



California Regional Water Quality Control Board

Los Angeles Region



Recipient of the 2001 *Environmental Leadership Award* from Keep California Beautiful

Linda S. Adams
Agency Secretary

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Arnold Schwarzenegger
Governor

November 16, 2006

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED
NO. 7000 0520 0024 7127 4650

Mr. Jay Churchill, Manager
and

Mr. Miles T. Heller, Superintendent Environmental Services
ConocoPhillips Company, Carson Plant
1520 East Sepulveda Boulevard
Carson, CA 90745

Dear Mr. Churchill and Mr. Heller:

**WASTE DISCHARGE REQUIREMENTS AND NATIONAL POLLUTANT DISCHARGE
ELIMINATION SYSTEM PERMIT - CONOCOPHILLIPS COMPANY (FORMER TOSCO
REFINING COMPANY), CONOCOPHILLIPS - LOS ANGELES REFINERY, CARSON PLANT,
CARSON, CALIFORNIA (NPDES NO. CA0063185, CI NO. 7352)**

Our letter dated September 29, 2006, transmitted the revised tentative Order for renewal of your permit to discharge wastes under the National Pollutant Discharge Elimination System (NPDES).

Pursuant to Division 7 of the California Water Code, this Regional Board at a public hearing held on November 9, 2006, reviewed the revised tentative requirements, considered all factors in the case, and adopted Order No. R4-2006-0082 (copy attached) relative to the waste discharge requirements. Order No. R4-2006-0082 serves as your permit under the NPDES and expires on October 10, 2011. Section 13376 of the California Water Code requires that an application for a new permit must be filed at least 180 days before the expiration date.

You are required to implement the *Monitoring and Reporting Program* (MRP) on the effective date (December 9, 2006) of Order No. R4-2006-0082. Your first monitoring report for the October - December reporting period is due by February 1, 2007. All monitoring reports should be sent to the Regional Board, Attn: Information Technology Unit.

When submitting monitoring, technical reports, or any correspondence regarding the discharge under Order No. R4-2006-0082 to the Regional Water Board, please include a reference to *Compliance File No. CI 7352 and NPDES No. CA0063185* which will assure that the reports are directed to the appropriate file and staff. Please do not combine your discharge monitoring reports with other reports. Submit each type of report as a separate document.

California Environmental Protection Agency



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Our mission is to preserve and enhance the quality of California's water resources for the benefit of present and future generations.

Mr. Jay Churchill
and
Mr. Miles T. Heller
ConocoPhillips Company, Carson Plant


-2-

November 16, 2006

We are sending the final copy of the permit only to the Discharger. For those on the mailing list who would like access to a copy of the final permit, please go to the Regional Board's website at www.waterboards.ca.gov/rwqcb4/html/permits/generalpermits.html.

If you have any questions, please contact Rosario Aston at (213) 576-6653.

Sincerely,



M. David Hung, Chief
Watershed Regulatory Section

Enclosures

cc: Environmental Protection Agency, Region 9, Permits Branch (WTR-5)
U.S. Army Corps of Engineers
NOAA, National Marine Fisheries Service
Department of Interior, U.S. Fish and Wildlife Service
Mr. Philip Isorena, State Water Resources Control Board, Division of Water Quality
Mr. William Paznokas, Department of Fish and Game, Region 5
Department of Health Services, Sanitary Engineering Section
California State Parks and Recreation
California Coastal Commission, South Coast Region
South Coast Air Quality Management District
Water Replenishment District of Southern California
Los Angeles County, Department of Public Works, Waste Management Division
Los Angeles County, Department of Health Services
City of Los Angeles, Bureau Sanitation, Industrial Waste Operation
City of Los Angeles, Bureau of Engineering, Storm Water Management Division
City of Carson
Dr. Mark Gold, Heal the Bay
Ms. Tracy Egoscue, Santa Monica BayKeeper
Mr. Daniel Cooper, Lawyers for Clean Water
Mr. David Beckman, Natural Resources Defense Council
Mr. Bob Canter, Port of Long Beach
Mr. Lee Solomon, Tetra Tech
Mr. Steve Mallon, ConocoPhillips Company

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Arnold Schwarzenegger
Governor

ORDER NO. R4-2006-0082
NPDES NO. CA0063185

The following Discharger is authorized to discharge in accordance with the conditions set forth in this Order:

Discharger	ConocoPhillips Company (Former Tosco Refining Company)
Name of Facility	ConocoPhillips - Los Angeles Refinery, Carson Plant
Facility Address	1520 East Sepulveda Boulevard
	Carson, CA 90745
	Los Angeles County

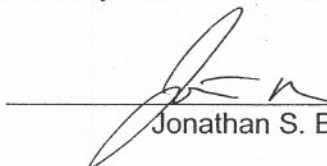
The Discharger is authorized to discharge from the following discharge points as set forth below:

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	Storm water runoff, boiler condensate, and boiler blowdown	33° 48' 55" N	118° 13' 55" W	Dominguez Channel, within the Estuary

This Order was adopted by the Regional Water Board on:	November 9, 2006
This Order shall become effective on:	December 9, 2006
This Order shall expire on:	October 10, 2011
The U.S. Environmental Protection Agency (USEPA) and the Regional Water Board have classified this discharge as a major discharge.	
The Discharger shall file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, not later than 180 days in advance of the Order expiration date as application for issuance of new waste discharge requirements.	

IT IS HEREBY ORDERED, that Order No. 01-074 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 California Water Code (CWC) 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, Jonathan S. Bishop, Executive Officer, do hereby certify the following is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on November 9, 2006.


Jonathan S. Bishop, Executive Officer

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
 REGION 4, LOS ANGELES REGION**

ORDER NO. R4-2006-0082
 NPDES NO. CA0063185

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I. FACILITY INFORMATION

The following Discharger is authorized to discharge in accordance with the conditions set forth in this Order:

Table 1
Facility Information

Discharger	ConocoPhillips Company (Former Tosco Refining Company)
Name of Facility	ConocoPhillips - Los Angeles Refinery, Carson Plant
Facility Address	1520 East Sepulveda Boulevard
	Carson, CA 90745
	Los Angeles County
Facility Contact, Title, and Phone	Steve Mallon, Senior Environmental Engineer, (310) 522-8038
Mailing Address	Same as above
Type of Facility	Petroleum Refinery
Facility Design Flow	11.0 Million Gallons per Day (MGD)

II. FINDINGS

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

- A. **Background.** ConocoPhillips Company (hereinafter Discharger or ConocoPhillips) formerly known as Tosco Refining Company is authorized to discharge under Order No. 01-074 and a National Pollutant Discharge Elimination System (NPDES) Permit No. CA0063185. The Discharger submitted a Report of Waste Discharge, dated October 7, 2005, and applied for a NPDES permit renewal to discharge up to 11 million gallons per day (MGD) of treated wastewater consisting of storm water, and boiler condensate and blowdown from ConocoPhillips Carson Plant, hereinafter Facility or Carson Plant. The application was deemed complete on October 7, 2005.
- D. **Facility Description.** The Carson Plant is a petroleum refining facility and is categorized as a cracking refinery as defined in 40 Code of Federal Regulations (CFR) 419.20. The Facility is located at 1520 East Sepulveda Boulevard, Carson California. The Carson Plant receives a daily average crude oil throughput of 135,000 barrels per day. Crude oil is separated and processed in various refinery processes and intermediate products are piped to another refinery located in Wilmington for continued processing to produce gasoline, diesel fuel, and jet fuel. Sulfur, carbon dioxide, and petroleum coke are produced as co-products. The refinery processes at the Facility include crude distillation, vacuum flashing, delayed coking, hydrotreating, and sulfur recovery.

The Facility maintains two water handling and treatment systems. Process wastewaters and storm water from process areas are segregated from non-process waters and storm water from non-process areas (i.e., tank farms, parking lots roadways, and other non-process areas) via site grading, piping, and berms. Process wastewaters and storm water from process areas are directed via process sewer lines to the API pump structure for pumping to Tank 1647 with subsequent oil removal and recovery in the Oil Recovery Unit (ORU) Nos. 1 & 2 API Separators, AFU-1601 and AFU-1602, respectively. The processed wastewater is discharged to the Los Angeles County Sanitation District (LACSD) sanitary sewer. Water from groundwater cleanup operation for removal of petroleum products underlying the facility is also discharged to the ORU for processing.

The storm water from parking lots, roadways, some non-process areas, and boiler condensate and blowdown are directed to an 8.4 million gallon storm water retention basin. The storm water from other non-process areas (tank farms) is collected in a common drain system that is normally routed to the process drain system via diversion boxes. During storm events, the Facility discharges the first one tenth (1/10th) of an inch of runoff (first flush) from the common drain system to the ORU. After the first flush, the Facility directs non-process common drain system runoff via the same diversion boxes to the storm water retention basin. During storm events when the capacity of the storm water retention basin is exceeded, the Facility is permitted to discharge storm water from non-process areas, and boiler condensate and blowdown to the Dominguez Channel, a water of the United States, within the Estuary. The storm water is treated with chemicals and dissolved air flotation prior to discharge to the Dominguez Channel, within the Estuary.

The Discharger is permitted to discharge up to 0.015 MGD of boiler condensate and blowdown, and approximately 11 MGD of storm water runoff from non-production areas to the Dominguez Channel via Discharge Point No. 001 when the capacity of the storm water retention basin is

exceeded during storm events. The Facility has not discharged to the Dominguez Channel since May 2001.

Attachment B provides a topographic map of the area around the Facility. Attachment C provides a flow schematic of the Facility.

- C. **Legal Authorities.** This Order is issued pursuant to Section 402 of the Federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and Chapter 5.5, Division 7 of the California Water Code (CWC). 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 of the CWC for discharges that are not subject to regulation under CWA Section 402.
- 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 through special studies. Attachments A through I, which contain background information and rationale for Order requirements, are hereby incorporated into this Order and, thus, constitute part of the Findings for this Order.
- E. **California Environmental Quality Act (CEQA).** This action to adopt an NPDES permit is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21100, et seq.) in accordance with Section 13389 of the CWC.
- F. **Technology-based Effluent Limitations.** The 40 CFR §122.44(a) requires that permits include applicable technology-based limitations and standards. This Order includes technology-based effluent limitations based on Effluent Limitations Guidelines and Standards for the Petroleum Refinery Category in 40 CFR Part 419 Subpart B, Cracking Subcategory. This Order also includes technology-based effluent limitations based on Best Professional Judgment (BPJ) in accordance with 40 CFR §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 122.44(d) of 40 CFR requires that permits include water quality-based effluent limitations (WQBELs) to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where numeric water quality objectives have not been established, 40 CFR §122.44(d) specifies that WQBELs may be established using USEPA criteria guidance under CWA section 304(a), proposed State criteria or a State policy interpreting narrative criteria supplemented with other relevant information, or an indicator parameter.
- USEPA approved the State's 2002 303(d) list of impaired water bodies on July 25, 2003. Certain receiving waters in Los Angeles County watersheds do not fully support beneficial uses and therefore have been classified as impaired on the 2002 303(d) list and have been scheduled for Total Maximum Daily Load (TMDL) development. According to the 2002 303(d) list, the Dominguez Channel within the Estuary is impaired for aldrin (fish tissue), ammonia, benthic community effects, Chema (fish tissue), chromium (sediment), chlordane (fish tissue), DDT (tissue and sediment), dieldrin (fish tissue), coliform, lead (fish tissue), polyaromatic hydrocarbons (PAHs) (sediment), and zinc (sediment). To date, no TMDL has been approved by USEPA for this segment of water. Therefore, no conditions in the Order are based on TMDLs.
- H. **Water Quality Control Plans.** The Regional Water Board adopted a Water Quality Control Plan for the Los Angeles Region (hereinafter 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 plan. In addition, State Water Resources Control Board (State Water Board) Resolution No. 88-63 requires that, with certain exceptions, the Regional Water Board assign the municipal and domestic supply use to water bodies that do not have beneficial uses listed in the Basin Plan. Beneficial uses applicable to Dominguez Channel, within the Estuary are listed in Table 2:

Table 2
Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Dominguez Channel within the Estuary	<u>Existing:</u> Preservation or rare, threatened or endangered species (RARE), contact (REC-1), non-contact (REC-2) water recreation, commercial and sport fishing (COMM), estuarine habitat (EST), marine habitat (MAR), wildlife habitat (WILD), migration of aquatic organisms (MIG), spawning, reproduction, and/or early development (SPAWN). <u>Potential:</u> Navigation.

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 inland surface waters.

- 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 became effective on May 19, 2004.
- J. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, which was amended on May 4, 1995 and November 9, 1999, and the CTR on May 18, 2000, which was amended on February 13, 2001. These rules include water quality criteria for priority pollutants and are applicable to this discharge.
- K. **State Implementation Policy.** On March 2, 2000, 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 Boards in their basin plans, with the exception of the provision on alternate test procedures for individual discharges that have been approved by USEPA Regional Administrator. The alternate test procedures provision was effective on May 22, 2000. The SIP became effective on May 18, 2000. The SIP includes procedures for determining the need for and calculating WQBELs and requires dischargers to submit data sufficient to do so. The State Water Board adopted

amendments to the SIP on February 24, 2005, was approved by the Office of Administrative Law (OAL) on May 31, 2005, and the USEPA approved it on July 13, 2005. The CTR's Compliance Schedule provisions sunseted on May 17, 2005. After this date, the provisions of the SIP allow for Compliance Schedules not to exceed five years from permit issuance or May 17, 2010, whichever is sooner.

- 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 18, 2010) to establish and comply with CTR criterion-based effluent limitations. Where a compliance schedule for a final effluent limitation exceeds 1 year, the Order must include interim numeric limitations for that constituent or parameter. Where allowed by the Basin Plan, compliance schedules and interim effluent limitations or discharge specifications may also be granted to allow time to implement a new or revised water quality objective. This Order does not include compliance schedules and interim effluent limitations and/or discharge specifications.
- M. **Antidegradation Policy.** Section 131.12 of 40 CFR requires that 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, which incorporates the requirements of the federal antidegradation policy. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. As discussed in detail in the Fact Sheet (Attachment F) the permitted discharge is consistent with the antidegradation provision of 40 CFR §131.12 and State Water Board Resolution No. 68-16.
- N. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 CFR §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. All effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order.
- O. **Monitoring and Reporting.** Section 122.48 of 40 CFR requires that all NPDES permits specify requirements for recording and reporting monitoring results. Sections 13267 and 13383 of the CWC authorize the Regional Water Boards to require technical and monitoring reports. The Monitoring and Reporting Program (MRP) establishes monitoring and reporting requirements to implement federal and State requirements. This MRP is provided in Attachment E.
- P. **Standard and Special Provisions.** Standard Provisions, which in accordance with 40 CFR §§122.41 and 122.42, apply to all NPDES discharges and must be included in every NPDES permit, are provided in Attachment D. 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 (Attachment F).
- Q. **Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised State and Tribal water quality standards become effective for CWA purposes (40 CFR §131.21, 65 FR 24641, April 27, 2000). Under USEPA's new regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be

approved 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.

- R. **Notification of Interested Parties.** The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet (Attachment F) of this Order.
- S. **Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet (Attachment F) of this Order.

III. DISCHARGE PROHIBITIONS

- A. Wastes discharged shall be limited to a maximum of 11.00 MGD of treated wastewater (i.e., storm water from parking lots, roadways, some non-process areas, and boiler condensate, and boiler blowdown) as described in the findings. The discharge of wastes from accidental spills or other sources is prohibited.
- B. Discharges of water, materials, thermal wastes, elevated temperature wastes, toxic wastes, deleterious substances, or wastes other than those authorized by this Order, to a storm drain system, the Dominguez Channel, or other waters of the State, are prohibited.
- C. Neither the treatment nor the discharge of pollutants shall create a pollution, contamination, or nuisance as defined by Section 13050 of the CWC.
- D. Wastes discharged shall not contain any substances in concentrations toxic to human, animal, plant, or aquatic life.
- E. The discharge shall not cause a violation of any applicable water quality standards for receiving waters adopted by the Regional Water Board or the State Water Resources Control Board as required by the Federal CWA and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal CWA, and amendments thereto, the Regional Water Board will revise and modify this Order in accordance with such more stringent standards.
- F. The discharge of any radiological, chemical, or biological warfare agent or high level radiological waste is prohibited.
- G. Any discharge of wastes at any point(s) other than specifically described in this Order is prohibited, and constitutes a violation of the Order.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations – Discharge Point No. 001

1. Final Effluent Limitations – Discharge Point No. 001

- a. The discharge of storm water runoff from non-process areas, boiler condensate, and boiler blowdown shall maintain compliance with the following effluent limitations at Discharge Point No. 001, with compliance measured at Monitoring Location M-001 as described in the attached MRP (Attachment E):

Table 3
Effluent Limitations, Discharge Point No. 001

Parameters	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C) ²	mg/L	26	48	--	--
	lbs/day ¹	2,420	4,400	--	--
Chemical Oxygen Demand (COD) ²	mg/L	180	360	--	--
	lbs/day ¹	16,500	33,000	--	--
Oil and Grease	mg/L	8 ²	15 ³	--	--
	lbs/day ¹	737	1,376	--	--
PH	Units	--	--	6.5 ⁴	8.5 ⁴
Temperature	°F	--	--	--	86
Total Suspended Solids (TSS)	mg/L	21 ³	33 ³	--	--
	lbs/day ¹	1,927	3,027	--	--
Chromium (Total)	µg/L	210 ³	600 ²	--	--
	lbs/day ¹	19	55	--	--
Chromium (VI) ² , Total Recoverable	µg/L	28	62	--	--
	lbs/day ¹	2.5	5.7	--	--
Copper, Total Recoverable	µg/L	1.9	2.1	--	--
	lbs/day ¹	0.17	0.2	--	--
Lead, Total Recoverable	µg/L	5.8	7.4	--	--
	lbs/day ¹	0.53	0.68	--	--
Mercury, Total Recoverable	µg/L	0.05	0.1	--	--
	lbs/day ¹	0.0046	0.0092	--	--
Nickel, Total Recoverable	µg/L	6.8	14	--	--
	lbs/day ¹	0.62	1.3	--	--
Silver, Total Recoverable	µg/L	1.1	2.2	--	--
	lbs/day ¹	0.10	0.20	--	--
Zinc, Total Recoverable	µg/L	33	40	--	--
	lbs/day ¹	3.0	3.7	--	--
Cyanide	µg/L	0.5	1	--	--
	lbs/day ¹	0.046	0.092	--	--

Parameters	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Bis (2-ethylhexyl) Phthalate	µg/L	5.9	12	--	--
	lbs/day ¹	0.54	1.1	--	--
Chrysene	µg/L	0.049	0.098	--	--
	lbs/day ¹	0.0045	0.0090	--	--
Hexachlorobenzene	µg/L	0.00077	0.0015	--	--
	lbs/day ¹	0.00007	0.00014	--	--
Phenolic Compounds ²	µg/L	170	350	--	--
	lbs/day ¹	15	32	--	--
Settleable Solids	ml/L	0.1	0.3	--	--
Sulfide	mg/L	--	1.0	--	--
	lbs/day ¹	--	92	--	--
Total Oxidants (Chlorine and /or Bromine)	mg/L	--	0.1	--	--
	lbs/day ¹	--	9.2	--	--

¹ Mass-based (lbs/day) effluent limitations are based on a maximum discharge flow rate of 11 mgd.

² The effluent limitations for BOD, COD, oil and grease, phenolic compounds (4AAP), total chromium, and chromium (VI) are established based on the Effluent Limitation Guidelines and Standards the Petroleum Refining Point Source Category defined in 40 CFR Part 419, Subpart B, Cracking Category. (See Fact Sheet for details).

³ Based on the existing permit (Order No. 01-074).

⁴ Based on the Basin Plan.

b. The fecal coliform concentration shall not exceed a log mean of 200 MPN/100ml (based on a minimum of not less than four samples for any 30-day period), nor shall more than 10 percent of total samples during any 30-day period exceed 400 MPN/100ml.

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

(1) 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

(2) No single test producing less than 70% survival. Compliance with the toxicity objectives will be determined by the method described in Section V of the MRP (Attachment E).

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:

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. 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.
3. 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.
4. Exceed total ammonia (as N) concentrations specified in the Regional Water Board Resolution No. 2004-022, adopted on March 4, 2004. 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 became effective on May 19, 2004.
5. The presence of visible, floating, suspended or deposited macroscopic particulate matter or foam.
6. 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.
7. Suspended or settleable materials, chemical substances or pesticides in amounts that cause nuisance or adversely affect any designated beneficial use.
8. 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.
9. Accumulation of bottom deposits or aquatic growths.
10. Biostimulatory substances at concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses.
11. The presence of substances that result in increases of BOD that adversely affect beneficial uses.
12. 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.

13. Alteration of turbidity, or apparent color beyond present natural background levels.
14. Damage, discolor, nor cause formation of sludge deposits on flood control structures or facilities nor overload the design capacity.
15. Degrade surface water communities and populations including vertebrate, invertebrate, and plant species.
16. Problems associated with breeding of mosquitoes, gnats, black flies, midges, or other pests.
17. Create nuisance, or adversely effect beneficial uses of the receiving water.
18. 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 40 CFR sections 122.44, 122.62, 122.63, 122.64, 125.62 and 125.64. Causes for taking such actions include, but are not limited to: failure to comply with any condition of this Order; endangerment to human health or the environment resulting from the permitted activity; or acquisition of newly-obtained information which would have justified the application of different conditions if known at the time of Order adoption. The filing of a request by the Discharger for an Order modification, revocation, and issuance or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.
 - 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:
 - 1) Violation of any term or condition contained in this Order;
 - 2) Obtaining this Order by misrepresentation, or failure to disclose all relevant facts;
 - 3) 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 CWC provides that any person who violates a waste discharge requirement or a provision of the CWC 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 six months prior to 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:
 - 1) Name and general composition of the chemical,
 - 2) Frequency of use,
 - 3) Quantities to be used,
 - 4) Proposed discharge concentrations, and
 - 5) USEPA registration number, if applicable.

B. Monitoring and Reporting Program Requirements

The Discharger shall comply with the MRP, and future revisions thereto, in Attachment E of this Order. If there is any conflict between provisions stated in the MRP and the Regional Water Board Standard Provisions, those provisions stated in the MRP shall prevail.

C. Special Provisions

1. Reopener Provisions

- a. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal CWA, and amendments thereto, the Regional Water Board will revise and modify this Order in accordance with such more stringent standards.
- b. This Order may be reopened to include effluent limitations for toxic constituents determined to be present in significant amounts in the discharge through a more comprehensive monitoring program included as part of this Order and based on the results of the RPA.
- c. This Order may be reopened and modified, to incorporate in accordance with the provisions set forth in 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.
- 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 and modified to revise the discharge conditions as a result of future relevant law or amendments to applicable regulations that stem from the State Board Expert Panel, Design Storm Task Force, and or the Wet Weather task Force.

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 180 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:
- 1) 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;
 - 2) 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;
 - 3) If a toxicity identification evaluation (TIE) is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor) (Section V of the MRP, Attachment E) provides references for the guidance manuals that should be used for performing TIEs).

3. Storm Water Pollution Prevention Plan

The Discharger shall submit, within 180 days of the effective date of this Order:

- a. An updated 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. The SWPPP shall contain a Best Management Practice Plan (BMPP) that entails site-specific plans and procedures to be implemented to prevent hazardous waste/material from being discharged to waters of the State. The updated BMPP shall be consistent with the general guidance contained in the *USEPA Guidance Manual for Developing Best Management Practices (BMPs)* (EPA 833-B-93-004). In particular, a risk assessment of each area identified by the Discharger shall be performed to determine the potential for hazardous or toxic waste/material discharge to surface waters.

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

- b. An updated Spill Contingency Plan that shall be site specific and shall cover all areas of the facility.

The Discharger shall implement the SWPPP and Spill Contingency Plan within 10 days of the approval by the Executive Officer. The plans shall be reviewed annually and at the same time. Updated information shall be submitted within 30 days of revision.

4. Compliance Schedules

[Not Applicable]

5. Other Special Provisions

[Not Applicable]

VII. COMPLIANCE DETERMINATION

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

A. Single Constituent Effluent Limitation.

If the concentration of the pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported Minimum Level (see Reporting Requirement I.G. of the MRP), then the Discharger is out of compliance.

B. Effluent Limitations Expressed as a Sum of Several Constituents.

If the sum of the individual pollutant concentrations is greater than the effluent limitation, then the Discharger is out of compliance. In calculating the sum of the concentrations of a group of pollutants, consider constituents reported as ND or DNQ to have concentrations equal to zero, provided that the applicable ML is used.

C. Effluent Limitations Expressed as a Median.

In determining compliance with a median limitation, the analytical results in a set of data will be arranged in order of magnitude (either increasing or decreasing order); and

1. If the number of measurements (n) is odd, then the median will be calculated as $= X_{(n+1)/2}$, or
2. If the number of measurements (n) is even, then the median will be calculated as $= [X_{n/2} + X_{(n/2)+1}]$, i.e. the midpoint between the $n/2$ and $n/2+1$ data points.

D. Mass-based Effluent Limitations.

In calculating mass emission rates from the monthly average concentrations, use one half of the method detection limit for “Not Detected” (ND) and the estimated concentration for “Detected, but Not Quantified” (DNQ) for the calculation of the monthly average concentration. To be consistent with Limitations and Discharge Requirements, Section VII.B, if all pollutants belonging to the same group are reported as ND or DNQ, the sum of the individual pollutant concentrations should be considered as zero for the calculation of the monthly average concentration.

E. Average Monthly Effluent Limitation (AMEL).

If the average of daily discharges over a calendar month exceeds the AMEL for a given parameter, an alleged violation will be flagged and 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). The average of daily discharges over the calendar month that exceeds the AMEL for a parameter will be considered out of compliance for that month only. If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the discharger will be considered out of compliance for that calendar month. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

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

1. If the analytical result of a single sample, monitored monthly, quarterly, semiannually, or annually, does not exceed the AMEL for that constituent, the Discharger has demonstrated compliance with the AMEL for that month;

2. If the analytical result of a single sample, monitored monthly, quarterly, semiannually, or annually, exceeds the AMEL for any constituent, the Discharger shall collect four additional samples at approximately equal intervals during the month. All five analytical results shall be reported in the monitoring report for that month, or 45 days after results for the additional samples were received, whichever is later.

When all sample results are greater than or equal to the reported Minimum Level (see Reporting Requirement I.G. of the MRP), the numerical average of the analytical results of these five samples will be used for compliance determination.

When one or more sample results are reported as “Not-Detected (ND)” or “Detected, but Not Quantified (DNQ)” (see Reporting Requirement I.G. of the MRP), the median value of these four samples shall be used for compliance determination. If one or both of the middle values is ND or DNQ, the median shall be the lower of the two middle values.

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

F. Maximum Daily Effluent Limitation (MDEL).

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

G. Instantaneous Minimum Effluent Limitation.

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

H. Instantaneous Maximum Effluent Limitation.

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

ATTACHMENT A – DEFINITIONS, ACRONYMS, AND ABBREVIATIONS

DEFINITIONS

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.

Average Weekly Effluent Limitation (AWEL): the highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

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.

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.

µg/L: micrograms per Liter

mg/L: milligrams per Liter

MGD: million gallons per day

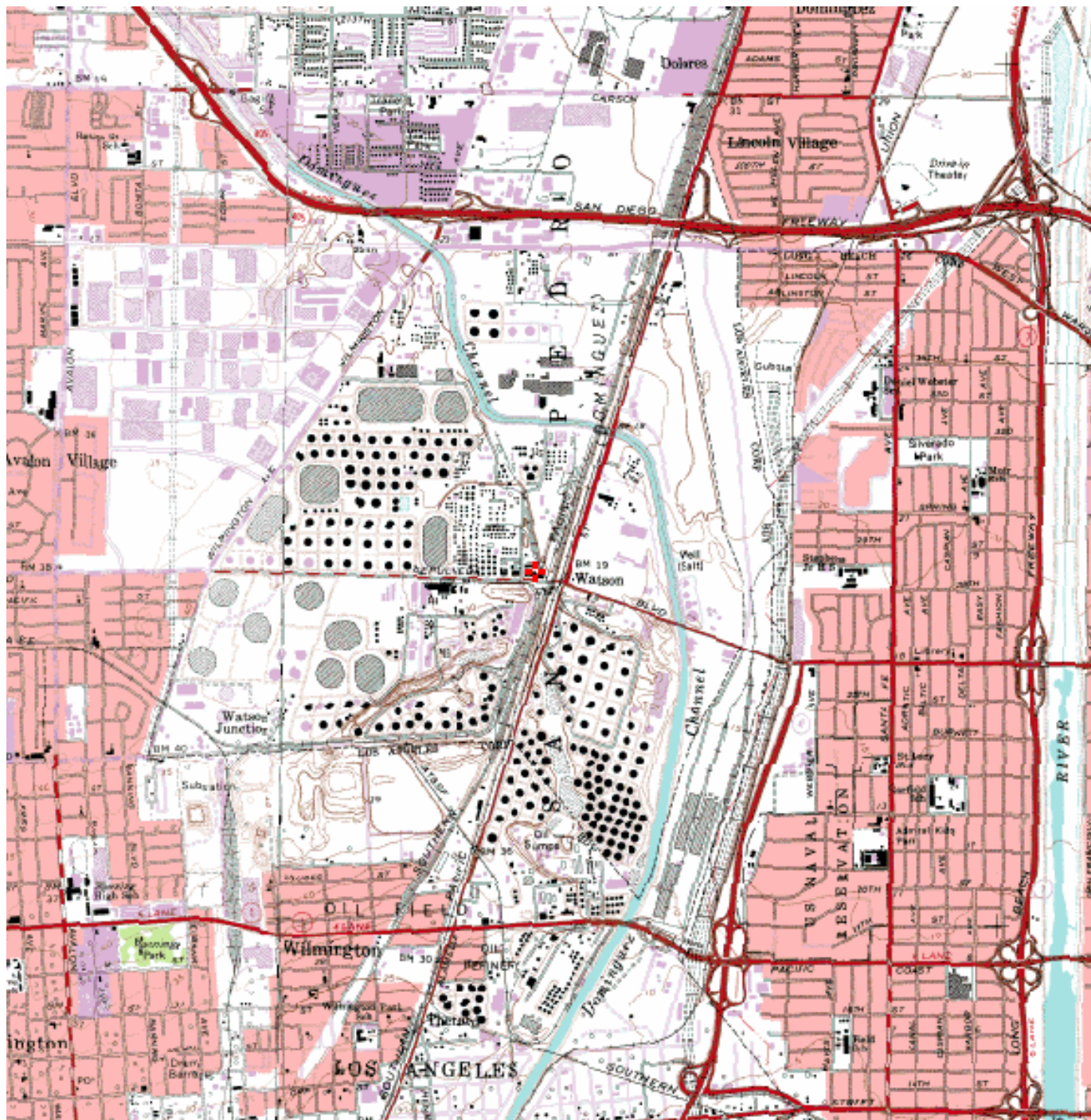
Six-month Median Effluent Limitation: the highest allowable moving median of all daily discharges for any 180-day period.

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	ConocoPhillips Company
DMR	Discharge Monitoring Report
DNQ	Detected But Not Quantified
ELAP	California Department of Health Services Environmental Laboratory Accreditation Program
ELG	Effluent Limitations, Guidelines and Standards
Facility	ConocoPhillips Carson Plant
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
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
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	Technical Support Document
TSS	Total Suspended Solid
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 – TOPOGRAPHIC MAP





ATTACHMENT D – FEDERAL 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 CWA and the CWC and is grounds for enforcement action, for permit termination, revocation and reissuance, or denial of a permit renewal application [40 *CFR* §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 been modified to incorporate the requirement [40 *CFR* §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 [40 *CFR* §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 [40 *CFR* §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 [40 *CFR* §122.41(e)].

E. Property Rights

1. This Order does not convey any property rights of any sort or any exclusive privileges [40 *CFR* §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 [40 *CFR* §122.5(c)].

F. Inspection and Entry

The Discharger shall allow the Regional Water Quality Control Board (Regional Water Board), State Water Resources Control 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 [40 CFR §122.41(i)] [CWC 13383(c)]:

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 [40 CFR §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 [40 CFR §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 [40 CFR §122.41(i)(3)];
4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the CWC, any substances or parameters at any location [40 CFR §122.41(i)(4)].

G. Bypass

1. Definitions
 - a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility [40 CFR §122.41(m)(1)(i)].
 - b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production [40 CFR §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 and I.G.5 below [40 CFR §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 [40 CFR §122.41(m)(4)(i)]:
 - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage [40 CFR §122.41(m)(4)(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 [40 CFR §122.41(m)(4)(B)]; and
- c. The Discharger submitted notice to the Regional Water Board as required under Standard Provision – Permit Compliance I.G.5 below [40 CFR §122.41(m)(4)(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 [40 CFR §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 [40 CFR §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 [40 CFR §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 permittee. 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 [40 CFR §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 paragraph H.2 of this section 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 [40 CFR §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 [40 CFR §122.41(n)(3)]:
 - a. An upset occurred and that the Discharger can identify the cause(s) of the upset [40 CFR §122.41(n)(3)(i)];
 - b. The permitted facility was, at the time, being properly operated [40 CFR §122.41(n)(3)(ii)];
 - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b [40 CFR §122.41(n)(3)(iii)]; and
 - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above [40 CFR §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 [40 CFR §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 [40 CFR §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 [40 CFR §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 CWC [40 CFR §122.41(l)(3)] [40 CFR §122.61].

III. STANDARD PROVISIONS – MONITORING

- A. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity [40 CFR §122.41(j)(1)].
- B. Monitoring results must be conducted according to test procedures under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503 unless other test procedures have been specified in this Order [40 CFR §122.41(j)(4)] [40 CFR §122.44(i)(1)(iv)].

IV. STANDARD PROVISIONS – RECORDS

- A. Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR 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 [40 CFR §122.41(j)(2)].

B. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements [40 CFR §122.41(j)(3)(i)];
2. The individual(s) who performed the sampling or measurements [40 CFR §122.41(j)(3)(ii)];

3. The date(s) analyses were performed [40 CFR §122.41(j)(3)(iii)];
4. The individual(s) who performed the analyses [40 CFR §122.41(j)(3)(iv)];
5. The analytical techniques or methods used [40 CFR §122.41(j)(3)(v)]; and
6. The results of such analyses [40 CFR §122.41(j)(3)(vi)].

C. Claims of confidentiality for the following information will be denied [40 CFR §122.7(b)]:

1. The name and address of any permit applicant or Discharger [40 CFR §122.7(b)(1)]; and
2. Permit applications and attachments, permits and effluent data [40 CFR §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 [40 CFR §122.41(h)] [CWC 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 paragraph (2.) and (3.) of this provision [40 CFR §122.41(k)].
2. All permit applications shall be signed as follows:
 - a. For a corporation: 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 [40 CFR §122.22(a)(1)];
 - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively [40 CFR §122.22(a)(2)]; or

- c. For a municipality, State, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA) [40 CFR §122.22(a)(3)].
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 paragraph (b) of this provision, 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 paragraph (2.) of this provision [40 CFR §122.22(b)(1)];
 - b. The authorization specified 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) [40 CFR §122.22(b)(2)]; and
 - c. The written authorization is submitted to the Regional Water Board, State Water Board, or USEPA [40 CFR §122.22(b)(3)].
4. If an authorization under paragraph (3.) of this provision 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 paragraph (3.) of this provision must be submitted to the Regional Water Board, State Water Board or USEPA prior to or together with any reports, information, or applications, to be signed by an authorized representative [40 CFR §122.22(c)].
5. Any person signing a document under paragraph (2.) or (3.) of this provision 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” [40 CFR §122.22(d)].

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the MRP in this Order [40 CFR §122.41(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 [40 CFR §122.41(l)(4)(i)].
3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR 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 [40 CFR §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 [40 CFR §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 [40 CFR §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 [40 CFR §122.41(l)(6)(i)].
2. The following shall be included as information that must be reported within 24 hours under this paragraph [40 CFR §122.41(l)(6)(ii)]:
 - a. Any unanticipated bypass that exceeds any effluent limitation in this Order [40 CFR §122.41(l)(6)(ii)(A)].
 - b. Any upset that exceeds any effluent limitation in this Order [40 CFR §122.41(l)(6)(ii)(B)].
 - c. Violation of a maximum daily discharge limitation for any of the pollutants listed in this Order to be reported within 24 hours [40 CFR §122.41(l)(6)(ii)(C)].
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 [40 CFR §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 [40 CFR §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 40 CFR §122.29(b) [40 CFR §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 which are subject neither to effluent limitations in this Order nor to notification requirements under 40 CFR Part 122.42(a)(1) (see Additional Provisions—Notification Levels VII.A.1) [40 CFR §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 [40 CFR §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 [40 CFR §122.41(l)(2)].

H. Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting E.3, E.4, and E.5 at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E [40 CFR §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 [40 CFR §122.41(l)(8)].

VI. STANDARD PROVISIONS – ENFORCEMENT

- A. 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 [40 CFR §122.41(a)(2)] [CWC 13385 and 13387].

- B.** 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 [40 CFR §122.41(a)(3)].
- C.** 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 [40 CFR §122.41(j)(5)].
- D.** 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 [40 CFR §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 [40 *CFR* §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" [40 *CFR* §122.42(a)(1)]:
 - a. 100 micrograms per liter (µg/L) [40 *CFR* §122.42(a)(1)(i)];
 - b. 200 µg/L for acrolein and acrylonitrile; 500 µg/L for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter (mg/L) for antimony [40 *CFR* §122.42(a)(1)(ii)];
 - c. Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge [40 *CFR* §122.42(a)(1)(iii)]; or
 - d. The level established by the Regional Water Board in accordance with 40 *CFR* §122.44(f) [40 *CFR* §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" [40 *CFR* §122.42(a)(2)]:
 - a. 500 micrograms per liter (µg/L) [40 *CFR* §122.42(a)(2)(i)];
 - b. 1 milligram per liter (mg/L) for antimony [40 *CFR* §122.42(a)(2)(ii)];
 - c. Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge [40 *CFR* §122.42(a)(2)(iii)]; or
 - d. The level established by the Regional Water Board in accordance with 40 *CFR* §122.44(f) [40 *CFR* §122.42(a)(2)(iv)].

B. Publicly-Owned Treatment Works (POTWs)

All POTWs shall provide adequate notice to the Regional Water Board of the following [40 *CFR* §122.42(b)]:

1. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to Sections 301 or 306 of the CWA if it were directly discharging those pollutants [40 *CFR* §122.42(b)(1)]; and
2. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of adoption of the Order [40 *CFR* §122.42(b)(2)].

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CONOCOPHILLIPS – LOS ANGELES REFINERY,
CARSON PLANT
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Adequate notice shall include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW [40 *CFR* §122.42(b)(3)].

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP) No. 7352

The Code of Federal Regulations (CFR) at 40 CFR §122.48 requires that all NPDES permits specify monitoring and reporting requirements. CWC 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' 55" N, Longitude 118° 13' 55" 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. This Regional Water Board shall be notified in writing of any change in the sampling stations once established or in the methods for determining the quantities of pollutants in the individual waste streams.
- D. Pollutants shall be analyzed using the analytical methods described in 40 CFR §§136.3, 136.4, and 136.5 (revised May 14, 1999); or, where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board. Laboratories analyzing effluent samples and receiving water samples shall be certified by the California Department of Health Services 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 Health Services 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 Resources Control Board in the Policy for the Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California, March 2, 2000.

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

The Regional Water Board, in consultation with the State Water Board Quality Assurance Program, shall establish a ML that is not contained in Attachment A 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 May 14, 1999);
 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 40 CFR §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.2 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 generated from the storm water collection system and storm water pond and are transported to a 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.
- 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.

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 Locations**

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
001	M-001	Effluent: After treatment, prior to discharge to the Dominguez Channel (Latitude 33° 48' 55" N, Longitude 118° 13' 55" W).
--	R-001	Receiving water: 50 feet from the center of the outfall line in the direction of tidal flow at the time of sampling. If sampled at slack tide, this station shall be in the direction where the channel waters have been influenced by the discharge at the time of sampling.
--	R-002	Receiving water: 250 feet from the center of the outfall line in the direction of tidal flow at the time of sampling. If sampled at slack tide, this station shall be in the direction where the channel waters have been influenced by the discharge at the time of sampling.
--	R-003	Receiving water: 250 feet from the center line in the opposite direction of tidal flow at the time of sampling. If sampled at slack tide, this station shall be located opposite of where the channel waters have been influenced by the discharge at the time of sampling.
--	S-001	Sediment: At intersection of the Dominguez Channel and Anaheim Road.
--	S-002	Sediment: At intersection of the Dominguez Channel and the Pacific Coast Highway.
--	S-003	Sediment: At intersection of the Dominguez Channel and Sepulveda Boulevard.
--	S-004	Sediment: At intersection of the Dominguez Channel and Alameda Street.
--	S-005	Sediment: At intersection of the Dominguez Channel and Wilmington Avenue.
--	S-006	Sediment: At intersection of the Dominguez Channel and Avalon Boulevard.
--	S-007	Sediment: At intersection of the Dominguez Channel and Main Street.

III. INFLUENT MONITORING REQUIREMENTS

[Not Applicable]

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Location M-001

1. The Discharger shall monitor the storm water runoff from parking lots, roadways, some non-process areas, and boiler condensate and boiler blowdown at M-001 as follows:

Table E-2
Effluent Monitoring Requirements

Parameter ¹	Units	Sample Type	Minimum Sampling Frequency ³
Flow	Gpd	Grab	Once per discharge event ²
BOD	mg/L	Grab	Once per discharge event ²
	Lbs/day ⁴	Calculated	
COD	mg/L	Grab	Once per discharge event ²
	Lbs/day ⁴	Calculated	
Oil and Grease	mg/L	Grab	Once per discharge event ²
	Lbs/day ⁴	Calculated	
PH ⁵	Units	Grab	Once per discharge event ²
Temperature	°F	Grab	Once per discharge event ²
Total Suspended Solids (TSS)	mg/L	Grab	Once per discharge event ²
	Lbs/day ⁴	Calculated	
Chromium (Total)	µg/L	Grab	Once per discharge event ²
	Lbs/day ⁴	Calculated	
Chromium (VI), Total Recoverable	µg/L	Grab	Once per discharge event ²
	Lbs/day ⁴	Calculated	
Copper, Total Recoverable	µg/L	Grab	Once per discharge event ²
	Lbs/day ⁴	Calculated	
Lead, Total Recoverable	µg/L	Grab	Once per discharge event ²
	Lbs/day ⁴	Calculated	
Mercury, Total Recoverable	µg/L	Grab	Once per discharge event ²
	Lbs/day ⁴	Calculated	
Nickel, Total Recoverable	µg/L	Grab	Once per discharge event ²
	Lbs/day ⁴	Calculated	
Silver, Total Recoverable	µg/L	Grab	Once per discharge event ²
	Lbs/day ⁴	Calculated	
Zinc, Total Recoverable	µg/L	Grab	Once per discharge event ²
	Lbs/day ⁴	Calculated	
Cyanide	µg/L	Grab	Once per discharge event ²
	Lbs/day ⁴	Calculated	
Bis (2-ethylhexyl) Phthalate	µg/L	Grab	Once per discharge event ²
	Lbs/day ⁴	Calculated	
Chrysene	µg/L	Grab	Once per discharge event ²
	Lbs/day ⁴	Calculated	

Parameter ¹	Units	Sample Type	Minimum Sampling Frequency ³
Hexachlorobenzene	µg/L	Grab	Once per discharge event ²
	Lbs/day ⁴	Calculated	
Phenolic Compounds	µg/L	Grab	Once per discharge event ²
	Lbs/day ⁴	Calculated	
Settleable Solids	ml/L	Grab	Once per discharge event ²
Sulfide	mg/L	Grab	Once per discharge event ²
	Lbs/day ⁴	Calculated	
Total Oxidants (Chlorine and/or Bromine)	mg/L	Grab	Once per discharge event ²
	Lbs/day ⁴	Calculated	
Ammonia (as N)	mg/L	Grab	Once per discharge event ²
	Lbs/day ⁴	Calculated	
Residual Chlorine	mg/L	Grab	Once per discharge event ²
	Lbs/day ⁴	Calculated	
Fecal Coliform	MPN/100ml	Grab	Once per discharge event ²
Methyl Tertiary Butyl Ether (MTBE)	µg/L	Grab	Once per discharge event ²
	Lbs/day ⁴	Calculated	
Tertiary Butyl Alcohol (TBA)	µg/L	Grab	Once per discharge event ²
	Lbs/day ⁴	Calculated	
Total Petroleum Hydrocarbon (TPH) ⁶	µg/L	Grab	Once per discharge event ²
	Lbs/day ⁴	Calculated	
Acute Toxicity	% survival	Grab	Once per discharge event ⁷
Remaining Priority Pollutants ^{5,8}	µg/L	Grab	Once per discharge event ⁹

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

² During periods of extended rainfall, no more than one sample per week needs to be taken. Sampling shall be during the first hour of discharge. If, for safety reasons, a sample cannot be obtained during the first hour of discharge, a sample shall be obtained at the first safe opportunity and the reason for delay shall be included in the report. No more than two samples are required per calendar year.

³ For all pollutants (except acute toxicity), if no discharge occurs from the NPDES Discharge Point 001 during a calendar year, the Discharger shall provide the results of a representative sample from the storm water from parking lots, roadways, some non-process areas, and boiler blowdown and boiler condensate from the outlet of the storm water treatment unit or the retention basin (if the storm water treatment unit is not placed in operation) annually. The sampling results from this sample will not be required to meet the NPDES effluent limitations as there is no actual discharge from the Facility. The data will be used to conduct a reasonable potential analysis (RPA).

- ⁴ The mass emission (in lbs/day) for the discharge shall be calculated and reported using the reported concentration and the actual flow rate measured at the time of the discharge, using the formula:

$$\text{lbs/day} = 8.34 \times C \times Q$$

where:

C = actual measured concentration for a pollutant, in mg/L

Q = actual discharge flow rate in MGD

- ⁵ Must analyze pH and hardness of the receiving water at the same time the samples are collected for priority pollutants
- ⁶ Analyses using USEPA Methods 8015b and 8015m.
- ⁷ During periods of extended rainfall, no more than one sample per quarter needs to be taken. Sampling shall be during the first hour of discharge.
- ⁸ Priority Pollutants as defined by the California Toxics Rule (CTR) defined in Finding II.I of the Limitations and Discharge Requirements of this Order, and included as Attachment I.
- ⁹ During periods of extended rainfall, no more than one sample per semiannual needs to be taken. Sampling shall be during the first hour of discharge.

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. Definition of Toxicity

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.

B. Acute Toxicity Effluent Monitoring Program

1. Effluent samples shall be collected after all treatment processes and before discharge to the receiving water.
2. The Discharger shall conduct acute toxicity tests on effluent grab samples by methods specified in 40 CFR 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.
3. 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/82-R-02-014).

4. 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.

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-R-02-014), then the Discharger must re-sample and re-test at the earliest time possible.
3. Control and dilution water should be receiving water or laboratory water, as appropriate, as described in the manual. If the dilution water used is different from the culture water, a second control using culture water shall be used.

D. Accelerated Monitoring and Initial Investigation TRE Trigger

1. Special Provision VI.C.2.b of the Order requires the Discharger to develop and submit for approval an Initial Investigation TRE Workplan.
2. If the results of a toxicity test exceed the acute toxicity effluent limitations (as defined below)

Acute Toxicity:

- 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.

then, the Discharger shall begin the investigation and evaluation as specified in the Dischargers' Initial Investigation TRE Workplan and begin accelerated monitoring by conducting six additional tests, in as close of a time frame as possible (however limited to one monitoring event per discharge event). The samples shall be collected and the tests initiated no less than 7 days apart. The Discharger shall ensure that they receive results of a failing acute 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.

3. 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 Initial Investigation Toxicity Reduction Evaluation and resume routine testing frequency.
4. 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 from Discharge Point 001 causes or contributes to the measured downstream acute toxicity. If this first step TRE testing shows that the Discharge Point 001 effluent does not cause or contribute to downstream acute using the 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), then a report on this testing shall be submitted to the Regional Water Board and the Initial Investigation TRE will be considered to be completed. Routine testing in accordance with the MRP shall be continued thereafter.

E. TRE/TIE Trigger

1. If the accelerated testing shows consistent toxicity as defined below:

Acute Toxicity:

- 1) If the results of any two of the six accelerated tests are less than 90% survival, or
- 2) 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 Toxicity Reduction Evaluation (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:
 - 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 toxicity 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 (BMPs). 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).

- 3. If a TRE/TIE is initiated prior to completion of the accelerated testing schedule required by 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.
- 4. Toxicity tests conducted as part of a TRE/TIE may also be used for compliance determination, if appropriate.
- 5. The Regional Water Board recognizes that toxicity may be episodic and identification of causes of and reduction of sources of toxicity may not be successful in all cases. Consideration of enforcement action by the Board will be based in part on the Discharger's actions and efforts to identify and control or reduce sources of consistent toxicity.

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 with the self-monitoring report (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 average limitation.
- 3. Test results for toxicity tests also shall be reported according to the appropriate manual chapter on Report Preparation and shall be attached to the SMR. Routine reporting shall include, at a minimum, as applicable, for each test:
 - a. Sample date(s);

- b. Test initiation date;
 - c. Test species;
 - d. End point values for each dilution (e.g., number of young, growth rate, percent survival);
 - e. NOEC value(s) in percent effluent;
 - f. IC₁₅, IC₂₅, IC₄₀ and IC₅₀ values in percent effluent;
 - g. Mean percent mortality (+standard deviation) after 96 hours in 100% effluent (if applicable);
 - h. NOEC and LOEC values for reference toxicant test(s);
 - i. IC₂₅ value for reference toxicant test(s);
 - j. Any applicable charts; and
 - k. 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 limitation 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 SEDIMENT

The Discharger may participate in a coordinated receiving water, biomonitoring, and sediment monitoring program with other dischargers to the Dominguez Channel in order to provide the Regional Water Board with a comprehensive water and sediment quality database for this water body. Upon approval by the Executive Officer of the Regional Water Board of such coordinated water quality and sediment quality monitoring program, provisions of Section(s) VIII.A., B., C., and D. of this monitoring and reporting program may be revised, as appropriate.

A. Surface Water Monitoring

The receiving water monitoring stations (R-001, R-002, and R-003) shall be sampled during periods of discharge, at least semiannually. Samples shall be obtained within ten centimeters of the surface and shall be analyzed for the constituents listed in Tables E-3 and E-4:

1. The Discharger shall monitor the Dominguez Channel at R-001 and R-002 as follows:

Table E-3
Monitoring Requirements for Monitoring Location R-001 and R-002

Parameter¹	Units	Sample Type	Minimum Sampling Frequency
Temperature	°F	Surface grab	Semiannually
Dissolved Oxygen	Mg/L	Surface grab	Semiannually
Fecal Coliform	MPN/100 ml	Surface grab	Semiannually
PH ²	Units	Surface grab	Semiannually
Sulfide	Mg/L	Surface grab	Semiannually
Copper	µg/L	Subsurface grab	Semiannually
Lead	µg/L	Subsurface grab	Semiannually
Zinc	µg/L	Subsurface grab	Semiannually
Ammonia Nitrogen, Total	Mg/L	Subsurface grab	Semiannually
Ammonia Nitrogen Un-ionized	Mg/L	Subsurface grab	Semiannually
Chlorine, Total Residual	Mg/L	Subsurface grab	Semiannually
Hardness (CaCO ₃) ²	Mg/L	Subsurface grab	Semiannually
Nitrate Nitrogen, Total (as N)	Mg/L	Subsurface grab	Semiannually
Salinity	g/kg	Subsurface grab	Semiannually
Visual observations	---	Discharge point	Monthly

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

² Must analyze pH and hardness of the receiving water at the same time the samples are collected for copper, lead, and zinc.

2. The Discharger shall monitor the Dominguez Channel at R-003 as follows:

Table E-4
Monitoring Requirements for Monitoring Location R-003

Parameter¹	Units	Sample Type	Minimum Sampling Frequency
Temperature	°F	Surface grab	Semiannually
Dissolved Oxygen	Mg/L	Surface grab	Semiannually
Fecal Coliform	MPN/100 ml	Surface grab	Semiannually
PH ²	Units	Surface grab	Semiannually
Sulfide	Mg/L	Surface grab	Semiannually
Copper	µg/L	Subsurface grab	Semiannually
Lead	µg/L	Subsurface grab	Semiannually
Zinc	µg/L	Subsurface grab	Semiannually
Ammonia Nitrogen, Total	Mg/L	Subsurface grab	Semiannually
Ammonia Nitrogen Un-ionized	Mg/L	Subsurface grab	Semiannually
Chlorine, Total Residual	Mg/L	Subsurface grab	Semiannually

Parameter ¹	Units	Sample Type	Minimum Sampling Frequency
Hardness (CaCO ₃) ²	Mg/L	Subsurface grab	Semiannually
Nitrate Nitrogen, Total (as N)	Mg/L	Subsurface grab	Semiannually
Salinity	g/kg	Subsurface grab	Semiannually
Priority pollutants ³	µg/L	surface grab	Annually
Visual observations	---	Discharge point	Monthly

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

² Must analyze pH and hardness of the receiving water at the same time the samples are collected for priority pollutants.

³ Priority Pollutants as defined by the CTR defined in Finding II.I of this Order (Attachment I). The MLs are for the priority pollutants are available in Appendix 4 of the SIP. Sampling for priority pollutants shall be conducted annually. pH and hardness data shall also be collected at the time of sampling.

B. Visual Monitoring of Upstream and Downstream Receiving Water Sampling Points

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

C. Sediment Monitoring Stations S-001 through S-007

Sediment samples shall be collected and analyzed from the seven sediment monitoring stations (S-001 through S-007) annually during dry weather months.

Grab samples contained the upper two centimeters of sediment shall be taken from an Ekman grab (or another method approved by the Executive Officer) collected at each station and shall be analyzed for the following:

**Table E-5
Sediment Monitoring Requirements**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Chronic Toxicity	TU _c	Surface Grab	Annually
Sediment Grain Size	¹	Surface Gra	Annually
Total Organic Carbon	mg/kg	Surface Grab	Annually
Total Petroleum Hydrocarbons	mg/kg	Surface Grab	Annually
Cadmium, Total	mg/kg	Surface Grab	Annually
Chromium, Total	mg/kg	Surface Grab	Annually
Copper, Total	mg/kg	Surface Grab	Annually
Lead, Total	mg/kg	Surface Grab	Annually
Nickel, Total	mg/kg	Surface Grab	Annually
Zinc, Total	mg/kg	Surface Grab	Annually
PCBs ²	µg/kg	Surface Grab	Annually
PAHs ³	µg/kg	Surface Grab	Annually
DDT ⁴	µg/kg	Surface Grab	Annually
Description of odor and color	⁵	Surface Grab	Annually

¹ Percent sand, silt, and clay.

² The sum of Arochlor 1016, Ar Arochlor 1221, Arochlor 1232, Arochlor 1242, Arochlor 1248, Arochlor 1254, and Arochlor 1260.

³ The sum of acenaphthylene, anthracene, 1,2-benzanthracene, 3,4-benzofluoranthene, benzo(k)fluoranthene, 1,12-benzoperylene, benzo(a)pyrene, chrysene, dibenzo(a,h)anthracene, fluorine, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene.

⁴ The sum of 4,4-DDT, 2,4-DDT, 4,4-DDE, 2,4-DDE, 4,4-DDD, and 2,4-DDD.

⁵ Note visible aquatic life in sediment.

IX. OTHER MONITORING REQUIREMENTS

A. Storm Water Monitoring

- Monitoring.** The Discharger shall measure and record the rainfall on each day of the month. This information shall be included in the monitoring report for that month.
- Visual Observation.** The Discharger shall make visual observations of all storm water discharge locations 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 and Spill Contingency Plan Status and Effectiveness Report

1. As required under Provision VI.C.3 of this Order, the Discharger shall submit an updated SWPPP and Spill Contingency Plan to the Executive Officer of the Regional Water Board for approval within 180 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 and Spill Contingency Plan Status required under Special Provision VI.C.3 of this Order. The SWPPP 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 and Spill Contingency Plan Status. All changes or revisions to the SWPPP and Spill Contingency Plan Status will be summarized in the annual report required under Attachment E, Monitoring and Reporting, Section X.D.2.

C. Chemical Use Report

1. The Discharger shall submit to the Regional Water Board, together with the first monitoring report required by this permit, a list of all chemicals and proprietary additives which could affect the waste discharge, including quantities of each.
2. The Discharger shall report annually 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.
3. The Discharger shall monitor the chemicals used in the facility. Prior to any change in the use of chemical at the facility the discharger must inform the Regional Water Board. No changes in the type or amount of chemicals added to the process water shall be made without the written approval of the Regional Water Board's Executive Officer. The Discharger must submit a complete report of the change to the Regional Water Board before the proposed date of change. This requirement does not apply to changes of chemical brand names where the chemical composition and MSDS information for the new brand is essentially identical to the previous chemical used. The change in brand or manufacturer with a copy of the new MSDS sheet need only be reported to the Regional Water Board in the Discharger's quarterly DMRs.

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 SMRs. Until such notification is given, the Discharger shall submit SMRs in accordance with the requirements described below.
2. 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. Quarterly reports shall be due on May 1, August 1, November 1, and February 1 following each calendar quarter.
3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

**Table E-6
Monitoring Periods**

Sampling Frequency	Monitoring Period Begins On...	Monitoring Period	SMR Due Date
1 / month	On permit effective date (December 9, 2006)	1 st day of calendar month through last day of calendar month	First day of second calendar month following month of sampling
1 / semiannual	Closest of January 1 or July 1 following (or on) December 9, 2006	January 1 through June 30 July 1 through December 31	August 1 February 1
1 / year	January 1 following (or on) December 9, 2006	January 1 through December 31	March 15
1 / Discharge Event	On permit effective date (December 9, 2006)	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

4. The Discharger shall report with each sample result the applicable Minimum Level (ML) and the current Method Detection Limit (MDL), as determined by the procedure in 40 CFR Part 136.
5. 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. Where applicable, the Discharger shall include results of receiving water observations.
6. Each monitoring report shall state whether or not there was any change in the discharge as described in the Order during the reporting period.
7. 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.

8. 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
Attn: Information Technology Unit

C. Discharge Monitoring Reports (DMRs)

1. As described in Section X.B.1 of this MRP, at any time during the term of this permit, the State or Regional Water Board may notify the discharger to electronically submit SMRs. 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:

State Water Resources Control Board
Discharge Monitoring Report Processing Center
Post Office Box 671
Sacramento, CA 95812

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 or modified cannot be accepted.

D. Other Reports

1. Within 180 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 with BMPP
 - c. Spill Contingency Plan
2. By March 15 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.C of the MRP, Attachment E).
3. As discussed in Section IX.C of the MRP, Attachment E, the Discharger shall submit to the Regional Water Board, together with the first monitoring report required by this permit, a list of all chemicals and proprietary additives which could affect this waste discharge, including quantities of each. Any subsequent changes in types and/or quantities shall be reported promptly.
4. If the Discharger wishes to participate in a coordinated receiving water, biomonitoring, and sediment monitoring program with other dischargers to the Dominguez Channel, 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 180 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.

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

**Table F-1
Facility Information**

WDID	4B192131026
Discharger	ConocoPhillips Company (Former Tosco Refining Company)
Name of Facility	ConocoPhillips – Los Angeles Refinery, Carson Plant
Facility Address	1520 East Sepulveda Boulevard
	Carson, CA 90745
	Los Angeles
Facility Contact, Title and Phone	Steve Mallon, Senior Environmental Engineer, (310) 522-8038
Authorized Person to Sign and Submit Reports	Jay Churchill, Manager
Mailing Address	Same as above
Billing Address	Same as above
Type of Facility	Petroleum Refining, SIC Code – 2911
Major or Minor Facility	Major
Threat to Water Quality	2
Complexity	A
Pretreatment Program	NA
Reclamation Requirements	NA
Facility Permitted Flow	11.00 Million Gallons Per Day (MGD)
Facility Design Flow	11.00 MGD
Watershed	Dominguez Channel Watershed
Receiving Water	Dominguez Channel within the Estuary
Receiving Water Type	Inland Surface Water, Estuary

- A.** ConocoPhillips Company (hereinafter Discharger or ConocoPhillips) formerly known as Tosco Refining Company is the owner and operator of ConocoPhillips Los Angeles Refinery, Carson Plant (hereinafter Facility or Carson Plant), a petroleum refinery.
- B.** The Facility discharges storm water runoff from non-process areas and wastewater (i.e., boiler condensate and blowdown) to the Dominguez Channel within the Estuary, a water of the United States. The discharge is regulated under Order No. 01-074 adopted on May 24, 2001, and expires on April 10, 2006. The terms of the existing Order automatically continued in effect after the permit expiration date.
- C.** ConocoPhillips filed a Report of Waste Discharge (ROWD) and applied for renewal of its Waste Discharge Requirements (WDRs) and a National Pollutant Discharge Elimination

System (NPDES) permit on October 7, 2005. A site visit was conducted on January 24, 2006, to observe operations and collect additional data to develop permit limitations and conditions.

II. FACILITY DESCRIPTION

The Carson Plant is a petroleum refining facility and is categorized as a cracking refinery as defined in 40 Code of Federal Regulations (CFR) 419.20. The Facility is located at 1520 East Sepulveda Boulevard, Carson California. The Carson Plant receives a daily average crude oil throughput of 135,000 barrels per day. Crude oil is separated and processed in various refinery processes and intermediate products are piped to another refinery located in Wilmington for continued processing to produce gasoline, diesel fuel, and jet fuel. Sulfur, carbon dioxide, and petroleum cokes are produced as co-products. The refinery processes at the Facility include crude distillation, vacuum flashing, delayed coking, hydrotreating, and sulfur recovery.

A. Description of Wastewater and Biosolids Treatment or Controls

The Facility maintains two water handling and treatment systems. Process wastewaters and storm water from process areas are segregated from non-process waters and storm water from non-process areas (i.e., tank farms, parking lots, roadways, and other non-process areas) via site grading, piping, and berms. Process wastewaters and storm water from process areas are directed via process sewer lines to the API pump structures for pumping to Tank 1647 with subsequent oil removal and recovery in the Oil Recovery Unit (ORU) Nos. 1 & 2 API Separators, AFU-1601 and AFU-1602, respectively. The processed wastewater is discharged to the Los Angeles County Sanitation District (LACSD) sanitary sewer. Water from groundwater cleanup operation for removal of petroleum products underlying the facility is also discharged to the ORU for processing.

The storm water from parking lots, roadways, some non-process areas, and boiler condensate and blowdown are directed to an 8.4 million gallon storm water retention basin. The storm water from other non-process areas (tank farms) is collected in a common drain system that is normally routed to the process drain system via diversion boxes. During storm events, the Facility discharges the first one tenth ($1/10^{\text{th}}$) of an inch of runoff (first flush) from the common drain system to the ORU. After the first flush, the Facility directs non-process common drain system runoff via the same diversion boxes to the storm water retention basin. During storm events when the capacity of the storm water retention basin is exceeded, the Facility is permitted to discharge storm water from non-process areas, and boiler condensate and blowdown to the Dominguez Channel, a water of the United States, within the Estuary. The storm water is treated with chemicals and dissolved air flotation prior to discharge to the Dominguez Channel, within the Estuary.

The Discharger is permitted to discharge up to 0.015 million gallons per day (MGD) of boiler condensate and blowdown, and approximately 11 MGD of storm water runoff from non-production areas to the Dominguez Channel via Discharge Point No. 001 when the capacity of the storm water retention basin is exceeded during storm events. The Facility has not discharged to the Dominguez Channel since May 2001.

The existing Order No. 01-174 permitted the Discharger to discharge up to 11.23 MGD treated wastewater to Dominguez Channel within the Estuary. However, the ROWD indicated a maximum flow rate of approximately 11 MGD. Thus, the tentative permit contains a maximum flow rate of 11 MGD.

B. Discharge Points and Receiving Waters

The Discharger is authorized discharge up to 11 MGD of treated storm water from parking lots, roadways, some non-process areas, and boiler condensate and blowdown to the Dominguez Channel within the Estuary, a water of the United States, via Discharge Point No. 001 (Latitude 33° 48' 55", Longitude 118° 13' 55").

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

Effluent limitations contained in the existing Order for discharges from Discharge Point No. 001 (Monitoring Location M-001) are summarized in Table F-2, below.

Table F-2
Summary of Effluent Limitations Contained in Order No. 01-074

Parameter	Units	Effluent Limitations	
		Average Monthly	Maximum Daily
PH	Units	--	1
Temperature	°F	--	100
Chemical Oxygen Demand	Mg/L	180	360
	Lbs/day	16,858	33,717
BOD	Mg/L	26	48
	Lbs/day	2,435	4,496
Total Suspended Solids	Mg/L	21	33
	Lbs/day	1,967	3,091
Oil and Grease	Mg/L	8	15
	Lbs/day	749	1,405
Settleable Solids	ml/L	0.1	0.3
Total Oxidants (chlorine and/or bromine)	Mg/L	--	0.1
	Lbs/day	--	9.37
Sulfide	Mg/L	--	1.0
	Lbs/day	--	93.7
Phenolic Compounds	µg/L	170	350
	Lbs/day	15.9	32.8
Total Chromium	µg/L	210	600
	Lbs/day	19.7	56.2
Hexavalent Chromium	µg/L	28	62
	Lbs/day	2.62	5.81
Copper	µg/L	1.9	2.1
	Lbs/day	0.178	0.197
Lead	µg/L	5.8	7.4
	Lbs/day	0.543	0.693
Mercury	µg/L	0.05	0.1
	Lbs/day	0.00468	0.00937
Nickel	µg/L	6.8	14

Parameter	Units	Effluent Limitations	
		Average Monthly	Maximum Daily
	Lbs/day	0.637	1.31
Silver	µg/L	1.1	2.2
	Lbs/day	0.103	0.206
Zinc	µg/L	33	40
	Lbs/day	3.09	3.75
Cyanide	µg/L	0.5	1
	Lbs/day	0.0468	0.0936
Bis (2-ethylhexyl) Phthalate	µg/L	5.9	12
	Lbs/day	0.553	1.12
Hexachlorobenzene	µg/L	0.00077	0.0015
	Lbs/day	0.000072	0.00014
Chrysene	µg/L	0.049	0.098
	Lbs/day	0.00459	0.00918
Acute Toxicity	% survival	²	
Chronic Toxicity	TU _c	1.0	2.0
Fecal Coliform	MPN/100 ml	³	
Remaining CTR parameters ⁴	µg/L	Monitoring Only	

¹ A pH value less than 6.5 or greater than 8.5.

² The acute toxicity of the effluent shall be such that: (i) the average survival in undiluted effluent for any three consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, and (ii) no single test producing less than 70% survival.

³ The fecal coliform concentration shall not exceed a log mean of 200 MPN/100 ml (based on a minimum of not less than four samples for any 30-day period), nor shall more than 10 percent of total samples during any 30-day period exceed 400 MPN/100 ml.

⁴ The Discharger was required to monitor for the remaining parameters contained in the California Toxics Rule (CTR). No effluent limitations were established for the remaining CTR parameters in Order No. 01-074.

D. Compliance Summary

The Facility has not discharged to the Dominguez Channel since May 2001 to present.

E. Planned Changes

[Not Applicable]

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 (CWC). It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order also serves as WDRs pursuant to Article 4, Chapter 4 of the CWC for discharges that are not subject to regulation under CWA section 402.

B. California Environmental Quality Act (CEQA)

This action to adopt an NPDES permit is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21100, et seq.) in accordance with Section 13389 of the CWC.

C. State and Federal Regulations, Policies, and Plans

- 1. Water Quality Control Plans.** The Regional Water Board adopted a Water Quality Control Plan for the Los Angeles Basin (hereinafter 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 plan. In addition, State Water Board Resolution No. 88-63 requires that, with certain exceptions, the Regional Water Board assign the municipal and domestic supply use to water bodies that do not have beneficial uses listed in the Basin Plan. Beneficial uses applicable to Dominguez Channel are as follows:

Table F-3
Discharge Points, Receiving Waters, and Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Dominguez Channel within the Estuary	<p><u>Existing:</u> Preservation of rare, threatened or endangered species (RARE), contact (REC-1), non-contact (REC-2) water recreation, commercial and sport fishing (COMM), estuarine habitat (EST), marine habitat (MAR), wildlife habitat (WILD), migration of aquatic organisms (MIG), spawning, reproduction, and/or early development (SPAWN).</p> <p><u>Potential:</u> Navigation.</p>

- 2. 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 became effective on May 19, 2004.

3. **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 inland surface waters.
4. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, which was amended on May 4, 1995 and November 9, 1999, and the CTR on May 18, 2000, which was amended on February 13, 2001. These rules include water quality criteria for priority pollutants and are applicable to this discharge.
5. **State Implementation Policy.** On March 2, 2000, 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 Boards in their basin plans, with the exception of the provision on alternate test procedures for individual discharges that have been approved by USEPA Regional Administrator. The alternate test procedures provision was effective on May 22, 2000. The SIP became effective on May 18, 2000. The SIP includes procedures for determining the need for and calculating water quality-based effluent limitations (WQBELs), and requires Dischargers to submit data sufficient to do so. The State Water Board adopted amendments to the SIP on February 24, 2005, was approved by the Office of Administrative Law (OAL) on May 31, 2005, and the USEPA approved it on July 13, 2005. The CTR's Compliance Schedule provisions sunseted on May 17, 2005. After this date, the provisions of the SIP allow for Compliance Schedules not to exceed five years from permit issuance or May 17, 2010, whichever is sooner.
6. **Antidegradation Policy.** Section 131.12 of 40 CFR requires that 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, which incorporates the requirements of the federal antidegradation policy. Resolution No. 68-16 requires that existing water quality is maintained unless degradation is justified based on specific findings. As discussed in detail in this Fact Sheet, the permitted discharge is consistent with the antidegradation provision of 40 CFR §131.12 and State Water Board Resolution No. 68-16.
7. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and 40 CFR §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. All effluent limitations in the Order are at least as stringent as the effluent limitations in the existing Order.

- 8. Monitoring and Reporting Requirements.** Section 122.48 of 40 CFR requires that all NPDES permits specify requirements for recording and reporting monitoring results. Sections 13267 and 13383 of the CWC authorize the Regional Water Boards to require technical and monitoring reports. The MRP establishes monitoring and reporting requirements to implement federal and State requirements. This MRP is provided in Attachment E.
- 9. Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised State and Tribal water quality standards become effective for CWA purposes (40 CFR 131.21, 65 FR 24641, April 27, 2000). Under USEPA's new regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved 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.

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 2002 303(d) list of impaired water bodies on July 25, 2003. 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 2002 303(d) list and have been scheduled for TMDL development.

According to the 2002 303(d) list, the Dominguez Channel within the Estuary is impaired for aldrin (fish tissue), ammonia, benthic community effects, Chema (fish tissue), chromium (sediment), chlordane (fish tissue), DDT (tissue and sediment), dieldrin (fish tissue), coliform, lead (fish tissue), polyaromatic hydrocarbons (PAHs) (sediment), and zinc (sediment). To date, no TMDL has been approved by USEPA for this segment of water. Therefore, no conditions in the Order are based on TMDLs.

E. Other Plans, Policies and Regulations

[Not Applicable]

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source discharges 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: 40 CFR §122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 CFR §122.44(d) requires that permits include WQBELs to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where numeric water quality objectives have not been established, three options exist to protect water quality: 1) 40 CFR §122.44(d) specifies that WQBELs may be established using USEPA criteria

guidance under CWA section 304(a); 2) proposed State criteria or a State policy interpreting narrative criteria supplemented with other relevant information may be used; or 3) an indicator parameter may be established.

The CWA requires that any pollutant that may be discharged by a point source in quantities of concern must be regulated through an NPDES permit. Further, the NPDES regulations require regulation of any pollutant that (1) causes; (2) has the reasonable potential to cause; or (3) contributes to the exceedance of a receiving water quality criteria or objective.

Pollutants of Concern

The Discharger operates a petroleum refining facility and is categorized as a cracking refinery as defined in 40 CFR 419.20. Contributing waste streams consist of boiler condensate and blowdown, and storm water runoff from non-process areas ((i.e., tank farms, parking lots roadways, and other non-process areas). Typical pollutants present in these waste streams may include total oxidants (chlorine and/or bromide), solids, oil and grease, sulfides, phenol, metals, petroleum hydrocarbons, methyl tertiary butyl ether, tertiary butyl alcohol, and volatile organic compounds. In addition, biochemical oxygen demand (BOD), total suspended solids (TSS), chemical oxygen demand (COD), oil and grease, phenolic compounds, total chromium and chromium (IV) are regulated under the Petroleum Refining Point Source Category Subpart B: Cracking Subcategory [40 CFR 419.22(e)(2); 40 CFR 419.23(e)(2); and 40 CFR 419.24(e)(2)] effluent limitation guidelines and standards (ELGs). The Development Document for Effluent Limitations Guidelines and Standards for the Petroleum Refining Point Source Category Subpart B: Cracking Category indicate these pollutants are common in the wastewater discharged from these facilities and because the facility is a petroleum refinery they are considered pollutants of concern.

Effluent limitations for Discharge Point 001 in the existing permit were established for pH, temperature, settleable solids, sulfides, total oxidants (chlorine and/or bromine), copper, lead, mercury, nickel, silver, zinc, bis(2-ethylhexyl) phthalate, hexachlorobenzene, chrysene. In addition, the existing Order establishes an effluent limitation for acute and chronic toxicity. However, since the discharge is intermittent and there has been no discharge from the Facility for the past five years, the proposed permit has no effluent limitation for chronic toxicity.

Because of the nature of operations at the Facility, the established ELGs for the Petroleum Refining Point Source Category Subpart B: Cracking Subcategory, and there is no effluent data to conduct reasonable potential analysis, all pollutants currently regulated in the existing permit, are considered pollutants of concern in the tentative permit.

Generally, mass-based effluent limitations ensure that proper treatment, and not dilution, is employed to comply with the final effluent concentration limitations. 40 CFR §122.45(f)(1) requires that all permit limitations, standards or prohibitions be expressed in terms of mass units except under the following conditions: (1) for pH, temperature, radiation or other pollutants that cannot appropriately be expressed by mass limitations; (2) when applicable standards or limitations are expressed in terms of other units of measure; or (3) if in establishing technology-based permit limitations on a case-by-case basis, limitations based on mass are infeasible because the mass or pollutant cannot be related to a measure of production. The limitations, however, must ensure that dilution will not be used as a substitute for treatment.

A. Discharge Prohibitions

The discharge prohibitions are based on the requirements of the Basin Plan, State Water Resources Control Board's plans and policies, CWC, and previous permit provisions, and are consistent with the requirements set for other discharges regulated by NPDES permits to the Dominguez Channel, within the Estuary.

B. Technology-Based Effluent Limitations

1. Scope and Authority

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 nonconventional 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 nonconventional 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 40 CFR §125.3 of the NPDES regulations authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern. Where BPJ is used, the permit writer must consider specific factors outlined in 40 CFR §125.3.

2. Applicable Technology-Based Effluent Limitations

The Facility is a petroleum refining facility and is categorized as a cracking refinery as defined in 40 CFR 419.20. The discharge from the Facility is subject to Effluent Limitation Guidelines and Standards (ELGs) for the Petroleum Refining Point Source Category defined in 40 CFR Part 419.

As mentioned earlier, the discharge through Discharge Point 001 consists of boiler condensate and blowdown, and storm water from non-process areas (i.e., tank farms,

parking lots roadways, and other non-process areas) of the Facility. There are promulgated effluent limitations for the discharge of pollutants attributable to storm water from petroleum refining facility. Therefore, the effluent limitations for some pollutants are based on the promulgated effluent limitations (40 CFR 419). These pollutants are BOD, TSS, COD, oil and grease, phenolic compounds (4AAP), total chromium, and chromium (VI). Further, the existing Order established effluent limitations based on the requirements contained in 40 CFR Part 419. In the proposed Order, technology-based effluent limitations for these pollutants have been established by taking the most stringent limitations of the BPT, BAT, and BCT [40 CFR §§ 419.22(e)(2), 419.32(e) (2), and 419.24(e)(2)], respectively. The mass-based limitations for BOD, TSS, COD, oil and grease, phenolic compounds, total chromium, and chromium (VI) using the BPT, BAT, and BCT limitations are established using the maximum flow reported by the Facility in the ROWD.

Based on best professional judgement (BPJ) in accordance with 40 CFR § 125.3. the effluent limitations from the existing Order No. 01-074 for settleable solids, sulfide, and total oxidants (chlorine and/or bromine) have been carried over to the proposed Order. Mass-based limitations for final effluent limitations have been recalculated based on the maximum flow volume reported by the Discharger in the ROWD. The effluent limitations for pH, and temperature are based on the Basin Plan. The final effluent limitation for temperature has been revised based on more stringent water quality standards.

Table F-4
Summary of Technology-Based Effluent Limitations
Discharge Point No. 001

Parameters	Units	Effluent Limitations	
		Average Monthly	Maximum Daily
BOD	Mg/L	26	48
COD	Mg/L	180	360
Oil and Grease	Mg/L	8	15
Total Suspended Solids (TSS)	Mg/L	21	33
Chromium (Total)	µg/L	210	600
Chromium VI, Total Recoverable	µg/L	28	62
Phenolic Compounds	µg/L	170	350
Settleable Solids	ml/L	0.1	0.3
Sulfide	mg/L	--	1.0
Total Oxidants (Chlorine and Bromine)	mg/L	--	0.1

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

As specified in 40 CFR §122.44(d)(1)(i), permits are required to include WQBELs for pollutants (including toxicity) that are or may be discharged at levels that cause, have reasonable potential to cause, or contribute to an excursion above any state water quality standard. The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses 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 water quality criteria contained in the CTR and NTR. The specific procedures for determining reasonable potential for discharges from the Facility, and if necessary for calculating WQBELs, are contained in the SIP.

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 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. The CTR contains both saltwater and freshwater criteria. Because a distinct separation generally does not exist between freshwater and saltwater aquatic communities, the following apply, in accordance with 40 CFR § 131.38(c)(3), freshwater criteria apply at salinities of 1 part per thousand (ppt) and below at locations where this occurs 95 percent or more of the time. The CTR criteria for freshwater 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 Dominguez Channel within the Estuary, a water of the United States in the vicinity of the discharge.

3. Determining the Need for WQBELs

In accordance with Section 1.3 of the SIP, the Regional Water Board conducts a reasonable potential analysis (RPA) for each priority pollutant with an applicable criterion or objective to determine if a WQBEL is required in the permit. The Regional Water Board analyzes effluent and receiving water data and identifies the maximum observed effluent concentration (MEC) and maximum background concentration (B) in the receiving water for each constituent. To determine reasonable potential, the MEC and the B are then compared with the applicable water quality objectives (C) outlined in the CTR, NTR, as well as the Basin Plan. For all pollutants that have a reasonable potential to cause or contribute to an excursion above a state water quality standard, numeric WQBELs are required. The RPA considers water quality criteria from the CTR and NTR, and when applicable, water quality objectives specified in the Basin Plan. To conduct the RPA, the Regional Water Board identifies the MEC and maximum background concentration in the receiving water for each constituent, based on data provided by the Discharger.

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

- 1) Trigger 1 – If the $MEC \geq C$, a limit is needed.
- 2) Trigger 2 – If the background concentration $(B) > C$ and the pollutant is detected in the effluent, a limit is needed.

- 3) Trigger 3 – If other related information such as CWA 303(d) listing for a pollutant, discharge type, compliance history, etc. indicates that a WQBEL is required.

Sufficient effluent and receiving water data are needed to conduct a complete RPA. If data are not sufficient, the Discharger will be required to gather the appropriate data for the Regional Water Board to conduct the RPA. Because the Facility did not discharge over the term of the existing permit, no representative data was available to conduct a RPA. Monitoring requirements for CTR parameters has been established to provide sufficient data to perform a 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.

Based on best professional judgement (BPJ) in accordance with 40 CFR § 125.3. the effluent limitations from the existing Order No. 01-074 for copper, lead, mercury, nickel, silver, zinc, cyanide, bis (2-ethylhexyl) phthalate, hexachlorobenzene, and chrysene have been carried over to the proposed Order.

4. WQBEL Calculations

[Not Applicable]

5. WQBELs Based on Basin Plan Objectives

The Basin Plan states that the pH of inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharge. Based on the requirements of the Basin Plan an instantaneous minimum limitation of 6.5 and an instantaneous maximum limitation of 8.5 for pH are included in the proposed permit. The Basin Plan lists temperature requirements for the receiving waters and references the Thermal Plan. Based on the requirements of the Thermal Plan and recently adopted permits with similar discharges, the temperature limit was changed from 100°F to 86°F.

Acute toxicity limitation has been established in this permit based on the requirements of the Basin Plan. Section IV.C.7 of this fact sheet discusses the applicable toxicity effluent limitations contained in the tentative Order.

6. Final WQBELs

Summaries of the water quality effluent limitations are described in Table F-5.

Table F-5
Summary of Water Quality-Based Effluent Limitations
Discharge Point No. 001

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Ph	Units	--	--	--	6.5	8.5
Temperature	°F	--	--	--	--	86
Copper, Total Recoverable	µg/L	1.9	--	2.1	--	--
Lead, Total Recoverable	µg/L	5.8	--	7.4	--	--
Mercury, Total Recoverable	µg/L	0.05	--	0.1	--	--
Nickel, Total Recoverable	µg/L	6.8	--	14	--	--
Silver, Total Recoverable	µg/L	1.1	--	2.2	--	--
Zinc, Total Recoverable	µg/L	33	--	40	--	--
Cyanide (as N)	µg/L	0.5	--	1	--	--
Bis (2-ethylhexyl) Phthalate	µg/L	5.9	--	12	--	--
Chrysene	µg/L	0.049	--	0.098	--	--
Hexachlorobenzene	µg/L	0.00077	--	0.0015	--	--

7. 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 existing 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. Consistent with Basin Plan requirements, this Order carries over the acute toxicity limitations and monitoring requirements from the previous Order.

Due to the intermittent nature of the discharge from Discharge Points 001 and there has been no discharge for the past five years, the Discharger will not be required to conduct chronic toxicity testing. Intermittent discharges are likely to have short-term effects; therefore at this Facility, the Discharger will be required to comply with acute toxicity effluent limitations in accordance with the Basin Plan and the Order.

D. Final Effluent Limitations

Section 402(o) of the CWA and 40 §CFR 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 settleable solids, sulfide, total oxidants (chlorine and/or bromine), copper, lead, mercury, nickel, silver, zinc, cyanide, bis (2-ethylhexyl) phthalate, hexachlorobenzene, and chrysene have been carried over to the tentative Order. Removal of these numeric limitations would constitute backsliding under CWA Section 402(o). The Regional Water Board has determined that these numeric effluent limitations continue to be applicable to the Facility and that backsliding is not appropriate. The effluent limitations for BOD, TSS, COD, oil and grease, phenolic compounds, total chromium, and chromium VI are based on 40 CFR 419 and the existing permit whichever is more stringent. The effluent limitation for temperature has been revised to be consistent with the Thermal Plan. The effluent limitation for pH, fecal coliform, and acute toxicity have been carried over from the previous Order and is consistent with current water quality objectives established in the Basin Plan.

Mass-based Effluent Limitations

Mass-based effluent limitations are established using the following formula:

Mass (lbs/day) = flow rate (MGD) x 8.34 x effluent limitation (mg/L)

where:

Mass = mass limitation for a pollutant (lbs/day)

Effluent limitation = concentration limit for a pollutant (mg/L)

Flow rate = discharge flow rate (11.0 MGD)

Table F-6
Summary of Final Effluent Limitations
Discharge Point No. 001

Parameters	Units	Effluent Limitations				Basis
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C)	mg/L	26	48	--	--	40 CFR Part 419 ²
	lbs/day ¹	2,420	4,400	--	--	
Chemical Oxygen Demand (COD)	mg/L	180	360	--	--	40 CFR Part 419 ²
	lbs/day ¹	16,500	33,000	--	--	
Oil and Grease	mg/L	8 ²	15 ³	--	--	40 CFR Part 419 ² Previous Order ³
	lbs/day ¹	737	1,376	--	--	
PH	Units	--	--	6.5	8.5	Previous Order ³ , Basin Plan
Temperature	°F	--	--	--	86	Thermal Plan
Total Suspended Solids (TSS)	mg/L	21 ³	33 ³	--	--	40 CFR Part 419 ² Previous Order ³
	lbs/day ¹	1,927	3,027	--	--	
Chromium (Total)	µg/L	210 ³	600 ²	--	--	40 CFR Part 419 ² Previous Order ³
	lbs/day ¹	19	55	--	--	
Chromium (VI), Total Recoverable	µg/L	28	62	--	--	40 CFR Part 419 ²
	lbs/day ¹	2.5	5.7	--	--	
Copper, Total Recoverable	µg/L	1.9	2.1	--	--	Previous Order ³
	lbs/day ¹	0.17	0.2	--	--	
Lead, Total Recoverable	µg/L	5.8	7.4	--	--	Previous Order ³
	lbs/day ¹	0.53	0.68	--	--	
Mercury, Total Recoverable	µg/L	0.05	0.1	--	--	Previous Order ³
	lbs/day ¹	0.0046	0.0092	--	--	
Nickel, Total Recoverable	µg/L	6.8	14	--	--	Previous Order ³
	lbs/day ¹	0.62	1.3	--	--	
Silver, Total Recoverable	µg/L	1.1	2.2	--	--	Previous Order ³
	lbs/day ¹	0.10	0.20	--	--	

Parameters	Units	Effluent Limitations				Basis
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Zinc, Total Recoverable	µg/L	33	40	--	--	Previous Order ³
	lbs/day ¹	3.0	3.7	--	--	
Cyanide	µg/L	0.5	1	--	--	Previous Order ³
	lbs/day ¹	0.046	0.092	--	--	
Bis (2-ethylhexyl) Phthalate	µg/L	5.9	12	--	--	Previous Order ³
	lbs/day ¹	0.54	1.1	--	--	
Chrysene	µg/L	0.049	0.098	--	--	Previous Order ³
	lbs/day ¹	0.0045	0.0090	--	--	
Hexachlorobenzene	µg/L	0.00077	0.0015	--	--	Previous Order ³
	lbs/day ¹	0.00007	0.00014	--	--	
Phenolic Compounds ²	µg/L	170	350	--	--	40 CFR Part 419 ²
	lbs/day ¹	15	32	--	--	
Settleable Solids	ml/L	0.1	0.3	--	--	Previous Order ³
Sulfide	mg/L	--	1.0	--	--	Previous Order ³
	lbs/day ¹	--	92	--	--	
Total Oxidants (Chlorine and /or Bromine)	mg/L	--	0.1	--	--	Previous Order ³
	lbs/day ¹	--	9.2	--	--	
Acute Toxicity	% survival	--	5	--	--	Previous Order ³ , Basin Plan

¹ Mass-based (lbs/day) effluent limitations are based on a maximum discharge flow rate of 11 MGD.

² The effluent limitations for BOD, COD, oil and grease, phenolic compounds (4AAP), total chromium, and chromium (VI) are established based on the Effluent Limitation Guidelines and Standards the Petroleum Refining Point Source Category defined in 40 CFR Part 419 Subpart B: Cracking Subcategory.

³ Based on the Previous Order No. 01-074).

⁴ Based on the Basin Plan.

⁵ The acute toxicity of the effluent shall be such that: (i) the average survival in 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.

E. Interim Effluent Limitations

[Not Applicable]

F. Land Discharge Specifications

[Not Applicable]

G. Reclamation Specifications

[Not Applicable]

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

The Basin Plan contains numeric and narrative water quality objectives applicable to all surface waters within the Los Angeles Region. Water quality objectives include an objective to maintain the high quality waters pursuant to federal regulations (40 CFR § 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 of 40 CFR requires all NPDES permits to specify recording and reporting of monitoring results. Sections 13267 and 13383 of the CWC authorize the Water Boards to require technical and monitoring reports. The 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 at Monitoring Location M-001 at Discharge Point No. 001 will be required as shown on the proposed MRP (Attachment E). To determine compliance with effluent limitations, the proposed monitoring plan carries forward monitoring requirements from previous Order No. 01-074 with some modifications. In the proposed permit, monitoring requirements for pH, temperature, BOD, TSS, chemical oxygen demand, oil and grease, settleable solids, sulfide, total oxidants (chlorine and/or bromine), phenolic compounds, total chromium, hexavalent chromium, copper, lead, mercury, nickel, silver, zinc, cyanide, bis (2-ethylhexyl) phthalate, hexachlorobenzene, chrysene, and acute toxicity are carried over from the previous permit. However, the monitoring frequencies for

those pollutants for which no effluent limitations have been established are modified. Because the discharge through Discharge Point 001 will occur only during storm events, the proposed Order requires that the monitoring for all CTR parameters without effluent limitations be performed once per discharge event and no more than twice per year. At a minimum, semi-annual monitoring is required to characterize the discharge for future analysis. If no discharge to the Dominguez Channel occurs during the year, the Discharger is required to sample the storm water from non-process areas, and boiler condensate and blowdown from the retention basin to characterize the discharge at a minimum frequency of annually. Representative effluent data will be used in accordance with the SIP to determine reasonable potential to exceed water quality objectives. Because of the nature of operations at the Facility, monitoring requirements for total petroleum hydrocarbons and tertiary butyl alcohol were added at frequency of once per discharge event.

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 limitation for acute, and therefore, monitoring requirements are included in the MRP (Attachment E) to determine compliance with the effluent limitations established in Limitations and Discharge Requirements, Effluent Limitations, Section IV.A.1.a.

D. Receiving Water Monitoring

The Discharger may participate in a coordinated receiving water, biomonitoring, and sediment monitoring program with other dischargers to the Dominguez Channel in order to provide the Regional Water Board with a comprehensive water and sediment quality database for this water body. Upon approval by the Executive Officer of the Regional Water Board of such coordinated water quality and sediment quality monitoring program, provisions of Section(s) VIII.A., B., C., and D. of the Monitoring and Reporting Program (Attachment E) may be revised, as appropriate.

1. Surface Water

Surface water monitoring requirements established in Order No. 01-074 were also required semiannually during discharge events to provide data to determine compliance with the receiving water limitations established in Limitations and Discharge Requirements, Receiving Water Limitations, Section V.A. Monitoring for the receiving water at Locations R-001, R-002, and R-003 for pH, dissolved oxygen, temperature, fecal coliform, total sulfide, total hardness, salinity, ammonia nitrogen, ammonia nitrogen (un-ionized), nitrate nitrogen (as N), total residual chlorine, copper, lead, and zinc are required during discharge events. The facility is also required to perform general observations of the receiving water when discharges occur and report the observations in the monitoring report. Attention shall be given to the presence or absence of: floating or suspended matter, discoloration, aquatic life, visible film, sheen or coating, and fungi, slime, or objectionable growths.

According to the SIP, the Discharger is required to monitor the upstream receiving water for the CTR priority pollutants, to determine reasonable potential. Accordingly, the Discharger is required to conduct upstream receiving water monitoring of the CTR priority

pollutants at Monitoring Location R-003. 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. Sediment Monitoring

Sediment monitoring requirements established in Order No. 01-074 have been carried over to provide data to determine the sediment quality and benthic effects of the discharge to the Dominguez Channel. Annual sediment monitoring during dry weather for chronic toxicity, sediment grain size, total organic carbon, total petroleum hydrocarbons, cadmium, chromium, copper, lead, nickel, zinc, PCBs, PAHs, DDT, and odor and color has been established in the MRP.

E. Other Monitoring Requirements

1. Storm water monitoring requirements

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

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

1. Federal Standard Provisions

Standard Provisions, which in accordance with 40 CFR §§122.41 and 122.42, apply to all NPDES discharges and must be included in every NPDES permit, are provided in Attachment D to the Order.

2. Regional Water Board Standard Provisions

Regional Water Board Standard Provisions are based on the CWA, USEPA regulations, and the CWC.

B. Special Provisions

1. Reopener Provisions

These provisions are based on 40 CFR Part 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.

3. Storm Water Pollution Prevention Plan and Best Management Practices Plan

This provision is based on 40 CFR §122.44(k) and includes the requirement to develop a SWPPP.

4. Compliance Schedules

[Not Applicable]

VIII. PUBLIC PARTICIPATION

The Regional Water Board is considering the issuance of WDRs that will serve as a NPDES permit for ConocoPhillips Company. 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 should 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 should be received at the Regional Water Board offices by 5:00 p.m. on October 19, 2006.

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: November 9, 2006
Time: 9:00 A.M.
Location: Metropolitan Water District of Southern California
700 North Alameda Street
Los Angeles, California

Interested persons are invited to attend. At the public hearing, the 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. 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

Attn: Elizabeth Jennings, Senior Staff Counsel

E. Information and Copying

The ROWD), related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address below 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.

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

F. 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.

G. Additional Information

Requests for additional information or questions regarding this order should be directed to David Hung at (213) 576-6664.

ATTACHMENT G – STORM WATER POLLUTION PREVENTION PLAN REQUIREMENTS

SECTION A: STORM WATER POLLUTION PREVENTION PLAN REQUIREMENTS

1. Implementation Schedule

A storm water pollution prevention plan (SWPPP) shall be developed and submitted to the Regional Water Board within 180 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).

2. Objectives

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

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

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

3. 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.

4. 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

<p>PLANNING AND ORGANIZATION</p> <p>Form Pollution Prevention Team Review other plans</p>
<p>ASSESSMENT PHASE</p> <p>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</p>
<p>BEST MANAGEMENT PRACTICES IDENTIFICATION PHASE</p> <p>Non-structural BMPs Structural BMPs Select activity and site-specific BMPs</p>
<p>IMPLEMENTATION PHASE</p> <p>Train employees Implement BMPs Conduct recordkeeping and reporting</p>
<p>EVALUATION / MONITORING</p> <p>Conduct annual site evaluation Review monitoring information Evaluate BMPs Review and revise SWPPP</p>

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.

5. 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.

6. 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:

i. 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.

ii. 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.

iii. 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.

iv. 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.

v. 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.

vi. 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.

7. 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:
- i. Which areas of the facility are likely sources of pollutants in storm water discharges and authorized non-storm water discharges, and
 - ii. 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.

8. 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:

i. Good Housekeeping

Good housekeeping generally consist of practical procedures to maintain a clean and orderly facility.

ii. 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.

iii. 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.

iv. 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.

v. 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.

vi. Waste Handling/Recycling

This includes the procedures or processes to handle, store, or dispose of waste materials or recyclable materials.

vii. 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.

viii. 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.

ix. 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.

x. 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:

i. 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.

ii. Retention Ponds

This includes basins, ponds, surface impoundments, bermed areas, etc. that do not allow storm water to discharge from the facility.

iii. Control Devices

This includes berms or other devices that channel or route run-on and runoff away from pollutant sources.

iv. Secondary Containment Structures

This generally includes containment structures around storage tanks and other areas for the purpose of collecting any leaks or spills.

v. Treatment

This includes inlet controls, infiltration devices, oil/water separators, detention ponds, vegetative swales, etc. that reduces the pollutants in storm water discharges and authorized non-storm water discharges.

9. 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 180 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.

10. 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 180 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 (ML)

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		
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		

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

Table 2d – PESTICIDES – PCBs*	GC
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

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

DCP - Direct Current Plasma

COLOR – Colorimetric

ATTACHMENT I – PRIORITY POLLUTANTS

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

CTR Number	Parameter	CAS Number	Suggested Analytical Methods
44	Vinyl Chloride	75014	EPA 8260B
45	2-Chlorophenol	95578	EPA 8270C
46	2,4-Dichlorophenol	120832	EPA 8270C
47	2,4-Dimethylphenol	105679	EPA 8270C
48	2-Methyl-4,6-Dinitrophenol	534521	EPA 8270C
49	2,4-Dinitrophenol	51285	EPA 8270C
50	2-Nitrophenol	88755	EPA 8270C
51	4-Nitrophenol	100027	EPA 8270C
52	3-Methyl-4-Chlorophenol	59507	EPA 8270C
53	Pentachlorophenol	87865	EPA 8270C
54	Phenol	108952	EPA 8270C
55	2,4,6-Trichlorophenol	88062	EPA 8270C
56	Acenaphthene	83329	EPA 8270C
57	Acenaphthylene	208968	EPA 8270C
58	Anthracene	120127	EPA 8270C
59	Benzidine	92875	EPA 8270C
60	Benzo(a)Anthracene	56553	EPA 8270C
61	Benzo(a)Pyrene	50328	EPA 8270C
62	Benzo(b)Fluoranthene	205992	EPA 8270C
63	Benzo(ghi)Perylene	191242	EPA 8270C
64	Benzo(k)Fluoranthene	207089	EPA 8270C
65	Bis(2-Chloroethoxy)Methane	111911	EPA 8270C
66	Bis(2-Chloroethyl)Ether	111444	EPA 8270C
67	Bis(2-Chloroisopropyl)Ether	108601	EPA 8270C
68	Bis(2-Ethylhexyl)Phthalate	117817	EPA 8270C
69	4-Bromophenyl Phenyl Ether	101553	EPA 8270C
70	Butylbenzyl Phthalate	85687	EPA 8270C
71	2-Chloronaphthalene	91587	EPA 8270C
72	4-Chlorophenyl Phenyl Ether	7005723	EPA 8270C
73	Chrysene	218019	EPA 8270C
74	Dibenzo(a,h)Anthracene	53703	EPA 8270C
75	1,2-Dichlorobenzene	95501	EPA 8260B
76	1,3-Dichlorobenzene	541731	EPA 8260B
77	1,4-Dichlorobenzene	106467	EPA 8260B
78	3,3'-Dichlorobenzidine	91941	EPA 8270C
79	Diethyl Phthalate	84662	EPA 8270C
80	Dimethyl Phthalate	131113	EPA 8270C
81	Di-n-Butyl Phthalate	84742	EPA 8270C
82	2,4-Dinitrotoluene	121142	EPA 8270C
83	2,6-Dinitrotoluene	606202	EPA 8270C
84	Di-n-Octyl Phthalate	117840	EPA 8270C
85	1,2-Diphenylhydrazine	122667	EPA 8270C
86	Fluoranthene	206440	EPA 8270C
87	Fluorene	86737	EPA 8270C
88	Hexachlorobenzene	118741	EPA 8260B
89	Hexachlorobutadiene	87863	EPA 8260B
90	Hexachlorocyclopentadiene	77474	EPA 8270C

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