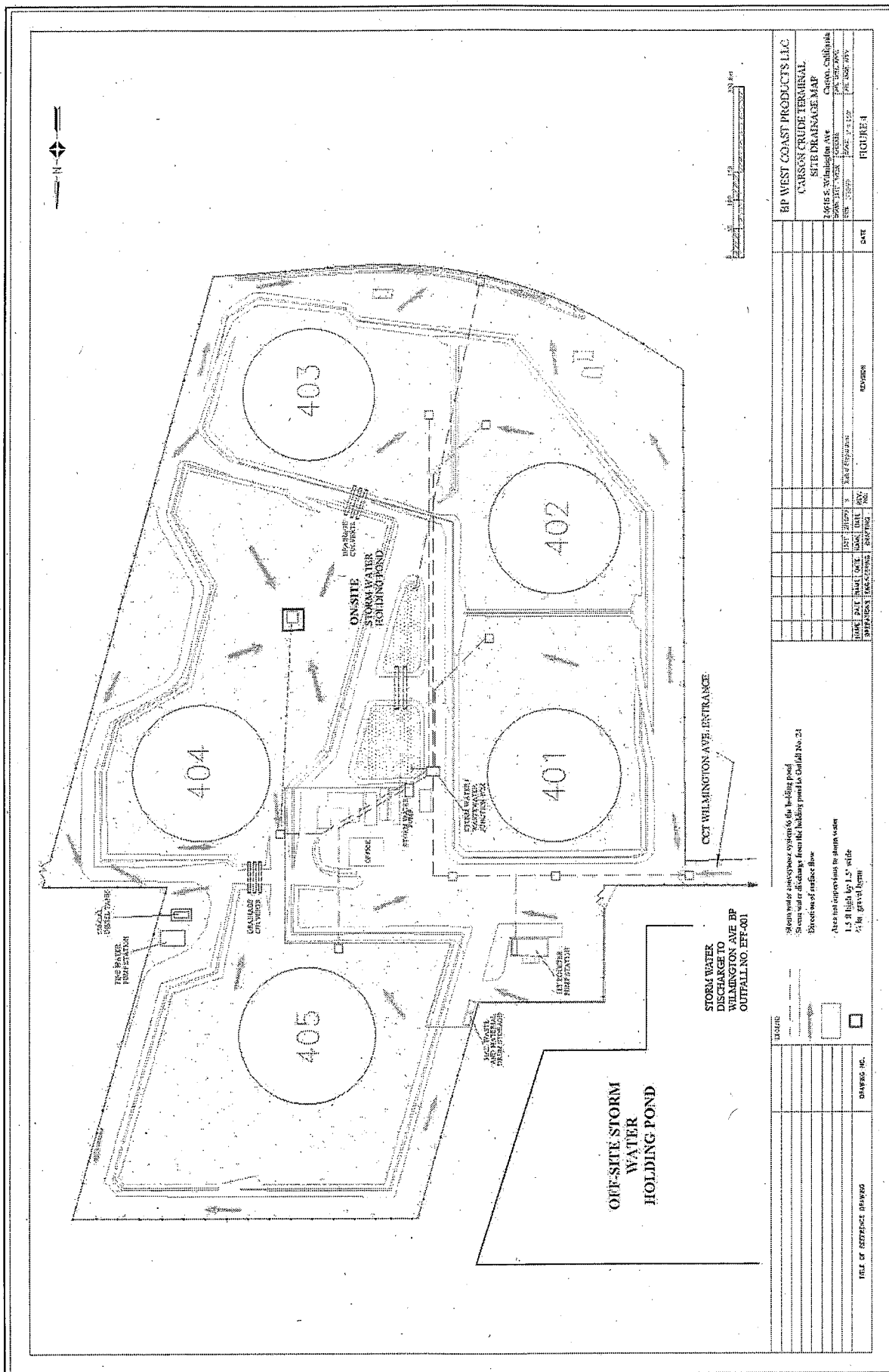
NOEC.....	No Observable Effect Concentration
NPDES.....	National Pollutant Discharge Elimination System
NSPS.....	New Source Performance Standards
NTR.....	National Toxics Rule
OAL	Office of Administrative Law
pg/L	picograms per Liter
PMEL	Proposed Maximum Daily Effluent Limitation
PMP	Pollutant Minimization Plan
POTW	Publicly Owned Treatment Works
QA.....	Quality Assurance
QA/QC.....	Quality Assurance/Quality Control
Ocean Plan	<i>Water Quality Control Plan for Ocean Waters of California</i>
Regional Water Board.....	California Regional Water Quality Control Board, Los Angeles Region
RPA.....	Reasonable Potential Analysis
SCP.....	Spill Contingency Plan
SIP	State Implementation Policy (<i>Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California</i>)
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	<i>Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California</i>
TIE	Toxicity Identification Evaluation
TMDL	Total Maximum Daily Load
TOC	Total Organic Carbon
TRE.....	Toxicity Reduction Evaluation
TSD.....	<i>Technical Support Document for Water Quality-based Toxics Control (EPA-505-2-90-001)</i>
TSS	Total Suspended Solids
TU _c	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





ATTACHMENT C – FLOW SCHEMATIC



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 not subject to effluent limitations in this Order [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 (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 (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. 6810)

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP) NO. 6810

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 (Discharge Point 001 [Latitude 33° 48' 29.83" N, Longitude 118°15' 17.72" W]) 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 12, 2007); 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 24, 2005.

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

The 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 40 CFR 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 Health Services, 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	Depending on the amount of rain, storm water samples may be taken from either the lower basin (aka, the inner pond) or the off-site retention basin (aka, the outer pond) adjacent to the suction line inlet to the drainage pipe that leads to and discharges into discharge point EFF-001 (Latitude 33° 48' 29.83" N, Longitude 118° 15' 17.72" W)
—	RSW-001	At a location in the receiving water (Dominguez Channel Estuary) at least 50 feet upstream of the discharge point of the storm drain 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 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

Parameter	Units	Sample Type	Minimum Sampling Frequency ²	Required Analytical Test Method and (Minimum Level, units), respectively
Rainfall	Inches/day	Rain guage ¹	Daily	
Conventional Pollutants				
pH	mg/L	Grab	1/Discharge Event	3
BOD ₅ 20°C	mg/L	Grab	1/Discharge Event	3
Total Suspended Solids	mg/L	Grab	1/Discharge Event	3
Oil and Grease	mg/L	Grab	1/Discharge Event	3
Fecal Coliform	MPN/100 mL	Grab	1/Discharge Event	3
Total Waste Flow	gpd	Estimated	1/Day ⁴	3
Temperature	°F	Grab	1/Discharge Event	3
Ammonia Nitrogen (as N), Total	mg/L	Grab	1/Discharge Event	3
Dissolved Solids, Total (TDS)	mg/L	Grab	1/Discharge Event	3
Organic Carbon, Total (TOC)	mg/L	Grab	1/Discharge Event	3
Residual Chlorine, Total	mg/L	Grab	1/Discharge Event	3
Oxygen, Dissolved	mg/L	Grab	1/Discharge Event	3
Settleable Solids	mL/L	Grab	1/Discharge Event	3
Specific Conductance @ 25°C	µmhos/cm	Grab	1/Discharge Event	3
Turbidity	NTU	Grab	1/Discharge Event	3
Phenolics, Total	mg/L	Grab	1/Discharge Event	3
Sulfides, Total	mg/L	Grab	1/Discharge Event	3
Surfactants (MBAS)	mg/L	Grab	1/Discharge Event	3
tert-Butyl Alcohol (TBA)	µg/L	Grab	1/Discharge Event	3
Methyl tert-Butyl Ether (MTBE)	µg/L	Grab	1/Discharge Event	3
Total Petroleum Hydrocarbons (TPH)	µg/L	Grab	1/Discharge Event ⁵	3
Xylenes, Total	µg/L	Grab	1/Discharge Event	3
Acute Toxicity ⁶	% survival	Grab	1/Year	3

Parameter	Units	Sample Type	Minimum Sampling Frequency ²	Required Analytical Test Method and (Minimum Level, units), respectively
Benzene	µg/L	Grab	1/Discharge Event	³
Toluene	µg/L	Grab	1/Discharge Event	³
Ethylbenzene	µg/L	Grab	1/Discharge Event	³
Carbon Tetrachloride	µg/L	Grab	1/Discharge Event	³
Tetrachloroethylene	µg/L	Grab	1/Discharge Event	³
Vinyl Chloride	µg/L	Grab	1/Discharge Event	³
1,4-Dichlorobenzene	µg/L	Grab	1/Discharge Event	³
1,1-Dichloroethane	µg/L	Grab	1/Discharge Event	³
1,2-Dichloroethane	µg/L	Grab	1/Discharge Event	³
1,1-Dichloroethylene	µg/L	Grab	1/Discharge Event	³
Arsenic, Total Recoverable	µg/L	Grab	1/Discharge Event	³
Cadmium, Total Recoverable	µg/L	Grab	1/Discharge Event	³
Chromium, Hexavalent	µg/L	Grab	1/Discharge Event	³
Chromium, Total	µg/L	Grab	1/Discharge Event	³
Copper, Total Recoverable	µg/L	Grab	1/Discharge Event	³
Lead, Total Recoverable	µg/L	Grab	1/Discharge Event	³
Mercury, Total Recoverable	µg/L	Grab	1/Discharge Event	³
Nickel, Total Recoverable	µg/L	Grab	1/Discharge Event	³
Selenium, Total Recoverable	µg/L	Grab	1/Discharge Event	³
Silver, Total Recoverable	µg/L	Grab	1/Discharge Event	³
Zinc, Total Recoverable	µg/L	Grab	1/Discharge Event	³
TCDD Equivalents ⁷	pg/L	Grab	1/Discharge Event	³
Remaining Priority Pollutants ⁸	µg/L	Grab	1/Year	³

¹ If a rain guage cannot be installed, then the data obtained from the nearest rain guage station owned and operated by the city/county will be included in each monitoring report.

² A representative sample of the effluent shall be collected. During periods of extended rainfall, no more than one sample per week need be taken.

³ 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.

4 Flow shall be recorded daily during each period of discharge. Periods of no flow shall also be reported.

5 Analysis using USEPA 8015 (Modified).

6 Refer to Section V, Whole Effluent Toxicity Testing Requirements

7 TCDD Equivalents shall mean the *sum* of the concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxic equivalency factors (TEFs) as shown in Section 3, Table 4, of the SIP.

8 Priority Pollutants as defined by the CTR defined in Finding II.I 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. Definition of Toxicity

1. 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. Accelerated Monitoring

If either of the above requirements is not met, the Discharger shall conduct six additional tests over a six-week period, if possible. 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 3 business days of the receipt of the result. If the additional tests indicate compliance with the toxicity limitation, the discharger may resume regular testing. However, if the results of any two of the six accelerated tests are less than the stipulated requirements, then the Discharger shall begin a Toxicity Identification Evaluation (TIE). 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 objective.

If the initial test and any of the additional six acute toxicity bioassay test result in less than 70% survival, including the initial test, the Discharger shall immediately begin a TIE.

B. Acute Toxicity Effluent Monitoring Program

1. The Discharger shall conduct acute toxicity tests on effluent grab samples 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 in 100 % effluent.

2. The fathead minnow, *Pimephales promelas*, 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. The method for topsmelt 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*, Third Edition, October 2002 (EPA/821-R-02-014), or a more recent edition.
3. In lieu of conducting the standard acute toxicity testing with the fathead minnow, the Discharger may elect to report the results or endpoint from the first 48 hours of the chronic toxicity test as the results of the acute toxicity test.
4. Effluent samples shall be collected before discharge to the receiving water.

C. 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/821-02-014), 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.

D. Accelerated Monitoring and Initial Investigation TRE Trigger

1. If toxicity exceeds the limitations (as defined in Section V.A.1, above), then the Discharger shall immediately implement accelerated testing, as specified at Section V.A.2 above. The discharger shall ensure that they receive results of a failing toxicity test within 24 hours of the completion of the test and the additional tests shall begin within 3 business days of receipt of the results or at the first opportunity of discharge. If the accelerated testing shows consistent toxicity, the discharger shall immediately implement the Initial Investigation of the TRE Workplan.
2. If implementation of the initial investigation TRE workplan indicates the source of toxicity (e.g., a temporary plant upset, etc.), then the Discharger may discontinue the TIE.
3. The first step in the initial Investigation TRE Workplan for downstream receiving water toxicity can be a toxicity test protocol designed to determine if the effluent

causes or contributes to the measured downstream chronic toxicity. If this first step TRE testing shows that the outfall effluent does not cause or contribute to downstream chronic toxicity, using EPA's Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, Fourth Edition, October 2002 (EPA/821-R-02-014). Then a report on this testing shall be submitted to the Board and the TRE will be considered to be completed. Routine testing in accordance with the MRP shall be continued thereafter.

E. Toxicity Reduction Evaluation (TRE)/ Toxicity Identification Evaluation (TIE) Trigger

1. If the accelerated testing shows consistent toxicity as defined below:
 - a. If the results of any two of the six accelerated tests are less than 90% survival, or
 - b. If the initial test and any of the additional six acute toxicity bioassay tests result in less than 70% survival.

then, the Discharger shall immediately implement the TRE as described below.

F. Steps in TRE and TIE Procedures

1. Following a TRE trigger, the Discharger shall initiate a TRE in accordance with the facility's Initial Investigation TRE workplan. At a minimum, the Discharger shall use USEPA manuals EPA/600/2-88/070 (industrial) or EPA/833B-99/002 (municipal) as guidance. The Discharger shall expeditiously develop a more detailed TRE workplan for submittal to the Executive Officer within 30 days of the trigger, which will 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;
 - c. Standards the Discharger will apply to consider the TRE complete and to return to normal sampling frequency; and,
 - d. A schedule for these actions.
2. The following is a stepwise approach in conducting the TRE and TIE:
 - a. Step 1 - 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. Step 3 - If Steps 1 and 2 are unsuccessful, Step 3 implements a TIE by employing all reasonable efforts and using currently available TIE methodologies. The Discharger shall use the USEPA acute and chronic manuals, 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. The objective of the TIE is to identify the substance or combination of substances causing the observed toxicity;

- d. Step 4 – 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. To prevent duplication of efforts, evidence of implementation of these control measures 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 acute toxicity test results are greater than 90% survival and/or six consecutive chronic toxicity results are less than or equal to the 1.0 TU_c).

- 3. The Discharger may initiate a TIE as part of the TRE process to identify the cause(s) of toxicity. The Discharger shall use the EPA acute and chronic manuals, 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 required in this permit, 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, if appropriate.
- 6. The 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.

G. Reporting

- 1. 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.

2. 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.
 - a. The full report shall be submitted on or before the end of the month in which the SMR is submitted.
 - b. 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 and (4) printout of the ToxCalc or CETIS 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:
 - c. Sample date(s);
 - d. Test initiation date;
 - e. Test species;
 - f. End point values for each dilution (e.g., number of young, growth rate, percent survival);
 - g. NOEC value(s) in percent effluent;
 - h. IC₁₅, IC₂₅, IC₄₀ and IC₅₀ values in percent effluent;
 - i. TU_c values $\left(TU_c = \frac{100}{NOEC}\right)$;
 - j. Mean percent mortality (+standard deviation) after 96 hours in 100% effluent (if applicable);
 - k. NOEC and LOEC values for reference toxicant test(s);
 - l. IC25 value for reference toxicant test(s);
 - m. Any applicable charts; and
 - n. 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.

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

1. The Discharger shall monitor the Dominguez Channel Estuary at Monitoring Location RSW-001 as follows:

Table E-3a. Receiving Water Monitoring Requirements

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 (as mg/L CaCO ₃)	mg/L	Grab	1/Year	1,2
Priority Pollutants ³	µg/L	Grab	1/Year	1

- 1 Pollutants shall be analyzed using the analytical methods described in 40 CFR 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 Board or the State Board.
- 2 Receiving water pH, hardness, temperature must be analyzed at the same time the samples are collected for Priority Pollutants analysis.
- 3 Priority Pollutants as defined by the CTR defined in Finding II.I 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). If, for safety reasons, a sample cannot be obtained during the first hour of discharge, then a sample shall be obtained, at first safe opportunity within 12 hours of the beginning of storm water or fire protection system test water discharge.

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 Spill Contingency Plan Status and Effectiveness Report

1. As required under Special Provision VI.C.3 of this Order, the Discharger shall submit an updated SWPPP, BMPP, and Spill Contingency Plan to the Executive Officer of the Regional Water Board within 90 days of the effective date of this permit.
2. Annually the Discharger shall report the status of the implementation and the effectiveness of the SWPPP, BMPP, and Spill Contingency Plan Status required under Special Provision VI.C.3.a of this Order. The SWPPP, BMPP, and Spill Contingency Plan Status 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 Spill Contingency Plan Status. All changes or revisions to the SWPPP, BMPP, and Spill Contingency Plan Status will be summarized in the annual report required under Attachment E, Monitoring and Reporting, Section X.D.

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	January 10, 2009	(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	January 10, 2009	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	January 10, 2009	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.

- c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.

- d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.
6. Compliance Determination. Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined above and Attachment H of this Order. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL).
7. 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:
 - a. 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.
 - b. 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.
8. The Discharger shall submit SMRs in accordance with the following requirements:
 - a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.
 - b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.

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

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

C. Discharge Monitoring Reports (DMRs)

1. As described in Section X.B.1 above, at any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit SMRs that will satisfy federal requirements for submittal of Discharge Monitoring Reports (DMRs). Until such notification is given, the Discharger shall submit DMRs in accordance with the requirements described below.
2. DMRs must be signed and certified as required by the standard provisions (Attachment D). The Discharger shall submit the original DMR and one copy of the DMR to the address listed below:

STANDARD MAIL	FEDEX/UPS/ OTHER PRIVATE CARRIERS
State Water Resources Control Board Division of Water Quality c/o DMR Processing Center PO Box 100 Sacramento, CA 95812-1000	State Water Resources Control Board Division of Water Quality c/o DMR Processing Center 1001 "I" Street, 15 th Floor Sacramento, CA 95814

3. All discharge monitoring results must be reported on the official USEPA pre-printed DMR forms (EPA Form 3320-1). Forms that are self-generated will not be accepted unless they follow the exact same format of EPA Form 3320-1.

D. Other Reports

1. The Discharger shall report the results of any special studies, acute toxicity testing, TRE/TIE, SWPPP, BMPP, and Spill Contingency Plan required by Special Provisions – VI.C.2.a and VI.C.3.a 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.
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. Updated BMPP
 - d. Spill Contingency 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 Spill Contingency Plan.
4. If the Discharger wishes to participate in a coordinated receiving water, biomonitoring, and sediment monitoring program with other dischargers to the Dominguez Channel, then, as discussed in Section VIII.C of the MRP, Attachment E, the Discharger shall submit a report seeking approval of the Regional Water Board.
 5. This Regional Water Board requires the Discharger to file with the Regional Water Board, within 90 days after the effective date of this Order, a technical report on his preventive (failsafe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events. The technical report should:
 - a. Identify the possible sources of accidental loss, untreated waste bypass, and contaminated drainage. Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks and pipes should be considered.
 - b. Evaluate the effectiveness of present facilities and procedures and state when they become operational.
 - c. Describe facilities and procedures needed for effective preventive and contingency plans.
 - d. Predict the effectiveness of the proposed facilities and procedures and provide an implementation schedule contingent interim and final dates when they will be constructed, implemented, or operational.

This Regional Water Board, after review of the technical report, may establish conditions which it deems necessary to control accidental discharges and to

minimize the effects of such events. Such conditions may be incorporated as part of this Order, upon notice to the Discharger.

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

WDID	4B192010019
Discharger	BP West Coast Products LLC (<i>Owner</i>) and BP U.S. Pipelines and Logistics (<i>Operator</i>)
Name of Facility	Carson Crude Terminal
Facility Address	24696 South Wilmington Avenue
	Carson, CA 90745-6126
	Los Angeles County
Facility Contact, Title and Phone	Carla Talley, Environmental Coordinator, (562) 499-3373
Authorized Person to Sign and Submit Reports	Stephen D. Comley, Terminal Manager, (562) 499-2249
Mailing Address	1300 Pier “B” Street, Long Beach, CA 90813
Billing Address	1300 Pier “B” Street, Long Beach, CA 90813
Type of Facility	Tank farm for storage of bulk petroleum products
Major or Minor Facility	Minor
Threat to Water Quality	3
Complexity	C
Pretreatment Program	N
Reclamation Requirements	None
Facility Permitted Flow	0.5 million gallons per day (MGD)
Facility Design Flow	0.5 MGD
Watershed	Dominguez Channel Watershed
Receiving Water	Dominguez Channel Estuary
Receiving Water Type	Inland surface water

- A. BP U.S. Pipelines and Logistics is the operator of Carson Crude Terminal, a petroleum crude oil transfer and storage terminal. BP West Coast Products LLC owns the property

at 24696 South Wilmington Avenue in Carson, California, on which the Facility is located. Together BP U.S. Pipelines and Logistics and BP West Coast Products LLC are 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 Dominguez Channel Estuary, a water of the United States, and is currently regulated by Order R4-2002-0151 which was adopted on September 26, 2002, and expired on August 10, 2007. 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 February 8, 2007. Supplemental information was requested on November 15, 2007, and received on November 21, 2007. A site visit was conducted on August 15, 2007, to observe operations and collect additional data to develop permit limitations and conditions.

II. FACILITY DESCRIPTION

The Facility is a petroleum crude oil storage and transfer terminal (SIC 5171) and consists of five above-ground storage tanks (AST): two ASTs with a capacity of 450,000 barrels (18.9 million gallons) each; and three ASTs with a capacity of 376,000 barrels (15.792 million gallons) each. Each of the ASTs is equipped with spill containment to capture any leakage from the tanks.

The Facility is designed primarily for remote (unmanned) operations. Local operating functions are performed manually at the Facility. Remote operations are also conducted via the BP Pipeline Operations Control Center located at 5900 Cherry Avenue in Long Beach, California. Crude oil is transported to and from the Facility by pipeline. Crude oil arrives at the Facility via pipeline from two of BP's marine terminals (T2 [NPDES No. CA0000442] and Berth 121 [NPDES No. CA0059285]). Crude oil is then shipped from the Facility via pipeline to the BP Carson Refinery (NPDES No. CA0000680).

A booster station also exists at the Facility and is used to pump Jet-A fuel from the BP Carson Refinery to the Los Angeles International Airport. The Discharger also leases three oil wells to Cooper and Brain Inc., which are located along the southern perimeter of the Facility; a swale located near these oil wells directs storm water to the inner debris basin of the Facility.

A. Description of Wastewater and Biosolids Treatment or Controls

Storm water runoff from the tank basins (diked containment areas), jet booster pump station, the three oil wells leased to Cooper and Brain Inc., the pump / meter area, and area roadways drains to the 1.638-million gallon storm water retention pond located in the center of the facility (a.k.a. on-site holding pond). This basin structure consists of impervious concrete or gunited concrete. Storm water is retained in this holding pond for sedimentation and only released when the volume of water in the pond necessitates

a release. Prior to every release, a sample is collected and a visual observation is made of the pond surface. Any oil sheen that is observed is then removed by the use of hydrophobic oil-absorbent pads and/or booms. As an additional precaution, the suction pipe for the pond discharge pump originates and draws water well below the high level of the pond, preventing discharge of any potential oil sheens. All pond discharges are manned by BP operators.

The facility has the option of pumping storm water from the on-site storm water retention pond to a larger storm water retention pond located northwest of the Facility (a.k.a. off-site holding pond); the BP Carson Refinery controls this retention pond. The off-site holding pond is unlined and consists of a combination of pervious rock and an earthen bottom. Storm water retained within the off-site holding pond is typically left to evaporate between wet weather events. If excess rainfall is experienced within a rainy season and the off-site pond approaches capacity, the retained water may be discharged to Discharge Point 001. In this latter situation, representative water samples are obtained, tested for required analytical discharge parameters, and reviewed to affirm compliance with the NPDES discharge requirements prior to release. In a letter to the Regional Water Board, dated November 20, 2007, the Discharger requested clarification regarding sampling practices. The Discharger requested the following clarification, "Representative samples of waters for discharge are obtained prior to discharge to assess compliance with the permit limits. After receipt/review of the analytical results and affirmation of compliance, the waters are discharged."

The wastewaters regulated by this Order consist of storm water runoff. Each of the ASTs is diked to contain and convey storm water to the on-site holding pond. During the term of the existing Order (R4-2002-0151), the seven discharge events that occurred from the Order's adoption date (September 26, 2002) through September 30, 2007, averaged a daily discharge rate of about 189,000 gpd, with the maximum daily discharge rate occurring during the period of February 23 through February 25, 2005, at a rate of about 245,000 gpd.

Other waste streams that exist at the Facility include hydrostatic test water and slop water from tank and pipeline transfer operations. A permit application was submitted to the Regional Water Board requesting that the Facility be able to discharge hydrostatic test water into the storm drain under a separate permit (CAG674001, CI-9329). Any slop water generated at the Facility is transferred along with the crude oil to the BP Carson Refinery, where it then undergoes separation and further processing at the refinery before discharging to the sanitary sewers under an industrial wastewater pretreatment permit.

B. Discharge Points and Receiving Waters

Treated storm water from the Facility is discharged intermittently from either the on-site or off-site holding ponds via a pump that pushes effluent through a PVC pipe that follows the Facility's access road to the Facility's entrance on Wilmington Avenue; from there, the effluent follows the curbing along Wilmington Avenue (adjacent to the Facility's entrance) northward and discharges into a storm water drop inlet (Discharge

Point 001) located at the southeastern corner of Wilmington Avenue and Sepulveda Boulevard in Carson, California (Latitude 33° 48' 29.83" North, Longitude 118° 15' 17.72" West). Effluent that empties into the storm water drop inlet at Discharge Point 001 is conveyed via a storm sewer that empties into Dominguez Channel Estuary, a water of the United States.

The Dominguez Channel originates in El Segundo and flows through portions of Hawthorne, Torrance, Gardena, Carson, and Wilmington to the East Basin of Los Angeles Harbor. The channel is concrete-lined above the estuary (Vermont Avenue). The Dominguez Channel receives discharges from highly developed and industrialized areas.

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

Effluent Limitations contained in the existing Order for discharges from Discharge Point 001 (Monitoring Location EFF-001, formerly Outfall No. 024) and representative monitoring data from the term of the previous Order are as follows:

Table F-2. Historic Effluent Limitations and Monitoring Data

Parameter	Units	Effluent Limitation				Monitoring Data (2/27/03 – 12/29/06)
		Instant- aneous Minimum	Instant- aneous Maximum	Average Monthly	Maximum Daily	Range of Reported Concentrations
pH	Std. Units	6.5	8.5	—	—	7.05 – 8.46
Temperature	°F	—	100	—	—	47 – 68
Acute Toxicity	% surv	—	—	70 ¹	90 ²	100
Total Suspended Solids	mg/L	—	—	50	75	ND - 64
Turbidity	NTU	—	—	50	75	3.1 - 170
BOD ₅ 20°C	mg/L	—	—	20	30	ND - 5.6
Oil and Grease	mg/L	—	—	10	15	ND - 1.3
Sulfides	mg/L	—	—	—	1.0	ND - 0.096
Phenols	mg/L	—	—	—	1.0	ND<0.081
Arsenic	µg/L	—	—	—	50	ND - 5.3
Cadmium	µg/L	—	—	—	5.0	All are ND
Chromium	µg/L	—	—	—	50	ND - 14
Copper	µg/L	—	—	—	1000	ND - 26
Lead	µg/L	—	—	—	50	ND - 17
Mercury	µg/L	—	—	—	2.0	All are ND
Selenium	µg/L	—	—	—	10	All are ND
Silver	µg/L	—	—	—	50	All are ND

Parameter	Units	Effluent Limitation				Monitoring Data (2/27/03 – 12/29/06)
		Instant- aneous Minimum	Instant- aneous Maximum	Average Monthly	Maximum Daily	Range of Reported Concentrations
Zinc	µg/L	—	—	—	5000	ND - 450
Benzene	µg/L	—	—	—	1.0	All are ND
Toluene	µg/L	—	—	—	150	All are ND
Ethylbenzene	µg/L	—	—	—	700	All are ND
Xylene	µg/L	—	—	—	1750	All are ND
Carbon Tetrachloride	µg/L	—	—	—	0.5	All are ND
Tetrachloroethylene	µg/L	—	—	—	5.0	All are ND
Trichloroethylene	µg/L	—	—	—	5.0	All are ND
Vinyl Chloride	µg/L	—	—	—	0.5	All are ND
1,4-Dichlorobenzene	µg/L	—	—	—	5.0	All are ND
1,1-Dichloroethane	µg/L	—	—	—	5.0	All are ND
1,2-Dichloroethane	µg/L	—	—	—	0.5	All are ND
1,1-Dichloroethylene	µg/L	—	—	—	6.0	All are ND
Methyl <i>tert</i> -Butyl Ether (MTBE)	µg/L	—	—	—	5.0	All are ND

- 1 Single Sample Minimum
- 2 Three Consecutive Sample Minimum

D. Compliance Summary

Data submitted to the Regional Water Board indicate that the Discharger has not complied with reporting requirements as outlined in the table below:

Table F-3. Summary of Compliance History

Date	Monitoring Period	Violation Type	Pollutant	Reported Value	Permit Limitation	Units
12/31/2002	Annual 2002	Non Report	Chromium, Trivalent	Not Reported	Sample 1/Year	µg/L
12/31/2003	Annual 2003	Non Report	Chromium, Trivalent	Not Reported	Sample 1/Year	µg/L
12/31/2004	Annual 2004	Non Report	Chromium, Trivalent	Not Reported	Sample 1/Year	µg/L
12/31/2005	Annual 2005	Non Report	Chromium, Trivalent	Not Reported	Sample 1/Year	µg/L
12/31/2006	Annual 2006	Non Report	Chromium, Trivalent	Not Reported	Sample 1/Year	µg/L

According to a Compliance Evaluation Inspection (CEI) performed on 8/15/2007 by a USEPA inspector, the Discharger was not in compliance with the following:

1. Provision II.A.2 of the NPDES requires the Discharger to develop and implement a Best Management Practices Plan (BMPP). The Facility had not developed nor implemented a BMPP.
2. Standard Provision B.1.c.2 requires the Discharger to record the individual(s) who perform sampling. The Discharger had not been recording this information.
3. Section 5.6 of the Facility's Storm Water Pollution Prevention Plan (SWPPP), required by Provision II.A.1 of Order No. R4-2002-0151, states that "soil erosion and sedimentation is [to be] controlled at the terminal by covering surfaces with asphalt, concrete and/or crushed rock." According to the USEPA inspector, the Facility's "southern border was not covered with such material and sand had inundated the swale along the southern border. In addition, the area near the larger storm water retention pond [off-site holding pond] was also not covered with such material."
4. 40 CFR Part 136, incorporated by reference in Standard Provision B.1.d, requires oil and grease samples to be taken directly into a glass container. Discussion between the facility representatives and the inspector indicated that oil and grease samples have been collected using a plastic scoop.

These violations are being evaluated for appropriate enforcement actions.

E. Planned Changes

According to the CEI performed on 8/15/2007, the Facility representatives stated that the Discharger is in the planning stage for capacity expansion at the Facility. The Discharger plans to construct two 500,000-barrel (21,000,000-gallon) ASTs northeast of Tank 405.

According to the Discharger's NPDES permit renewal application package, the Discharger requested that their maximum daily discharge allowance be increased from 0.250 MGD to 0.500 MGD. This Order incorporates the Discharger's request.

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 Dominguez Channel Estuary are as follows:

Table F-4. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Dominguez Channel Estuary (Hydrologic Unit No. 405.12)	<u>Existing:</u> Contact (REC-1) and non-contact (REC-2) water recreation; commercial and sport fishing (COMM); marine habitat (MAR); wildlife habitat (WILD); preservation of rare and endangered species (RARE); migration of aquatic organisms (MIGR); and spawning, reproduction, or early development (SPWN). <u>Potential:</u> Navigation (NAV).

Requirements of this Order implement the Basin Plan.

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

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

manner that it would enhance the quality of receiving waters above that which would occur in the absence of the discharge."

While the discharge from the Carson Crude Terminal discharges into the Dominguez Channel, within the Estuary, the wastewater is comprised solely of stormwater, and therefore is not considered to be industrial process wastewater. Nonetheless, this Order contains provisions necessary to protect all of the beneficial uses of the receiving water.

2. **Thermal Plan.** The State Water Board adopted a Water Quality Control Plan for Control of Temperature in the Coastal and Interstate 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. Requirements of this Order implement 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*. 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 the new information available that indicates that the 100°F temperature is not protective of aquatic organisms. A maximum effluent temperature limitation of 86°F is included in this Order, based on the information presented in the white paper.
3. **Ammonia Basin Plan Amendment.** The 1994 Basin Plan provided water quality objectives for ammonia to protect aquatic life, in Tables 3-1 through 3-4. However, those ammonia objectives were revised on March 4, 2004, by the Regional Water Board with the adoption of Resolution No. 2004-022, *Amendment to the Water Quality Plan for the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters Not Characteristic of Freshwater (including enclosed bays, estuaries and wetlands) with the Beneficial Use designations for protection of "Aquatic Life"*. The Ammonia Basin Plan amendment was approved by the State Water Board on July 22, 2004, Office of Administrative Law on September 15, 2004, and by USEPA on May 19, 2005. The amendment revised the Basin Plan by updating the ammonia objectives for inland surface waters not characteristic of freshwater such that they are consistent with USEPA's *"Ambient Water Quality Criteria for Ammonia (Saltwater) – 1989."* The amendment revised the regulatory provisions of the Basin Plan by adding language to Chapter 3, "Water Quality Objectives."

The amendment contains an objective for a 1-hour average concentration of un-ionized ammonia of 0.233 mg/L. The objective is a fixed concentration of un-ionized ammonia, independent of pH, temperature, or salinity. The Discharger is required to convert the total ammonia sampling results to unionized ammonia according to the procedure included in the amendment.

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 discharge is not a new discharge. The discharge is temporally limited, lasting only during the storm event that necessitates the discharge. The Facility has settling ponds as a treatment system for suspended solids removal and evaporation.

This NPDES permit includes effluent limits to ensure that the discharge does not adversely impact the beneficial uses of Dominguez Channel or degrade water quality. The inclusion of the effluent limits and prohibitions in the NPDES permit, which ensure that any discharge would not result in the lowering of water quality, coupled with the fact that the discharge occurs infrequently and is temporally limited, support the conclusion that no degradation will arise as a result of reissuing this permit. The issuance of this permit, therefore, is consistent with the state's antidegradation policy.

8. Anti-Backsliding Requirements. Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40, Code of Federal Regulations¹ 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.

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.

The USEPA approved the State's 2006 303(d) list of impaired water bodies on June 28, 2007. Certain receiving waters in the Los Angeles and Ventura County watersheds do not fully support beneficial uses and therefore have been classified as impaired on the 2006 303(d) list and have been scheduled for TMDL development. The Vopak Los Angeles Inland Terminal facility discharges into Dominguez Channel Estuary. The 2006 State Water Board's California 303(d) List classifies the Dominguez Channel Estuary (unlined portion below Vermont Ave) as impaired. The pollutants of concern in the estuary include ammonia, benthic community effects, benzo(a)pyrene (PAHs), benzo(a)anthracene, chlordane (tissue), chrysene (C1-C4), coliform bacteria, DDT (tissue & sediment), dieldrin (tissue), lead (tissue), PCBs (Polychlorinated biphenyls), phenanthrene, pyrene, and zinc (sediment). The inclusion of the Dominguez Channel Estuary on the 2006 303(d) list documents the waterbody's lack of assimilative capacity for the pollutants of concern. A total maximum daily load (TMDL) is developed for the pollutants of concern in a 303(d) listed waterbody to facilitate the waterbody's recovery of its ability to fully support its beneficial uses. To date, no TMDLs have been developed for the Dominguez Channel Estuary; therefore, no conditions in the Order are based on TMDLs. The effluent limits in the permit for constituents with reasonable potential are established to protect the beneficial uses of Dominguez Channel and to ensure that the discharge does not degrade its water quality. Also, this permit requires receiving water monitoring for priority pollutants, when there is discharge from the Facility. This information will be used to complete a reasonable potential analysis (RPA) of all priority pollutants. The permit also includes a Reopener Provision which allows revision of effluent limitations for toxic pollutants based on the results of RPA.

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

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

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.

Storm water discharges are intermittent. Therefore, only maximum daily discharge limits are specified.

The pollutants of concern were determined from the limitations from the previous permit (pH, temperature, acute toxicity, total suspended solids, turbidity, settleable solids, BOD₅@ 20°C, oil and grease, sulfides, and phenols), as well as parameters which were identified as having the reasonable potential to cause or contribute to an exceedance of a water quality standard (antimony, arsenic, beryllium, cadmium, chromium (III and VI), copper, lead, mercury, nickel, selenium, silver, thallium, zinc, 2,3,7,8 TCDD, methylene chloride, bis(2-ethylhexyl)phthalate, fluoranthene, and phenanthrene).

The Discharger operates a petroleum crude transfer and storage facility. Contributing waste streams consist of storm water runoff from the diked containment areas around the five ASTs, from the Jet-A booster pump station, and from the three oil wells along the southern perimeter of the Facility. The previous permit established effluent limitations for BOD₅, total suspended solids (TSS), oil and grease, turbidity, total organic carbon (TOC), total petroleum hydrocarbons, total sulfides, total phenolics, BTEX (benzene, toluene, ethylbenzene, and xylene), methyl tert-butyl ether (MTBE), metals and VOCs based on the fact that these are the primary pollutants of concern in storm water discharges from facilities that manage petroleum products. Due to lack of sufficient monitoring data for priority pollutants (like BTEX, VOCs), the limits for these pollutants were based on BPJ in the previous permit. RPA performed on the monitoring data submitted after adoption of the previous permit, showed no reasonable potential to cause or contribute to an exceedance of a water quality standards for BTEX and VOCs. Therefore, WQBELs for BTEX and VOCs have been removed.

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

The Facility discharges to the Dominguez Channel Estuary only during wet weather periods. Because the nature of the discharge is intermittent, and the flow is determined by the amount of rainfall, this Order does not contain mass-based effluent limitations.

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 to the Dominguez Channel Estuary regulated by an NPDES permit.

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 (CFR), 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 Effluent Limitations Guidelines and Standards for the Oil and Gas Extraction Category in Part 435 and 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 crude oil transfer and storage facility and it only addresses storm water runoff discharged from the facility. 40 CFR Part 435 does not include criteria for storm water associated with these types of operations. Therefore, this permit does not include effluent limitations based on 40 CFR Part 435. This Order includes technology-based effluent limitations based on BPJ in accordance with 40 CFR § 125.3. Effluent limitations for pH, temperature, acute toxicity, total suspended solids, turbidity, settleable solids, BOD₅ 20°C, oil and grease, sulfides, and phenols have been carried over from the previous Order No. R4-2002-0151.

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, a SWPPP. The SWPPP will outline site-specific management processes for minimizing storm water runoff contamination and for preventing contaminated storm water runoff from being discharged directly into the storm drain. At a minimum, the management practices should ensure that raw materials and chemicals do not come into contact with storm water in the undiked areas, and that all storm water within the diked areas is contained at all times. Because storm water discharges do occur at the Carson Crude Terminal (CCT) facility and make up the entire discharge, this Order will require that CCT update and continue to implement their SWPPP (Attachment G). This Order will also require the Discharger to update and continue to implement their Spill Prevention Control and Countermeasures (SPCC) Plan.

The combination of the SWPPP, BMPs, SPCC Plan, and the 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-5. Summary of Technology-based Effluent Limitations

Parameter	Units	Effluent Limitations ¹		
		Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
BOD ₅ 20°C	mg/L	30	—	—
Total Suspended Solids (TSS)	mg/L	75	—	—
Oil and Grease	mg/L	15	—	—
Turbidity	NTU	75	—	—
Phenolics, Total	mg/L	1.0	—	—
Sulfides, Total	mg/L	1.0	—	—
Xylenes, Total	µg/L	1750	—	—
Methyl <i>tert</i> -Butyl Ether	µg/L	5.0	—	—

1. The mass emission (in lb/day) for the discharge shall be calculated and reported using the limitation concentration and the actual flow rate measured at the time of discharge, using the formula: $m = 8.34 \times C_1 \times Q$, where: m = mass discharge for a pollutant (lb/day), C_1 = limitation concentration for a pollutant (mg/L), and Q = actual discharge flow rate (mgd)

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, for calculating WQBELs are contained in the Technical Support Document (TSD) for storm water discharges and in the SIP for non-storm water discharges. However, the 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 as well. Hence, in this Order, the Regional Water Board has used the SIP methodology to evaluate reasonable potential for storm water discharges through Discharge Point 001.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

As noted in Section II of the Limitations and Discharge Requirements, the 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 Dominguez Channel Estuary are summarized in Section III.C.1 of this Fact Sheet. The Basin Plan includes both narrative and numeric water quality objectives applicable to the receiving water.

Priority pollutant water quality criteria in the CTR are applicable to the Dominguez Channel Estuary. 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 Regional Water Board determined that because the discharge is within estuarine waters, saltwater CTR criteria are applicable. The CTR criteria for saltwater or human health for consumption of organisms, whichever is more stringent, are used to prescribe the effluent limitations in this Order to protect the beneficial uses of the the Dominguez Channel Estuary, a water of the United States in the vicinity of the discharge.

Table F-6 summarizes the applicable water quality criteria/objective for priority pollutants reported in detectable concentrations in the effluent or receiving water. These criteria were used in conducting the RPA for this Order.

Table F-6. Applicable Water Quality Criteria

CTR No.	Constituent	Selected Criteria µg/L	CTR/NTR Water Quality Criteria					
			Freshwater		Saltwater		Human Health for Consumption of:	
			Acute µg/L	Chronic µg/L	Acute µg/L	Chronic µg/L	Water & Organisms µg/L	Organisms only µg/L
2	Arsenic	36	N/A		69	36	N/A	4,300
4	Cadmium	9.36			42.25	9.36		Narrative
5-b	Chromium, Hexavalent or Total	50.35			1107.75	50.35		Narrative
6	Copper	3.73			5.78	3.73		—
7	Lead	8.52			220.82	8.52		Narrative
8	Mercury	0.051			Reserved	Reserved		0.051
9	Nickel	8.28			74.75	8.28		4,600
10	Selenium	71.14			290.58	71.14		Narrative
11	Silver	2.24			2.24	—		—
13	Zinc	85.62			95.14	85.62		—
17	Asbestos (Fibers/L)	No Criteria			—	—		—
18	TCDD-Equivalents	1.4×10^{-8}			—	—		1.4×10^{-8}
19	Benzene	71			—	—		71
20	Bromoform	360			—	—		360

CTR No.	Constituent	Selected Criteria µg/L	CTR/NTR Water Quality Criteria					
			Freshwater		Saltwater		Human Health for Consumption of:	
			Acute µg/L	Chronic µg/L	Acute µg/L	Chronic µg/L	Water & Organisms µg/L	Organisms only µg/L
21	Carbon Tetrachloride	4.4	N/A	N/A	—	—	N/A	4.4
23	Chloro-dibromomethane	34			—	—		34
27	Dichloro-bromomethane	46			—	—		46
28	1,1-Dichloroethane	No Criteria			—	—		—
29	1,2-Dichloroethane	99			—	—		99
30	1,1-Dichloroethylene	3.2			—	—		3.2
33	Ethylbenzene	29,000			—	—		29,000
36	Methylene Chloride	1,600			—	—		1,600
38	Tetrachloroethylene	8.85			—	—		8.85
39	Toluene	200,000			—	—		200,000
43	Trichloroethylene	81			—	—		81
44	Vinyl Chloride	525			—	—		525
77	1,4-Dichlorobenzene	2,600			—	—		2,600
94	Naphthalene	No Criteria			—	—		—

"N/A" indicates the receiving water body is not characterized as freshwater, nor are the water quality criteria for the protection of human health for the consumption of water and organisms applicable.

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.

The RPA was performed for the priority pollutants regulated in the CTR for which data are available. The Discharger submitted effluent data from 18 sampling events to the Regional Water Board, which occurred from February 27, 2003, through December 29, 2006. Based on the RPA, pollutants that demonstrate reasonable potential are copper, lead, nickel, zinc, and 2,3,7,8-TCDD (*as TCDD Equivalents*) for discharge through Discharge Point 001. Refer to Attachment J for a summary of the RPA and associated effluent limitation calculations.

Table F-7. Summary Reasonable Potential Analysis

CTR No.	Constituent	Applicable Water Quality Criteria (C)	Max Effluent Conc. (MEC)	Maximum Detected Receiving Water Conc. (B)	RPA Result - Need Limit?	Reason
		µg/L	µg/L	µg/L		
2	Arsenic	36	5.3	—	No	MEC < C
4	Cadmium	9.36	< 0.025	—	No	MEC < C
5-b	Chromium, Hexavalent or Total	50.35	14	—	No	MEC < C
6	Copper	3.73	26	—	Yes	MEC \geq C
7	Lead	8.52	17	—	Yes	MEC \geq C
8	Mercury	0.051	< 0.05	—	No	MEC < C
9	Nickel	8.28	9.6	—	Yes	MEC \geq C
10	Selenium	71.14	< 0.3	—	No	MEC < C
11	Silver	2.24	< 0.025	—	No	MEC < C

CTR No.	Constituent	Applicable Water Quality Criteria (C)	Max Effluent Conc. (MEC)	Maximum Detected Receiving Water Conc. (B)	RPA Result - Need Limit?	Reason
		µg/L	µg/L	µg/L		
13	Zinc	85.62	450	—	Yes	MEC ≥ C
17	Asbestos (<i>Fibers/L</i>)	No Criteria	4.4×10 ⁶	—	No	No Criteria
18	TCDD Equivalents	1.4×10 ⁻⁸	2.16×10 ⁻⁶	—	Yes	MEC ≥ C
19	Benzene	71	< 0.28	—	No	MEC < C
20	Bromoform	360	1.5	—	No	MEC < C
21	Carbon Tetrachloride	4.4	< 0.28	—	No	MEC < C
23	Chloro-dibromomethane	34	1.6	—	No	MEC < C
27	Dichloro-bromomethane	46	0.3 DNQ	—	No	MEC < C
28	1,1-Dichloroethane	No Criteria	< 0.27	—	No	No Criteria
29	1,2-Dichloroethane	99	< 0.28	—	No	MEC < C
30	1,1-Dichloroethylene	3.2	< 0.32	—	No	MEC < C
33	Ethylbenzene	29,000	< 0.25	—	No	MEC < C
36	Methylene Chloride	1,600	1.2 DNQ	—	No	MEC < C
38	Tetrachloroethylene	8.85	< 0.32	—	No	MEC < C
39	Toluene	200,000	< 0.36	—	No	MEC < C
43	Trichloroethylene	81	0.55 DNQ	—	No	MEC < C
44	Vinyl Chloride	525	< 0.19	—	No	MEC < C
77	1,4-Dichlorobenzene	2,600	< 0.37	—	No	MEC < C
94	Naphthalene	No Criteria	0.96	—	No	No Criteria

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. Water quality based effluent limits (final) for copper, lead, nickel, zinc, and, 2,3,7,8-TCDD (*as TCDD Equivalents*) are based on monitoring results and following the procedure based on the steady-state model, available in Section 1.4 of the SIP.
- c. Since many of the streams in the Region have minimal upstream flows, mixing zones and dilution credits are usually not appropriate. Therefore, in the proposed Order, no dilution credit is being allowed. However, in accordance with the reopener provision in Section VI.C.1.e in the tentative 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 nickel as an example, the following demonstrates how WQBELs were established for this Order. The tables in Attachment I summarize the development and calculation of all WQBELs for this Order using the process described below.

Concentration-Based Effluent Limitations

A set of AMEL and MDEL values are calculated separately, one set for the protection of aquatic life and the other for the protection of human health. The AMEL and MDEL limitations for aquatic life and human health are compared, and the most restrictive AMEL and the most restrictive MDEL are selected as the WQBEL.

Calculation of aquatic life AMEL and MDEL:

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

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

Where C = The priority pollutant criterion/objective, adjusted if necessary for hardness, pH and translators. In this Order, criteria for the protection of aquatic life in saltwater were used, thus neither hardness- nor pH-dependant criteria were developed.

D = The dilution credit, and

B = The ambient background concentration

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

$$ECA = C$$

For nickel the applicable water quality criteria are (reference Table F-2):

$$ECA_{acute} = 74.75 \mu\text{g/L}$$

$$ECA_{chronic} = 8.28 \mu\text{g/L}$$

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

$$LTA_{acute} = ECA_{acute} \times \text{Multiplier}_{acute\ 99}$$

$$LTA_{chronic} = ECA_{chronic} \times \text{Multiplier}_{chronic\ 99}$$

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 nickel, 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 _{acute 99}	ECA Multiplier _{chronic 99}
17	0.56	0.34	0.55

$$LTA_{acute} = 74.75 \mu\text{g/L} \times 0.34 = 25.29 \mu\text{g/L}$$

$$LTA_{chronic} = 8.28 \mu\text{g/L} \times 0.55 = 4.52 \mu\text{g/L}$$

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

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

For nickel, the most limiting LTA was the $LTA_{chronic}$

$$LTA\ 4.52 \mu\text{g/L}$$

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.

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

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

AMEL multipliers are based on a 95th percentile occurrence probability, and the MDEL multipliers are based on the 99th 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 nickel, 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 _{MDEL 99}	Multiplier _{AMEL 95}
4.00	0.56	2.96	1.52

$$\text{AMEL}_{\text{aquatic life}} = 4.52 \text{ } \mu\text{g/L} \times 1.52 = 6.86 \text{ } \mu\text{g/L}$$

$$\text{MDEL}_{\text{aquatic life}} = 4.52 \text{ } \mu\text{g/L} \times 2.96 = 13.37 \text{ } \mu\text{g/L}$$

Calculation of human health AMEL and MDEL:

Step 5: For the ECA based on human health,
set the AMEL equal to the ECA_{human health}

$$\text{AMEL}_{\text{human health}} = \text{ECA}_{\text{human health}}$$

For nickel:

$$\text{AMEL}_{\text{human health}} = 4,600 \text{ } \mu\text{g/L}$$

Step 6: Calculate the MDEL for human health by multiplying the AMEL by the ratio of the Multiplier_{MDEL} to the Multiplier_{AMEL}. Table 2 of the SIP provides pre-calculated ratios to be used in this calculation based on the CV and the number of samples.

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

For nickel, the following data were used to develop the MDEL_{human health}:

No. of Samples Per Month	CV	Multiplier _{MDEL 99}	Multiplier _{AMEL 95}	Ratio
4	0.56	2.96	1.52	1.95

$$\text{MDEL}_{\text{human health}} = 4,600 \text{ } \mu\text{g/L} \times 1.95 = 8,964 \text{ } \mu\text{g/L}$$

Step 7: Select the lower of the AMEL and MDEL based on aquatic life and human health as the water-quality based effluent limit for the Order.

For nickel:

AMEL _{aquatic life}	MDEL _{aquatic life}	AMEL _{human health}	MDEL _{human health}
6.86 µg/L	13.37 µg/L	4,600	8,964

The lowest (most restrictive) effluent limits are based on aquatic toxicity and were incorporated into this Order. For copper, lead, and, zinc, there are no human health criteria; therefore, the AMEL and MDEL based on aquatic life criteria are established as the WQBELs. For 2,3,7,8-TCDD, there are no aquatic life criteria; therefore, the AMEL and MDEL based on the human health criteria are established as the WQBELs. These limits will be protective of aquatic life.

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 Order.

The Basin Plan lists temperature requirements for the receiving waters and references the Thermal Plan. A white paper was 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*. The white paper evaluated the optimum temperatures for steelhead, topsmelt, ghost shrimp, brown rock crab, jackknife clam, and blue mussel. Based on the survey for several kinds of fish the 86°F temperature was included in this permit.

Regional Water Board Resolution 2004-022 amends the Basin Plan to include updated water quality objectives for un-ionized ammonia for inland surface waters not characterized as freshwater. As stated in Section III.D.3 of the Fact Sheet, the objectives for inland surface waters not characterized as freshwater (i.e., enclosed bays, estuaries, and wetlands) is 0.233 mg/L for one-hour average concentration of un-ionized ammonia. In order to adjust the un-ionized saltwater ammonia objective to an ECA expressed as total ammonia, the following equation must be used:

$$[\text{NH}_4^+] + [\text{NH}_3] = [\text{NH}_3] + [\text{NH}_3]^{\wedge} (pK_a^s + 0.0324(298 - T) + 0.0415 \frac{P}{T} - \text{pH})$$

where: $P = 1 \text{ atm}$

T = highest receiving water temperature ($^{\circ}\text{K}$)

pH = highest receiving water pH

$$pK_a^s = 0.116 \times i + 9.245,$$

the stoichiometric acid hydrolysis constant of ammonium ions in saltwater based on i

$$i = 19.9273 S (1000 - 1.005109 S)^{-1},$$

the molal ionic strength of saltwater based on S

S = lowest receiving water salinity (g/kg)

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. The previous Order contains acute toxicity limitations and monitoring requirements in accordance with the Basin Plan, in which 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. Annual acute toxicity data for the years 2004 through 2006 (with years 2002, 2003, and 2007 [through 3rd quarter] data unavailable) submitted by the Discharger showed 100 percent survival rates. This Order carries over the acute toxicity limitations and monitoring requirements from the previous Order.

In addition to the Basin Plan requirements, Section 4 of the SIP states that a chronic toxicity effluent limitation is required in permits for all discharges that will cause, have the reasonable potential to cause, or contribute to chronic toxicity in receiving waters. The discharges from Discharge Point 001 are intermittent and they are temporally limited, only occurring when rainfall exceeds storage capacity. Since it is unlikely that the discharge will contribute to long-term toxic effects within the receiving water; no chronic toxicity limitations or monitoring requirements are included in this Order.

7. Final WQBELs

Table F-8. Summary of Water Quality-based Effluent Limitations

Parameter	Units	Effluent Limitations		
		Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
pH	S.U.	—	6.5	8.5
Temperature	°F	—	—	86
Copper, Total Recoverable	µg/L	5.8	—	—
Lead, Total Recoverable	µg/L	14.8	—	—
Nickel, Total Recoverable	µg/L	13.4	—	—
Zinc, Total Recoverable	µg/L	95	—	—
TCDD Equivalents	pg/L	0.03	—	—

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 pH, BOD₅, total suspended solids, oil and grease, turbidity, total phenolics, total sulfides, copper, lead, zinc, and acute toxicity are being carried over from the previous Order (Order No. R4-2002-0151). The Regional Water Board has determined that these numeric effluent limitations continue to be applicable to the Facility. Final effluent limitations for arsenic, cadmium, chromium, mercury, selenium, silver, benzene, carbon tetrachloride, 1,1-dichloroethane, 1,2-dichloroethane, 1,1-dichloroethylene, ethylbenzene, tetrachloroethylene, toluene, trichloroethylene, vinyl chloride, and 1,4-dichlorobenzene have been removed because there is no reasonable potential for these pollutants. This is consistent with the exception to the anti-backsliding requirements, based on the consideration of "new information" that was not available during the previous permit renewal (i.e., monitoring reports and RPA). Effluent limitations for temperature have been revised to reflect WQO changes. In addition, the effluent limitations for nickel and TCDD Equivalents have been added to this Order because the Facility's discharge was found to have reasonable potential to exceed water quality criteria for these parameters.

1. Satisfaction of Anti-Backsliding Requirements

The effluent limitations of arsenic, cadmium, chromium, mercury, selenium, silver, benzene, carbon tetrachloride, 1,1-dichloroethane, 1,2-dichloroethane, 1,1-dichloroethylene, ethylbenzene, tetrachloroethylene, toluene, trichloroethylene, vinyl chloride, and 1,4-dichlorobenzene have been removed from this Order because they did not show reasonable potential to cause or contribute to an excursion above the respective water quality standards. The relaxation of effluent limitations is consistent

with the anti-backsliding requirements of the CWA and federal regulations, based on the consideration of new information (i.e., discharge monitoring reports and RPA). 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. The final limitations in this Order hold the Discharger to performance levels that will not cause or contribute to water quality impairments. The effluent limitations, receiving water limitations and monitoring requirements ensure that excursions in excess of the water quality limits which are designed to protect beneficial uses will be apparent and addressed immediately. Further, compliance with these requirements will result in the use of best practicable treatment or control of the discharge.

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 BOD₅, total suspended solids, oil and grease, turbidity, total phenolics, total sulfides, total xylenes, and MTBE. Restrictions on the above 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.

Water quality-based effluent limitations 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 water quality-based effluent limitations were derived from the CTR, the CTR is the applicable standard pursuant to section 131.38. The scientific procedures for calculating the individual water quality-based effluent limitations for priority pollutants are based on the CTR-SIP, 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.

The combination of the SWPPP, BMPP, and SPCC 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-9. Summary of Final Effluent Limitations

Parameter	Units	Effluent Limitations			Basis
		Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
pH	S.U.	—	6.5	8.5	BP
BOD ₅ 20°C	mg/L	30	—	—	E; BPJ
Total Suspended Solids (TSS)	mg/L	75	—	—	E; BPJ
Oil and Grease	mg/L	15	—	—	E; BPJ
Non-Conventional Pollutants					
Temperature	°F	—	—	86	BP; TP
Turbidity	NTU	75	—	—	E; BPJ
Phenolics, Total	mg/L	1.0	—	—	E; BPJ
Sulfides, Total	mg/L	1.0	—	—	E; BPJ
Xylenes, Total	µg/L	1750	—	—	E; BPJ
Methyl <i>tert</i> -Butyl Ether	µg/L	5.0	—	—	E; BPJ
Priority Pollutants					
Copper, Total Recoverable	µg/L	5.8	—	—	CTR; SIP
Lead, Total Recoverable	µg/L	14.8	—	—	CTR; SIP
Nickel, Total Recoverable	µg/L	13.4	—	—	CTR; SIP
Zinc, Total Recoverable	µg/L	95	—	—	CTR; SIP
TCDD-Equivalents	pg/L	0.03	—	—	CTR; SIP

¹ BP = Basin Plan; BPJ = Best Professional Judgment; CTR = California Toxics Ruling; E = Existing Limitation; SIP = State Implementation Plan; TP = Thermal Plan

² 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

Due to the intermittent and infrequent nature of the discharge, mass-based effluent limitations have not been developed.

E. Interim Effluent Limitations

Based on effluent monitoring data submitted by the Discharger, a comparison between the MEC and calculated effluent limitation values shows that the Discharger may be unable to consistently comply with the effluent limitations established in this Order for copper, lead, zinc, and TCDD Equivalents. Section 131.38(e) provides conditions under which interim effluent limitations and compliance schedules may be issued. The SIP allows inclusion of an interim limitation with a specific compliance schedule included in an NPDES permit for priority pollutants if the limitation for the priority pollutant is based on CTR criteria and the Discharger demonstrates that it is infeasible to achieve immediate compliance with the effluent limitations. As a result, this Order contains interim limitations for these parameters and a compliance schedule that allows the Discharger up to May 17, 2010, to comply with the final effluent limitations. Within one year after the effective date of this Order, the Discharger must prepare and submit a compliance plan that describes the steps that will be taken to ensure compliance with applicable limitations.

Pursuant to the SIP (Section 2.2.1, Interim Requirements under a Compliance Schedule), when compliance schedules are established in an Order, interim limitations must be included based on current treatment facility performance or existing permit limitations, whichever is more stringent to maintain existing water quality. There are sufficient data to perform a meaningful statistical analysis to develop interim limitations for copper (16 of 17 data points reported as detected), lead (13 of 17 data points reported as detected), and zinc (15 of 17 data points reported as detected); therefore, the 99th percentile value of effluent data is established as the interim MDEL for copper, lead, and zinc. For TCDD Equivalents, there are only 9 data points reported; therefore, the MEC for TCDD Equivalents is established as the interim MDEL (2.2 pg/L).

It should be noted that the Regional Water Board might take appropriate enforcement actions if interim limitations and requirements are not met.

The SIP requires that the Regional Water Board establish other interim requirements such as requiring the discharger to develop a pollutant minimization plan and/or source control measures to achieve the final effluent limitations. These interim limitations shall be effective until May 17, 2010, after which, the Discharger shall demonstrate compliance with the final effluent limitations.

Table F-10. Interim Effluent Limitations

Parameter	Units	Maximum Daily Effluent Limitation
Copper, Total Recoverable	µg/L	25.7
Lead, Total Recoverable	µg/L	16.4
Zinc, Total Recoverable	µg/L	448
TCDD Equivalents	pg/L	2.2

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 on the proposed MRP. The Discharger is required to monitor the effluent for the CTR priority pollutants annually, to determine reasonable potential.

C. Whole Effluent Toxicity Testing Requirements

Whole effluent toxicity (WET) protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and growth. This Order includes limitations for acute toxicity only, 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 monitoring of the CTR priority pollutants at Monitoring Location RSW-001, 50 feet upstream from the discharge point of the storm drain to the receiving water, the Dominguez Channel Estuary. The Discharger must analyze temperature, pH, 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

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 develop and implement an updated SWPPP and address storm water runoff to the storm drain that discharges to the Dominguez Channel Estuary. 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 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, and handles 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. Therefore, this Order requires the Discharger to develop and implement an updated 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.

This Order also requires the Discharger to develop and implement a Spill Contingency Plan to control discharge of pollutants. This provision is included in this Order to minimize and control the amount of pollutants discharged in case of a spill. This will ensure compliance with the Order and protect the beneficial uses of the receiving water.

According to the SIP, pollution prevention measures may be particularly appropriate for priority pollutants where there is evidence that beneficial uses are being impacted. Because the RPA for the discharge of storm water indicated copper, lead, nickel, zinc, and 2,3,7,8-TCDD (as TCDD Equivalents) could exceed the applicable criteria, the Discharger is required to develop and implement a PMP for the pollutants. Described in detail in Section 2.4.5.1 of the SIP, pollution minimization includes: monitoring for potential sources of the pollutants, periodic monitoring,

control strategy, control measure implementation, and an annual status report sent to the Regional Water Board.

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

This provision is based on the SIP, Section 2.1, Compliance Schedules. CTR's Compliance Schedule provisions sunset on May 18, 2005. After this date, the provisions of the SIP allow for Compliance Schedules not to exceed 5 years from issuance of the permit or past May 17, 2010, whichever is sooner. The Discharger is required to develop and submit a Compliance Plan.

According to the SIP, pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. This permit also requires that the Discharger develop and implement a Pollution Minimization Plan for copper, lead, nickel, zinc, and TCDD Equivalents.

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 BP Carson Crude Terminal. 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 5:00 p.m. on November 17, 2008.

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: December 11, 2008
Time: 9:00 A.M.
Location: Ventura County Government Center
800 South Victoria Avenue, Ventura, California.

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. The applicant/permittee
2. Regional Board Staff

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

F. Public Comments and Submittal of Evidence

Persons wishing to comment upon or object to the tentative waste discharge requirements, or submit evidence for the Board to consider, are invited to submit them in writing to 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 close of business November 17, 2008. Comments or evidence received after that date will be submitted, ex agenda, to the Board for consideration, but only included in administrative record with express approval of the Chair during the hearing. Additionally, if the Board receives only supportive comments, the permit may be placed on the Board's consent calendar, and approved without an oral testimony.

G. Hearing Procedure

The meeting, in which the hearing will be a part of, will start at 9:00 a.m. Interested persons are invited to attend. Staff will present the matter under consideration, after which oral statements from parties or interested persons will be heard. For accuracy of the record, all important testimony should be in writing. The Board will include in the administrative record written transcriptions of oral testimony that is actually presented at the hearing. Oral testimony may be limited to 30 minutes maximum or less for each speaker, depending on the number of persons wishing to be heard. Parties or persons with similar concerns or opinions are encouraged to choose one representative to speak. At the conclusion of testimony, the Board will deliberate in open or close session, and render a decision.

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

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 Mazhar Ali at (213) 576-6652.

ATTACHMENT G – STORM WATER POLLUTION PREVENTION PLAN REQUIREMENTS

I. Implementation Schedule

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

II. Objectives

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

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

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

III. Planning and Organization

A. Pollution Prevention Team

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

B. Review Other Requirements and Existing Facility Plans

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

IV. Site Map

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

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

PLANNING AND ORGANIZATION

Form Pollution Prevention Team Review other plans
--

ASSESSMENT PHASE

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
--

BEST MANAGEMENT PRACTICES IDENTIFICATION PHASE

Non-structural BMPs Structural BMPs Select activity and site-specific BMPs
--

IMPLEMENTATION PHASE

Train employees
Implement BMPs
Conduct recordkeeping and reporting

EVALUATION / MONITORING

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

The following information shall be included on the site map:

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

V. List of Significant Materials

The SWPPP shall include a list of significant materials handled and stored at the site. For each material on the list, describe the locations where the material is being stored,

received, shipped, and handled, as well as the typical quantities and frequency. Materials shall include raw materials, intermediate products, final or finished products, recycled materials, and waste or disposed materials.

VI. Description of Potential Pollutant Sources

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

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

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

- 5. Non-Storm Water Discharges.** Facility operators shall investigate the facility to identify all non-storm water discharges and their sources. As part of this investigation, all drains (inlets and outlets) shall be evaluated to identify whether they connect to the storm drain system.

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

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

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

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

VII. Assessment of Potential Pollutant Sources

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

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

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

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

VIII. Storm Water Best Management Practices

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

TABLE B

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

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

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

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

A. Non-Structural BMPs

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

consider all possible non-structural BMPs options before considering additional structural BMPs (see Section A.8.b. below). Below is a list of non-structural BMPs that should be considered:

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

B. Structural BMPs.

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

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

IX. Annual Comprehensive Site Compliance Evaluation

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

- A.** A review of all visual observation records, inspection records, and sampling and analysis results.
- B.** A visual inspection of all potential pollutant sources for evidence of, or the potential for, pollutants entering the drainage system.
- C.** A review and evaluation of all BMPs (both structural and non-structural) to determine whether the BMPs are adequate, properly implemented and maintained, or whether additional BMPs are needed. A visual inspection of equipment needed to implement the SWPPP, such as spill response equipment, shall be included.

- D. An evaluation report that includes, (i) identification of personnel performing the evaluation, (ii) the date(s) of the evaluation, (iii) necessary SWPPP revisions, (iv) schedule, as required in Section A.10.e, for implementing SWPPP revisions, (v) any incidents of non-compliance and the corrective actions taken, and (vi) a certification that the facility operator is in compliance with this Permit. If the above certification cannot be provided, explain in the evaluation report why the facility operator is not in compliance with this General Permit. The evaluation report shall be submitted as part of the annual report, retained for at least five years, and signed and certified in accordance with Standard Provisions V.D.5 of Attachment D.

X. SWPPP General Requirements

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

- F. The SWPPP shall be provided, upon request, to the Regional Water Board. The SWPPP is considered a report that shall be available to the public by the Regional Water Board under Section 308(b) of the Clean Water Act.

ATTACHMENT H – STATE WATER BOARD MINIMUM LEVELS

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

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

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

Table 2b - SEMI-VOLATILE SUBSTANCES*	GC	GCMS	LC	COLOR
Benzo (a) Anthracene	10	5		
1,2 Dichlorobenzene (semivolatile)	2	2		
1,2 Diphenylhydrazine		1		
1,2,4 Trichlorobenzene	1	5		
1,3 Dichlorobenzene (semivolatile)	2	1		
1,4 Dichlorobenzene (semivolatile)	2	1		
2 Chlorophenol	2	5		
2,4 Dichlorophenol	1	5		
2,4 Dimethylphenol	1	2		
2,4 Dinitrophenol	5	5		
2,4 Dinitrotoluene	10	5		
2,4,6 Trichlorophenol	10	10		
2,6 Dinitrotoluene		5		
2- Nitrophenol		10		
2-Chloroethyl vinyl ether	1	1		
2-Chloronaphthalene		10		
3,3' Dichlorobenzidine		5		
Benzo (b) Fluoranthene		10	10	
3-Methyl-Chlorophenol	5	1		
4,6 Dinitro-2-methylphenol	10	5		
4- Nitrophenol	5	10		
4-Bromophenyl phenyl ether	10	5		
4-Chlorophenyl phenyl ether		5		
Acenaphthene	1	1	0.5	
Acenaphthylene		10	0.2	
Anthracene		10	2	
Benzidine		5		
Benzo(a) pyrene		10	2	
Benzo(g,h,i)perylene		5	0.1	
Benzo(k)fluoranthene		10	2	
bis 2-(1-Chloroethoxyl) methane		5		
bis(2-chloroethyl) ether	10	1		
bis(2-Chloroisopropyl) ether	10	2		
bis(2-Ethylhexyl) phthalate	10	5		
Butyl benzyl phthalate	10	10		
Chrysene		10	5	
di-n-Butyl phthalate		10		
di-n-Octyl phthalate		10		
Dibenzo(a,h)-anthracene		10	0.1	
Diethyl phthalate	10	2		
Dimethyl phthalate	10	2		

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

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BP CARSON CRUDE TERMINAL

ORDER NO. R4-2008-0202
NPDES NO. CA0060232

SPGFAA - Stabilized Platform Graphite Furnace Atomic Absorption (i.e., EPA 200.9)
DCP - Direct Current Plasma
COLOR - Colorimetric

ATTACHMENT I – LIST OF PRIORITY POLLUTANTS

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

CTR Number	Parameter	CAS Number	Suggested Analytical Methods
39	Toluene	108883	1
40	1,2-Trans-Dichloroethylene	156605	1
41	1,1,1-Trichloroethane	71556	1
42	1,1,2-Trichloroethane	79005	1
43	Trichloroethylene	79016	1
44	Vinyl Chloride	75014	1
45	2-Chlorophenol	95578	1
46	2,4-Dichlorophenol	120832	1
47	2,4-Dimethylphenol	105679	1
48	2-Methyl-4,6-Dinitrophenol	534521	1
49	2,4-Dinitrophenol	51285	1
50	2-Nitrophenol	88755	1
51	4-Nitrophenol	100027	1
52	3-Methyl-4-Chlorophenol	59507	1
53	Pentachlorophenol	87865	1
54	Phenol	108952	1
55	2,4,6-Trichlorophenol	88062	1
56	Acenaphthene	83329	1
57	Acenaphthylene	208968	1
58	Anthracene	120127	1
59	Benzidine	92875	1
60	Benzo(a)Anthracene	56553	1
61	Benzo(a)Pyrene	50328	1
62	Benzo(b)Fluoranthene	205992	1
63	Benzo(ghi)Perylene	191242	1
64	Benzo(k)Fluoranthene	207089	1
65	Bis(2-Chloroethoxy)Methane	111911	1
66	Bis(2-Chloroethyl)Ether	111444	1
67	Bis(2-Chloroisopropyl)Ether	108601	1
68	Bis(2-Ethylhexyl)Phthalate	117817	1
69	4-Bromophenyl Phenyl Ether	101553	1
70	Butylbenzyl Phthalate	85687	1
71	2-Chloronaphthalene	91587	1
72	4-Chlorophenyl Phenyl Ether	7005723	1
73	Chrysene	218019	1
74	Dibenzo(a,h)Anthracene	53703	1
75	1,2-Dichlorobenzene	95501	1
76	1,3-Dichlorobenzene	541731	1
77	1,4-Dichlorobenzene	106467	1
78	3,3'-Dichlorobenzidine	91941	1
79	Diethyl Phthalate	84662	1
80	Dimethyl Phthalate	131113	1
81	Di-n-Butyl Phthalate	84742	1

CTR Number	Parameter	CAS Number	Suggested Analytical Methods
82	2,4-Dinitrotoluene	121142	1
83	2,6-Dinitrotoluene	606202	1
84	Di-n-Octyl Phthalate	117840	1
85	1,2-Diphenylhydrazine	122667	1
86	Fluoranthene	206440	1
87	Fluorene	86737	1
88	Hexachlorobenzene	118741	1
89	Hexachlorobutadiene	87863	1
90	Hexachlorocyclopentadiene	77474	1
91	Hexachloroethane	67721	1
92	Indeno(1,2,3-cd)Pyrene	193395	1
93	Isophorone	78591	1
94	Naphthalene	91203	1
95	Nitrobenzene	98953	1
96	N-Nitrosodimethylamine	62759	1
97	N-Nitrosodi-n-Propylamine	621647	1
98	N-Nitrosodiphenylamine	86306	1
99	Phenanthrene	85018	1
100	Pyrene	129000	1
101	1,2,4-Trichlorobenzene	120821	1
102	Aldrin	309002	1
103	alpha-BHC	319846	1
104	beta-BHC	319857	1
105	gamma-BHC	58899	1
106	delta-BHC	319868	1
107	Chlordane	57749	1
108	4,4'-DDT	50293	1
109	4,4'-DDE	72559	1
110	4,4'-DDD	72548	1
111	Dieldrin	60571	1
112	alpha-Endosulfan	959988	1
113	beta-Endosulfan	33213659	1
114	Endosulfan Sulfate	1031078	1
115	Endrin	72208	1
116	Endrin Aldehyde	7421934	1
117	Heptachlor	76448	1
118	Heptachlor Epoxide	1024573	1
119	PCB-1016	12674112	1
120	PCB-1221	11104282	1
121	PCB-1232	11141165	1
122	PCB-1242	53469219	1
123	PCB-1248	12672296	1
124	PCB-1254	11097691	1

CTR Number	Parameter	CAS Number	Suggested Analytical Methods
125	PCB-1260	11096825	1
126	Toxaphene	8001352	1

1. Pollutants shall be analyzed using the methods described in 40 CFR Part 136

ATTACHMENT J – SUMMARY OF REASONABLE POTENTIAL ANALYSIS

Insert Table Summarizing RPA here.

CITY WATER QUALITY CRITERIA (UG/L)										REASONABLE POTENTIAL ANALYSIS (RPA)										HUMAN HEALTH CALCULATIONS	
CTR#	Parameters	Units	CV	Freshwater		Human Receptor for consumption of:		MEC >= Lowest C	Tier 1 - Need limit?	B Available (Y/N)?	Are all B data points non-defects	If all data points ND, enter the pollutant B max conc: MDL > C?	If B > C, effluent limit required - other info. ?	RPA Result - Tier 3 - other info. ?	Reason	AMEL hh = ECA = C hh O only	MDL/AMEL multiplier				
				C acute = C chronic CMC tot = CCC tot	Saltwater	Water & Organisms	Organisms only														
1	Antimony	ug/L	0.05					4300.00	No	N			No detected value of B, SI	No	Uf:MEC-C & no B						
2	Arsenic	ug/L	5.3					36.00	No	N			No detected value of B, SI	No	Uf:MEC-C & no B						
3	Beryllium	ug/L	0.025					9.36	No	N			No detected value of B, SI	No	Uf:MEC-C & no B						
4	Cadmium	ug/L	0.025					1107.75	No	N			No detected value of B, SI	No	Uf:MEC-C & no B						
5a	Chromium (III)	ug/L	0.49					50.35	No	N			No detected value of B, SI	No	Uf:MEC-C & no B						
5b	Chromium (VI)	ug/L	0.75					8.52	Yes	N			No detected value of B, SI	Yes	MEC > C		1.33				
6	Copper	ug/L	0.15					4600.00	No	N			No detected value of B, SI	No	Uf:MEC-C & no B		2.23				
7	Lead	ug/L	0.05					71.14	No	N			No detected value of B, SI	No	Uf:MEC-C & no B						
8	Manganese	ug/L	0.3					2.24	No	N			No detected value of B, SI	No	Uf:MEC-C & no B						
9	Nickel	ug/L	0.025					6.30	No	N			No detected value of B, SI	No	Uf:MEC-C & no B						
10	Selenium	ug/L	0.15					85.62	Yes	N			No detected value of B, SI	Yes	MEC > C		4600				
11	Silver	ug/L	0.8					1.00	No	N			No detected value of B, SI	No	Uf:MEC-C & no B		1.95				
12	Thallium	ug/L	0.05					765	No	N			No detected value of B, SI	No	Uf:MEC-C & no B		2.29				
13	Zinc	ug/L	450					0.66	Yes	N			No detected value of B, SI	Yes	MEC > C						
14	Cyanide	ug/L	0.6					780	No	N			No detected value of B, SI	No	Uf:MEC-C & no B						
15	Asbestos	Fiber/L	0.6					780	No	N			No detected value of B, SI	No	Uf:MEC-C & no B		0.000000014				
16	2,3,7,8 TCDD	ug/L	1.3					0.66	No	N			No detected value of B, SI	No	Uf:MEC-C & no B						
17	Acrolein	ug/L	0.28					360	No	N			No detected value of B, SI	No	Uf:MEC-C & no B						
18	Acrylonitrile	ug/L	0.28					4.4	No	N			No detected value of B, SI	No	Uf:MEC-C & no B						
19	Benzene	ug/L	1.5					21000	No	N			No detected value of B, SI	No	Uf:MEC-C & no B						
20	Bromofom	ug/L	0.36					34	No	N			No detected value of B, SI	No	Uf:MEC-C & no B						
21	Carbon Tetrachloride	ug/L	0.28					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
22	Chlorobenzene	ug/L	0.36					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
23	Chloroform	ug/L	0.3					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
24	Chloroform	ug/L	0.3					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
25	Chloroform	ug/L	0.3					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
26	Chloroform	ug/L	0.3					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
27	Dichloromethane	ug/L	0.28					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
28	1,1-Dichloroethane	ug/L	0.32					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
29	1,2-Dichloroethane	ug/L	0.35					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
30	1,1-Dichloroethene	ug/L	0.24					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
31	1,2-Dichloropropane	ug/L	0.25					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
32	1,3-Dichloropropene	ug/L	0.2					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
33	Ethylbenzene	ug/L	No Criteria					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
34	Methyl Bromide	ug/L	1.2					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
35	Methyl Chloride	ug/L	0.24					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
36	Methylene Chloride	ug/L	0.32					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
37	1,1,2,2-Tetrachloroethane	ug/L	0.36					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
38	Tetrachloroethene	ug/L	0.27					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
39	Toluene	ug/L	No Criteria					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
40	1,2-Trans-Dichloroethene	ug/L	0.33					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
41	1,1,1-Trichloroethane	ug/L	0.55					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
42	1,1,2-Trichloroethane	ug/L	0.19					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
43	Vinyl Chloride	ug/L	0.19					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
44	2-Chlorophenol	ug/L	1.9					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
45	2,4-Dichlorophenol	ug/L	3.3					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
46	2,4-Dimethylphenol	ug/L	3.8					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
47	4,6-Dinitro-o-resol (aka 2-methyl-4,6-Dinitrophenol)	ug/L	4.3					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
48	2-Nitrophenol	ug/L	No Criteria					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
49	4-Nitrophenol	ug/L	No Criteria					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
50	3-Methyl-4-Chlorophenol (aka P-Chlorophenol)	ug/L	No Criteria					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
51	Phenol	ug/L	No Criteria					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
52	Phenol	ug/L	No Criteria					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
53	Phenol	ug/L	No Criteria					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
54	Phenol	ug/L	No Criteria					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
55	Phenol	ug/L	No Criteria					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
56	Phenol	ug/L	No Criteria					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
57	Phenol	ug/L	No Criteria					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
58	Phenol	ug/L	No Criteria					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
59	Phenol	ug/L	No Criteria					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
60	Phenol	ug/L	No Criteria					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
61	Phenol	ug/L	No Criteria					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
62	Phenol	ug/L	No Criteria					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
63	Phenol	ug/L	No Criteria					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
64	Phenol	ug/L	No Criteria					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
65	Phenol	ug/L	No Criteria					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
66	Phenol	ug/L	No Criteria					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
67	Phenol	ug/L	No Criteria					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
68	Phenol	ug/L	No Criteria					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
69	Phenol	ug/L	No Criteria					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
70	Phenol	ug/L	No Criteria					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
71	Phenol	ug/L	No Criteria					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
72	Phenol	ug/L	No Criteria					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
73	Phenol	ug/L	No Criteria					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
74	Phenol	ug/L	No Criteria					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
75	Phenol	ug/L	No Criteria					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
76	Phenol	ug/L	No Criteria					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
77	Phenol	ug/L	No Criteria					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
78	Phenol	ug/L	No Criteria					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
79	Phenol	ug/L	No Criteria					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						
80	Phenol	ug/L	No Criteria					No Criteria	No Criteria	No Criteria	N		No Criteria	No Criteria	No Criteria						

CTR#	Parameters	Units	CV	CTR Water Quality Criteria (ug/L)				Human health consumption of:		REASONABLE POTENTIAL ANALYSIS (RPA)										HUMAN HEALTH CALCULATIONS			
				Freshwater		Saltwater		Water & organism consumption of:	Organisms only	MEC >= Lowest C	Tier 1- Need limit?	B Available (Y/N)?	Are all B data points non-detects	If all data points NO, is detected max conc MDL > C?	If B < C, effluent limit required	Tier 3 - other info, ?	RPA Result - Need Limit?	Reason	Organisms only				
				C acute = C chronic	CMC tot = CCC tot	C acute = C chronic	CMC tot = CCC tot	Water & organism consumption of:	Organisms only														
81	Di-n-Butyl Phthalate	ug/L	1.9						12000	12000	9.10	No	No	N				No detected value of B, SI		No	URMEC-C & no B	AMEL hh = ECA = multiplier	MDL hh
82	2,4-Dinitrotoluene	ug/L	1.9								9.10	No	No	N				No detected value of B, SI		No	URMEC-C & no B		
83	2,6-Dinitrotoluene	ug/L	No Criteria									No	No	N				No detected value of B, SI		No	URMEC-C & no B		
84	Di-n-Octyl Phthalate	ug/L	No Criteria									No	No	N				No detected value of B, SI		No	URMEC-C & no B		
85	1,2-Diphenylhydrazine	ug/L										No	No	N				No detected value of B, SI		No	URMEC-C & no B		
86	Fluoranthene	ug/L	0.031						0.54	0.54	0.54	No	No	N				No detected value of B, SI		No	URMEC-C & no B		
87	Fluorene	ug/L	0.028						14000	14000	14000	No	No	N				No detected value of B, SI		No	URMEC-C & no B		
88	Hexachlorobenzene	ug/L										No	No	N				No detected value of B, SI		No	URMEC-C & no B		
89	Hexachlorocyclopentadiene	ug/L	0.38						50	50.00	50.00	No	No	N				No detected value of B, SI		No	URMEC-C & no B		
90	Hexachlorocyclopentadiene	ug/L	3.2						17000	17000	17000	No	No	N				No detected value of B, SI		No	URMEC-C & no B		
91	Hexachloroethane	ug/L	2.9									No	No	N				No detected value of B, SI		No	URMEC-C & no B		
92	Indeno(1,2,3-cd)Pyrene	ug/L	0.021						0.049	0.0490	0.049	No	No	N				No detected value of B, SI		No	URMEC-C & no B		
93	Isophorone	ug/L	1.9						600	600.00	600	No	No	N				No detected value of B, SI		No	URMEC-C & no B		
94	Naphthalene	ug/L	No Criteria									No	No	N				No detected value of B, SI		No	URMEC-C & no B		
95	Nitrobenzene	ug/L	2.4						1900	1900	1900	No	No	N				No detected value of B, SI		No	URMEC-C & no B		
96	N-Nitrosodimethylamine	ug/L	2.4						8.10	8.10000	8.10	No	No	N				No detected value of B, SI		No	URMEC-C & no B		
97	N-Nitrosodipropylamine	ug/L							1.40	1.400	1.40	No	No	N				No detected value of B, SI		No	URMEC-C & no B		
98	N-Nitrosodiphenylamine	ug/L	1.9						16	16.0	16.0	No	No	N				No detected value of B, SI		No	URMEC-C & no B		
99	Phenanthrene	ug/L	No Criteria									No	No	N				No detected value of B, SI		No	URMEC-C & no B		
100	Pyrene	ug/L	0.025						11000	11000	11000	No	No	N				No detected value of B, SI		No	URMEC-C & no B		
101	1,2,4-Trichlorobenzene	ug/L	No Criteria									No	No	N				No detected value of B, SI		No	URMEC-C & no B		
102	Adrin	ug/L							0.00014	0.00014	0.00014	No	No	N				No detected value of B, SI		No	URMEC-C & no B		
103	alpha-BHC	ug/L	0.013						0.0130	0.0130	0.0130	No	No	N				No detected value of B, SI		No	URMEC-C & no B		
104	beta-BHC	ug/L	0.014						0.046	0.046	0.046	No	No	N				No detected value of B, SI		No	URMEC-C & no B		
105	gamma-BHC	ug/L	0.019						0.063	0.063	0.063	No	No	N				No detected value of B, SI		No	URMEC-C & no B		
106	delta-BHC	ug/L	No Criteria									No	No	N				No detected value of B, SI		No	URMEC-C & no B		
107	Chlordane	ug/L							0.00558	0.00558	0.00558	No	No	N				No detected value of B, SI		No	URMEC-C & no B		
108	4,4'-DDT	ug/L							0.00558	0.00558	0.00558	No	No	N				No detected value of B, SI		No	URMEC-C & no B		
109	4,4'-DDE (linked to DDT)	ug/L							0.00558	0.00558	0.00558	No	No	N				No detected value of B, SI		No	URMEC-C & no B		
110	4,4'-DDD	ug/L							0.00558	0.00558	0.00558	No	No	N				No detected value of B, SI		No	URMEC-C & no B		
111	Dieldrin	ug/L							0.00014	0.00014	0.00014	No	No	N				No detected value of B, SI		No	URMEC-C & no B		
112	alpha-Endosulfan	ug/L	0.034						240	0.0087	0.0087	No	No	N				No detected value of B, SI		No	URMEC-C & no B		
113	beta-Endosulfan	ug/L							240	0.0087	0.0087	No	No	N				No detected value of B, SI		No	URMEC-C & no B		
114	Endosulfan Sulfate	ug/L	0.019						240	0.0087	0.0087	No	No	N				No detected value of B, SI		No	URMEC-C & no B		
115	Endrin	ug/L							0.81	0.0023	0.0023	No	No	N				No detected value of B, SI		No	URMEC-C & no B		
116	Endrin Aldehyde	ug/L	0.042						0.81	0.0023	0.0023	No	No	N				No detected value of B, SI		No	URMEC-C & no B		
117	Heptachlor	ug/L							0.00021	0.00021	0.00021	No	No	N				No detected value of B, SI		No	URMEC-C & no B		
118	Heptachlor Epoxide	ug/L							0.00011	0.00011	0.00011	No	No	N				No detected value of B, SI		No	URMEC-C & no B		
119	125 PCBs sum (2)	ug/L							0.00017	0.00017	0.00017	No	No	N				No detected value of B, SI		No	URMEC-C & no B		
120	Tosaphene	ug/L							0.00075	0.00075	0.00075	No	No	N				No detected value of B, SI		No	URMEC-C & no B		

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

CTR#	Parameters	AQUATIC LIFE CALCULATIONS										LIMITS		Recommendation	Comment
		Saltwater / Freshwater / Basin Plan										Lowest AMEL	Lowest MDEL		
		ECA acute multiplier (p.7)	LTA acute	chronic multiplier	LTA chronic	Lowest chronic LTA	AMEL multiplier 95	AMEL multiplier 99	MDEL multiple	MDEL eq life					
1	Antimony													No Limit	
2	Arsenic													No Limit	
3	Beryllium													No Limit	
4	Cadmium													No Limit	
5a	Chromium (III)													No Limit	
5b	Chromium (VI)													No Limit	
6	Copper	0.38	2.19	0.59	2.19	2.19	1.44	3.16	2.64	5.79313		3.16	5.78	Calculated limits more stringent than the existing MOEL	
7	Lead	0.26	39.20	0.46	3.91	3.91	1.70	6.65	3.79	14.8104		6.65	14.81	Calculated limits more stringent than the existing MOEL	
8	Nickel	0.34	25.29	0.55	4.52	4.52	1.52	6.86	2.98	13.3711		6.86	13.37	New Effluent Limitation	
10	Selenium													No Limit	
11	Silver													No Limit	
12	Thallium													No Limit	
13	Zinc	0.25	23.70	0.44	37.61	23.70	1.75	41.50	4.01	95.1374		41.50	95.14	Calculated limits more stringent than existing MOEL	
14	Cyanide													No Limit	
15	Asbestos													No Limit	
16	2,3,7,8 TCDD						1.55		3.11			0.000000014	0.000000028	New Effluent Limitation	
17	Aroclor													No Limit	
18	Acrylonitrile													No Limit	
19	Benzene													No Limit	
20	Bromofom													No Limit	
21	Carbon Tetrachloride													No Limit	
22	Chlorobenzene													No Limit	
23	Chlorobromomethane													No Limit	
24	Chloroform													No Limit	
25	2-Chloroethyl ethyl ether													No Limit	
26	Chloroform													No Limit	
27	Dichloromethane													No Limit	
28	1,1-Dichloroethane													No Limit	
29	1,2-Dichloroethane													No Limit	
30	1,1-Dichloroethylene													No Limit	
31	1,2-Dichloropropane													No Limit	
32	1,3-Dichloropropylene													No Limit	
33	Ethylbenzene													No Limit	
34	Methyl Bromide													No Limit	
35	Methyl Chloride													No Limit	
36	Methylene Chloride													No Limit	
37	1,1,2,2-Tetrachloroethane													No Limit	
38	Tetrachloroethylene													No Limit	
39	1,2-Dibromoethane													No Limit	
40	1,1,1,2-Tetrachloroethane													No Limit	
41	1,1,1-Trichloroethane													No Limit	
42	1,1,2-Trichloroethane													No Limit	
43	Trichloroethylene													No Limit	
44	Vinyl Chloride													No Limit	
45	2-Chlorophenol													No Limit	
46	2,4-Dichlorophenol													No Limit	
47	2,4-Dimethylphenol													No Limit	
48	4,6-dinitro-o-resol (aka 2-methyl-4,6-dinitrophenol)													No Limit	
49	2,4-Dinitrophenol													No Limit	
50	2-Nitrophenol													No Limit	
51	4-Nitrophenol													No Limit	
52	3-Methyl-4-chlorophenol (aka P-chlorotoluene)													No Limit	
53	2-Chlorophenol													No Limit	
54	Phenol													No Limit	
55	2,4,6-Trichlorophenol													No Limit	
56	Acenaphthene													No Limit	
57	Acenaphthylene													No Limit	
58	Anthracene													No Limit	
59	Benzidine													No Limit	
60	Benz(a)Anthracene													No Limit	
61	Benz(e)Pyrene													No Limit	
62	Benzofluoranthene													No Limit	
63	Benzofluoranthene													No Limit	
64	Benzofluoranthene													No Limit	
65	Bis(2-Chloroethoxy)Methane													No Limit	
66	Bis(2-Chloroethoxy)Ether													No Limit	
67	Bis(2-Chloroisopropyl)Ether													No Limit	
68	Bis(2-Ethylhexyl)Phthalate													No Limit	
69	4-Bromophenyl Phenyl Ether													No Limit	
70	Bisphenol A													No Limit	
71	2-Chlorobiphenyl													No Limit	
72	4-Chlorobiphenyl													No Limit	
73	Chrysene													No Limit	
74	Dibenz(a,h)Anthracene													No Limit	
75	1,2-Dichlorobenzene													No Limit	
76	1,3-Dichlorobenzene													No Limit	
77	1,4-Dichlorobenzene													No Limit	
78	3,3-Dichlorobenzidine													No Limit	
79	Diethyl Phthalate													No Limit	
80	Dimethyl Phthalate													No Limit	

CTR#	Parameters	AQUATIC LIFE CALCULATIONS										LIMITS		Recommendation	Comment
		Saltwater / Freshwater / Basin Plan													
		ECA acute multiplier (p.7)	LTA acute	chronic multiplier	LTA chronic	Lowest chronic	AMEL multiplier	AMEL multiplier	MDL multiplier	MDL multiplier	Lowest AMEL				
81	Di-n-Butyl Phthalate													No Limit	
82	2,4-Dinitrotoluene													No Limit	
83	2,6-Dinitrotoluene													No Limit	
84	Di-n-Octyl Phthalate													No Limit	
85	1,2-Diphenylhydrazine													No Limit	
86	Fluoranthene													No Limit	
87	Fluorene													No Limit	
88	Hexachlorobenzene													No Limit	
89	Hexachlorobutadiene													No Limit	
90	Hexachlorocyclopentadiene													No Limit	
91	Hexachlorocyclopentadiene													No Limit	
92	Heptachlor (1,2,3-cis)Pyrene													No Limit	
93	Isochlorane													No Limit	
94	Naphthalene													No Limit	
95	Nitrobenzene													No Limit	
96	N-Nitrosodimethylamine													No Limit	
97	N-Nitrosodipropylamine													No Limit	
98	N-Nitrosodiphenylamine													No Limit	
99	Phenanthrene													No Limit	
100	Pyrene													No Limit	
101	1,2,4-Trichlorobenzene													No Limit	
102	Aldrin													No Limit	
103	alpha-BHC													No Limit	
104	beta-BHC													No Limit	
105	gamma-BHC													No Limit	
106	delta-BHC													No Limit	
107	Chlordane													No Limit	
108	4,4'-DDT													No Limit	
109	4,4'-DDE (linked to DDT)													No Limit	
110	4,4'-DDD													No Limit	
111	Dieldrin													No Limit	
112	alpha-Endosulfan													No Limit	
113	beta-Endosulfan													No Limit	
114	Endosulfan Sulfate													No Limit	
115	Endrin													No Limit	
116	Endrin Aldehyde													No Limit	
117	Heptachlor													No Limit	
118	Heptachlor Epoxide													No Limit	
119-125	PCBs sum (2)													No Limit	
126	Toxaphene													No Limit	

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